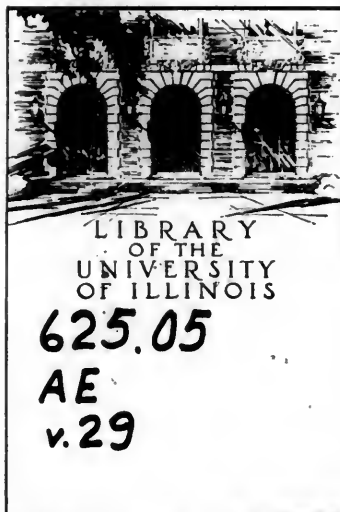


**AMERICAN
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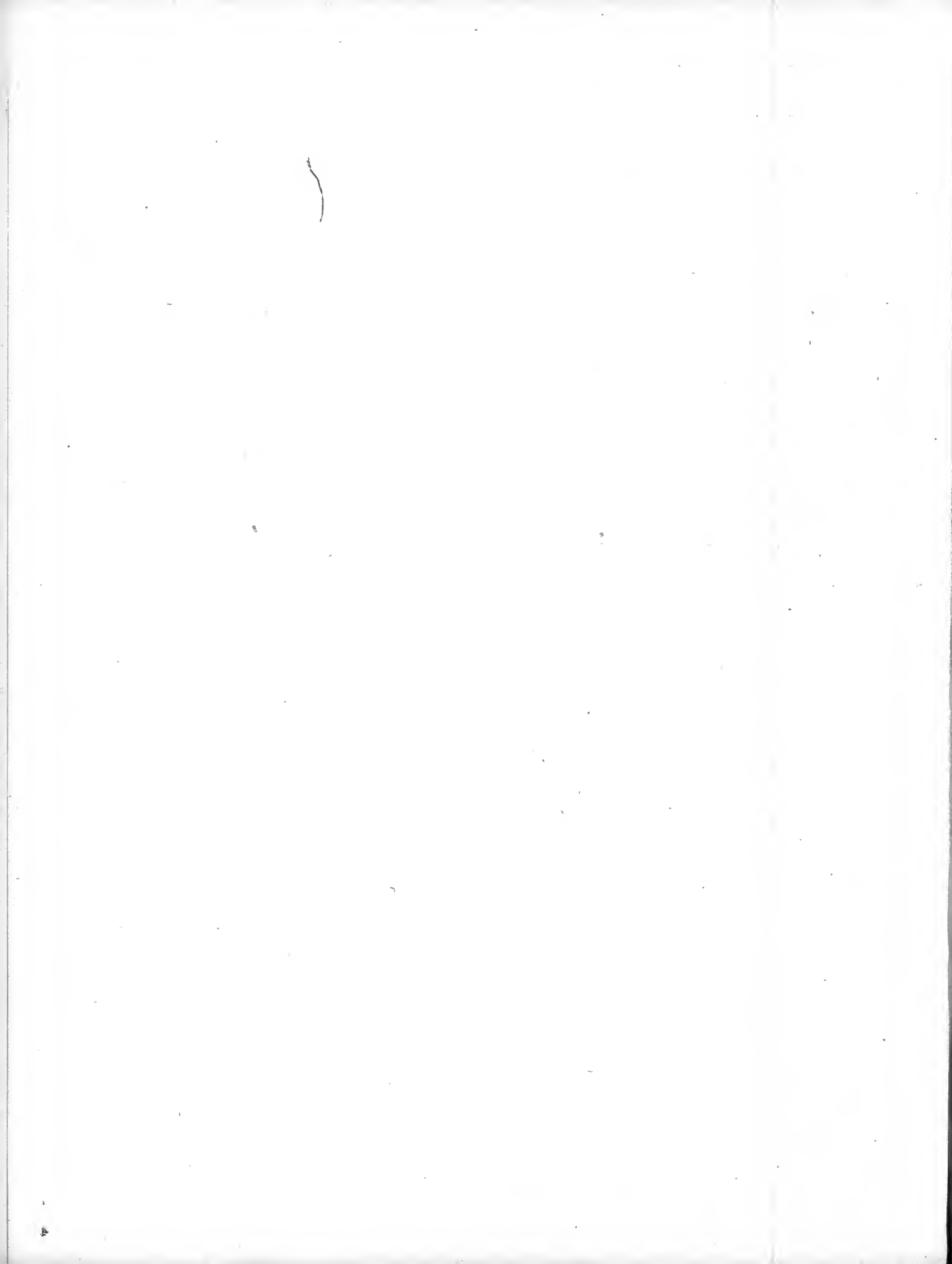
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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, January 5, 1856.

Railroads in the United States on the 1st day of January, 1856.

By a tabular statement to be found on another page of the *Journal*, it will be seen that the whole number of miles of railroad in operation in the United States on the first day of January, 1856, was 21,449—being an increase on the past year of 2,011 miles.

The number of miles of railroad in the United States, in operation on the first day of January, for nine years, consecutively, and the number annually brought into use, have been as follows:

	Miles.	An'l In.
1848.....	5,265	
1849.....	6,197	932
1850.....	7,350	1,254
1851.....	8,856	1,506
1852.....	10,878	2,022
1853.....	13,315	2,437
1854.....	15,511	2,196
1855.....	19,438	3,927
1856.....	21,440	2,011

The history of no other country presents a parallel to the extraordinary increase of railroads in this. There are in it more miles of railroad than in all the rest of the world, while the progress of these works is unchecked only as the wants of the country are fully supplied.

The cost of our railroads will average between \$35,000 and \$40,000 per mile. The total amount invested in the lines completed will fully equal \$750,000,000.

The expenditure of so vast a sum has of course affected most materially the business operations and financial condition of the country. The demand, due to these works, upon its capital and labor, has tended to advance very largely the value of both. But the cost of our railroads bears only a small proportion to the uses for money which they create. They are the conditions which render available the resources of the country,—the development of which, rendered practicable by their construction, immediately calls for much larger sums than their cost. The demand for capital for legitimate business operations has constantly far exceeded the supply. The building of an improved highway is a very small affair to the commerce which is to pass over it. The former is the pioneer of the latter. The expenditure of \$1,000,000 upon a railroad, is the occasion for the expenditure of ten times that sum to develop what the former has rendered available. With the rapid progress of these works, it is hardly possible that the undertakings of our people should not be continually exceeding their means, and that a demand for capital should be in excess of the supply. In other words, that a tight money market should not be the rule instead of the exception, so long as with their best efforts, and with the use of all their means, they can only accomplish a small portion of what they see should be done.

We have at length reached a point at which, better than at any previous occasion, we can form a correct estimate of the influence of the railroad movement upon the financial condition of the country. We had before us the example of Great Britain, in which the construction, distributed through a number of years, of a mileage less than what our people have opened in two consecutive years, brought on a financial crisis, unexampled for its severity and disastrous results. A great many of the more timid and cautious among us, carried the parallel of the rapid progress of our roads to similar disasters. The fear was very general that the vast sums taken for railroads had sapped the foundations of our commercial fabric, which would sooner or later fall with a tremendous crash. The high price paid for money, was taken as evidence of a lack of capital to carry forward the ordinary operations of business, and to discharge the general indebtedness of the country.

We now see that it is working out of its embarrassments without undergoing a commercial crisis—that the hardest point has been passed, that every day henceforward, will bring increased ease,—that the accumulation of capital is rapidly going on, which will to a great degree restore, as far as it can be done, an equal ratio of supply to demand,—that the investment in railroads, immense as it has been, and taxing for a time the capacity of the country to the utmost, is, for the country at large, the very best one that could be made,—that a season of prosperity is before us, which is fully to compensate for the losses and temporary inconvenience that has been suffered. The business of our railroads is increasing so rapidly as to enable nearly all our railroads to maintain their credit untarnished, and to render a very large number of them excellent properties. We now see that notwithstanding the temporary pressure, the financial condition of the country was never otherwise than sound, and that at the present moment it is infinitely stronger for every dollar expended in railroads.

The commencement of 1856 inaugurates a condition of affairs very different from that prevailing at the commencement of 1855. Then, the country was exhausted by the immense draft upon its strength. In the previous year, our people had built and put in operation 4,000 miles of railroad, and more than 10,000 miles in the four years immediately preceding. We were then just beginning to feel in the severest manner the influence of the gigantic war then raging in Europe—the effect of which was to cut off the flow of capital to this country, and to withdraw from it all available balances. A new country, intent upon the development of its own resources, is always largely indebted to older ones in which accumulated capital is abundant. A previous year of unexampled dearth had just closed, leaving only a scanty supply of great staples for home consumption, to discharge our foreign indebtedness, and to sustain the commercial operations of the country. A gloomy prospect, and, as the result proved, a hard year was before us. The one upon which we are just entering presents a picture in the most gratifying contrast to the one just drawn. A most plentiful season has given us a vast surplus which constitute our wealth. For all these,

an active and remunerating demand prevails.—Our foreign indebtedness is so far liquidated as to leave the country in a most independent position. An economy, which was the result of our unfavorable condition, has largely compensated for the loss of the crop of 1854. Our imports have largely fallen off. The country has been going through a process of liquidation, and is in a condition better fitted for a forward movement than at any previous period in its progress. Every branch of industry is well paid. Our railroads are sharing in the general prosperity and have the certainty of a lucrative traffic, for the year before them. With all the elements of a better state of things in the greatest abundance, we certainly cannot miss a fortunate result.

Tabular Statement showing the number of miles of railroad in operation in the United States, Jan'y, 1st, 1856.

ROADS.	Miles in operation.
MAINE.	
Androscoggin and Kennebec.....	68
Atlantic and St. Lawrence.....	150
Buckfield Branch.....	13
Bangor and Piscataquis.....	12
Kennebec and Portland.....	65
Bath Branch.....	9
Portland, Saco, and Portsmouth.....	61½
Calais and Barlog.....	11½
Machiasport.....	8
York and Cumberland.....	18
Androscoggin.....	20
Penobscot and Kennebec.....	53
Kennebec and Somerset.....	25
Total.....	519
NEW HAMPSHIRE.	
Boston, Concord, and Montreal.....	93
Cocheco.....	28½
Concord.....	35
Contocook Valley.....	25
Great Falls and Conway.....	13
Manchester and Lawrence.....	24
Northern.....	82
Portsmouth and Concord.....	47
Sullivan.....	25
Wilton.....	15
Cheshire.....	54
Ashuelot.....	23
Eastern.....	16¾
White Mountains.....	20
Boston and Malne.....	89¾
Merrimac and Connecticut Rivers.....	58
Total.....	601
VERMONT.	
Connecticut and Passumpsic.....	61
Rutland and Burlington.....	119
Vermont Central.....	166
Rutland and Washington.....	12
Vermont Valley.....	24
Bennington Branch.....	6
Western Vermont.....	53
Whitehall and Rutland.....	18
Total.....	454
MASSACHUSETTS	
Berkshire.....	21
Boston and Lowell.....	28
Boston and Maine.....	44½
Boston and Providence.....	53½
Stoughton Branch.....	4
Boston and Worcester.....	68½
Cape Cod.....	46
Dorchester and Milton.....	4
Eastern.....	48
Essex (Salem to Lawrence).....	21
Fitchburg.....	68
Fitchburg and Worcester.....	18

Lowell and Lawrence.....	12¼
Nashua and Lowell.....	15
New Bedford and Taunton.....	21
Newburyport.....	14½
Old Colony and Fall River.....	87
Peterboro' and Shirley.....	23
Pittsfield and N. Adams.....	19
Providence and Worcester.....	43½
South Shore.....	11½
Stoney Brook.....	13
Western (Boston to Albany).....	117
Worcester and Nashua.....	46
Vermont and Massachusetts.....	77
Housatonic Branch.....	11
South Reading Branch.....	9
Salem and Lowell.....	17
Georgetown.....	14
Grand Junction.....	6½
Harvard Branch.....	1
Lexington and West Cambridge.....	7
Boston and New York Central.....	74½
Fairhaven Branch.....	15
Medway Branch.....	3½
Sagus Branch.....	8½
South Reading Branch.....	8
West Stockbridge.....	3
Connecticut River.....	52
Charles River Branch.....	9
Stockbridge and Pittsfield.....	22
Danvers.....	9
Danvers and Georgetown.....	12½
Total.....	1,220
CONNECTICUT.	
Hartford and New Haven.....	62
Hartford, Providence, and Fishkill.....	76
Housatonic.....	98
Middletown Branch.....	11
Naugatuck.....	62
New Haven Canal.....	98
New London, Willimantic, and Palmer.....	66
New Haven and New London.....	50
Norwich and Worcester.....	66
New York and New Haven.....	76
Danbury and Norwalk.....	24
Total.....	689
RHODE ISLAND.	
Stonington.....	50
Providence, Hartford, and Fishkill.....	32
Providence and Bristol.....	13
Total.....	95
NEW YORK.	
Albany and West Stockbridge.....	38¼
Buffalo and Niagara Falls.....	28
Cayuga and Susquehanna.....	35
Hudson and Berkshire.....	31½
Hudson River.....	150
Long Island.....	100
New York and Erie.....	464
New York and Harlem.....	132
Northern.....	119
New York Central.....	556
New York City roads.....	30
Brooklyn City roads.....	30
Watertown and Pottsdam.....	23
Flushing.....	7
Oswego and Syracuse.....	38
Rensselaer and Saratoga.....	32
Saratoga and Washington.....	53
Saratoga and Shenectady.....	22
Skaneateles and Jordan.....	5
Corning and Blossburg.....	15
Watertown and Rome.....	96
Albany and Northern.....	36
Buffalo and State line.....	69
Buffalo and New York City.....	92
Buffalo, Corning, and New York.....	100
Canandaigua and Elmira.....	69
Plattsburg and Montreal.....	21
Rutland and Washington.....	51
Sackett's Harbor and Ellisburg.....	18
Troy and Boston.....	88
Troy Union.....	2
Canandaigua and Niagara Falls.....	99

Syracuse and Binghamton.....	80
Genesee Valley.....	20
Utica and Black River.....	35
Total.....	2,733
NEW JERSEY.	
Belvidere and Delaware.....	50
Burlington and Mount Holly.....	6
Camden and Amboy.....	98
Morris and Essex.....	63
New Jersey.....	31
New Jersey Central.....	64
Trenton branch.....	6
Union.....	33
Flemington branch.....	12
Camden and Atlantic.....	60
Millstone branch.....	6
Total.....	457
PENNSYLVANIA.	
Alleghany Portage.....	36
Beaver Meadow.....	36
Carbondale and Honesdale.....	24
Columbia and Philadelphia.....	82
Westchester branch.....	82
Corning and Blossburg.....	25
Cumberland Valley.....	52
Little Schuylkill.....	28
Mine Hill.....	12
Pennsylvania.....	256
Philadelphia, Reading, and Pottsville.....	92
Philadelphia and Norristown.....	17
Germantown branch.....	6
Philadelphia and Trenton.....	30
Philadelphia, Wilmington, and Baltimore.....	98
Summit Hill and Mauch chunk.....	8
Williamsport and Elmira.....	78
Franklin.....	22
Dauphin and Susquehanna.....	59
Chester valley.....	22
York and Cumberland.....	25
Sunbury and Erie.....	27
Delaware, Lakawanna, and Western.....	50
Catawissa.....	62
Philadelphia and Westchester.....	27
Pennsylvania Coal Company.....	47
Columbia Branch.....	18
Hanover branch.....	13
York and Wrightsville.....	13
Lancaster and Harrisburg.....	37
Franklin.....	26
North-east.....	19
Indiana branch.....	16
Various Coal Roads.....	150
Palmer and Amherst.....	20
Pittsburg and Connellsville.....	25
Alleghany Valley.....	40
North Pennsylvania.....	19
Pittsburg and Steubenville.....	25
Philadelphia and Sunbury.....	25
Total.....	1,767
VIRGINIA.	
Richmond and Danville.....	135
Richmond and Petersburg.....	22
Clover Hill.....	11½
South Side.....	131
Manasses Gap.....	70
Petersburg and Roanoke.....	60
Seaboard and Roanoke.....	80
Appomattox.....	10
Winchester and Potomac.....	32
Virginia Central, including Blue Ridge.....	171
Virginia and Tennessee.....	160
Orange and Alexandria.....	97
Richmond, Fredericksburg, and Potomac.....	76
Greenville and Roanoke.....	21
Roanoke Valley.....	22
Total.....	1,019
DELAWARE.	
New Castle and Frenchtown.....	16
Wilmington Branch.....	6
Delaware.....	40
Total.....	62

MARYLAND.			Memphis and Ohio	35	Peoria and Oquawka	75
Annapolis and Elkridge.....	21		McMinnville Branch.....	25	Bureau Valley.....	47
Baltimore and Ohio.....	379		Total	464	Ohio and Mississippi.....	147
Washidgton Branch.....	88				Michigan Central.....	10
Frederick Branch.....	3				" Southern.....	12
Baltimore and Susquehanna.....	57				Central Mil. Tract.....	84
Westminer branch.....	9				Belleville and Illinoistown.....	15
Total	507				Racine and Mississippi.....	80
NORTH CAROLINA.					Joliet Cut-off.....	44½
Easton and Raleigh.....	87				Northern Cross.....	76
Wilmington and Weldon.....	162				Total	2,241
North Carolina Central.....	228					
Weldon and Ridgeway.....	25					
Total	502					
SOUTH CAROLINA.						
South Carolina.....	242					
Greenville and Columbia.....	165					
Charlotte and South Carolina.....	109					
Kings Mountain.....	22					
Laurens.....	32					
Wilmington and Manchester.....	171					
Northeastern.....	30					
Total	771					
GEORGIA:						
Central.....	191					
Georgia.....	173					
Macon and Western.....	101					
Western and Atlantic.....	149					
South Western.....	72					
Rome Branch.....	20					
Musabgee.....	70					
Atlanta and West Point.....	81					
Milledgeville.....	17					
Eaton and Milledgeville.....	21					
Wilkes County.....	18					
Athens Branch.....	40					
Waynesboro'.....	51					
Total	1,001					
ALABAMA.						
Montgomery and West Point.....	88					
Mobile and Ohio.....	62					
Memphis and Charleston.....	75					
Alabama and Tennessee River.....	56					
Girard.....	25					
Opelika.....	30					
Total	334					
MISSISSIPPI.						
Raymond.....	7					
St. Francis and Woodville.....	28					
Vicksburg and Brandon.....	60					
Mobile and Ohio.....	120					
Mississippi Central.....	25					
Total	240					
LOUISIANA.						
Carrollton.....	6					
Clinton and Port Hudson.....	24					
Lake Pontchartrain.....	6					
Mexican Gulf.....	27					
New Orleans, Jackson and Northern.....	113					
New Orleans and Opelousas.....	55					
Total	231					
TEXAS.						
Buffalo Bay, Brazos, and Colorado.....	40					
KENTUCKY.						
Covington and Lexington.....	93					
Lexington and Frankfort.....	29					
Louisville and Frankfort.....	65					
Maysville and Lexington.....	19					
Louisville and Nashville.....	25					
Total	231					
TENNESSEE.						
East Tennessee and Georgia.....	110					
Memphis and Charleston.....	88					
Nashville and Chattanooga.....	159					
East Tennessee and Virginia.....	20					
Alabama and Tennessee.....	27					

OHIO.					
Bellefontaine and Indiana.....	123				
Central Ohio.....	141				
Cleveland and Mahoning.....	30				
Cincinnati, Hamilton, and Dayton.....	60				
Cleveland, Columbus, and Cincinnati.....	135				
Cincinnati, Wilmington, and Zanesville.....	132				
Cleveland, Painesville, and Ashta.....	72				
Cleveland, Zanesville, and Cincinnati.....	61				
Cleveland and Pittsburgh.....	133				
Cleveland and Toledo, S. Division.....	72				
" " N. ".....	107				
Columbus and Xenia.....	55				
Columbus, Piqua, and Indiana.....	90				
Dayton and Michigan.....	28				
Dayton and Western.....	42				
Findlay Branch.....	16				
Greenville and Miami.....	47				
Hamilton, Eaton, and Richmond.....	45				
Carrollton Branch.....	20				
Iron.....	18				
Little Miami.....	84				
Mad River and Lake Erie.....	193				
Mansfield and Sandusky.....	56				
Newark and Mansfield.....	61				
Ohio and Pennsylvania.....	187				
Ohio and Mississippi.....	20				
Ohio and Indiana.....	131				
Scioto and Hocking Valley.....	44				
Dayton and Xenia.....	19				
Marietta, Hillsboro', and Cincinnati.....	145				
Steubenville and Indiana.....	122				
Springfield, Mt. Vernon, and Pittsburgh.....	50				
Springfield and London.....	20				
Toledo and Illinois.....	76				
Northern Indiana.....	72				
Total	2,702				
INDIANA.					
Columbus and Shelbyville.....	24				
Evansville and Crawfordsville.....	109				
Indiana Central.....	72				
Cleveland and Pittsburg.....	84				
Jeffersonville.....	77				
Lafayette and Indianapolis.....	64				
Madison and Indianapolis.....	86				
Martinsville.....	27				
New Albany and Salem.....	288				
Fort Wayne and Chicago.....	65				
Cincinnati and Chicago.....	87				
Pern and Indianapolis.....	73				
Shelbyville and Knightstown.....	27				
Shelbyville Lateral.....	16				
Shelbyville and Rushville.....	20				
Terre Haute and Richmond.....	73				
Northern Indiana.....	139				
Ohio and Mississippi.....	67				
Michigan Central.....	40				
Indianapolis and Cincinnati.....	90				
Toledo and Illinois.....	61				
Total	1,589				
MICHIGAN.					
Central.....	228				
Southern.....	133				
Detroit and Milwaukee.....	52				
Tecumseh Branch.....	26				
Erie and Kalamazoo.....	33				
Total	472				
ILLINOIS.					
Aurora Branch.....	12				
" Extension.....	46				
Chicago and St. Louis.....	220				
" and Rock Island.....	182				
" and Milwaukee.....	45				
Galena and Chicago Union.....	247				
Great Western Illinois.....	94				
Illinois Central.....	630				
St. Charles Branch.....	7				
Illinois and Wisconsin.....	51				
Terre Haute and Alton.....	198				

WISCONSIN.					
Milwaukee and Mississippi.....	106				
Watertown Branch.....	30				
Milwaukee and Chicago.....	40				
Beloit and Madison.....	20				
Milwaukee and La Crosse.....	69				
Rock River Valley.....	20				
Total	285				
MISSOURI.					
Pacific.....	125				
North Missouri.....	13				
Total	138				
IOWA.					
Rock Island and Muscatine.....	20				
Mississippi and Missouri.....	67				
Total	87				
CALIFORNIA.					
Sacramento Valley.....	21				
RECAPITULATION.					
Maine.....	519				
New Hampshire.....	601				
Vermont.....	454				
Massachusetts.....	1,221				
Rhode Island.....	95				
Connecticut.....	689				
New York.....	2,738				
New Jersey.....	457				
Pennsylvania.....	1,767				
Virginia.....	1,019				
Maryland.....	507				
Delaware.....	62				
North Carolina.....	502				
South Carolina.....	771				
Georgia.....	1,001				
Alabama.....	336				
Mississippi.....	215				
Louisiana.....	231				
Texas.....	40				
Kentucky.....	231				
Tennessee.....	464				
Ohio.....	2,702				
Indiana.....	1,589				
Michigan.....	472				
Illinois.....	2,241				
Wisconsin.....	285				
Missouri.....	138				
Iowa.....	87				
California.....	20				
Total	21,449				
Little Miami Railroad.					
The earnings of this road for the year ending 30th November, 1855, were:					
Passengers.....	\$501,531 70				
Freight.....	514,852 48				
Extra baggage.....	795 92				
Total	\$1,017,180 10				
Disbursements including depreciation.....	506,546 81				
Net earnings	\$510,633 29				
Of which one-third belongs to the Columbus and Xenia Company, leaving to the Miami Company \$340,422 20. There was a surplus to income account last year of \$258,196 02, and after the payment of ten per cent. dividend, the surplus on the 1st December, 1855, is \$258,963 32. The Company have declared a semi-annual dividend of five per cent. payable in their six per cent. bonds.					

Sunbury and Erie Railroad.

The City Councils of Philadelphia have passed an ordinance, authorizing the Mayor to borrow \$1,050,000, at a rate of interest not exceeding six per cent. per annum,—to pay a subscription to the Sunbury and Erie Railroad, at the following periods, viz: \$300,000 on the 1st of February, 1856; \$250,000 on the 1st of April; \$250,000 on the 1st of August; and \$250,000 on the 1st of November, 1856. Certificates issued to be payable at the expiration of 30 years, and to be negotiated at not less than par. Provision is made to meet the interest charge, and create a sinking fund for the redemption of the principal at maturity.

West Point and Tennessee Railroad.

The stockholders met on the 18th inst. The \$50,000 required by the charter, has been subscribed. Jno. P. King, F. N. Chisholm, Wm. C. Darden and Henry W. Todd, of Georgia, and Wm. B. S. Gilmer, J. S. Mitchel and Atchison Finley, of Alabama, were elected directors. The route was ordered to be surveyed as far as La Fayette, Alabama, and the directors were instructed to communicate with Col. John P. King and the Georgia Railroad Company, in order to ascertain upon what terms the Company can unite their stock with theirs, and what aid they would afford in the extension of their road from West Point to La Fayette.

Virginia Central Railroad.

This work, formerly known as the Louisa Railroad, was chartered by the Legislature of that State, in February, 1836, the act specifying that that the road should start "from some point on the line of the Richmond, Fredericksburg, and Potomac Railroad, in the neighborhood of Taylorsville, passing by or near Louisa court-house, to a point in the county of Orange near the base of the South-west mountains." In February, 1837, an amendment was passed, by which the Board of Public Works, on behalf of the Commonwealth, were authorized to subscribe for 1,200 shares, being two-fifths the stock of the Louisa Railroad Company (\$300,000.) In March, 1838, an extension of the road to Charlottesville was authorized, the State taking three-fifths of the new stock thus created. An increase to the authorized stock was also made at this time to the extent of \$300,000. The above were the principal enactments under which this road in its early history, was commenced and carried forward. We shall have occasion to notice other provisions and rights granted from time to time in our further notice of the work.

The Virginia Central Railroad starts from Richmond, the capital of the State, and pursues a northerly direction for the first 27 miles, nearly parallel with the Richmond, Fredericksburg, and Potomac Railroad, which it crosses at the Junction. This point was formerly the eastern terminus of the Louisa road; but in the Legislative session of 1847-8, an act was passed empowering the company to construct an independent line to Richmond. On leaving this point it pursues a course west by north for 49½ miles to Gordonsville, now on the line of the Orange and Alexandria road.—This place was for several years the western terminus of the Louisa road. For so far it may be said to encounter few if any serious obstacles; the principal being the crossing of the South Anne river, near the Junction. Between the latter point and Gordonsville, it occupies the line of a continuous ridge of high grounds lying between the North and South Anne rivers. From Gordons-

ville the line bends to the South-west for about 18 miles, till it strikes the Rivanna river, which it crosses three miles east of Charlottesville. After crossing Meachum river, the road reaches Blue Ridge at what is called Rockfish Gap. At this point a temporary track has been laid over the mountain until the tunnel, 4,500 feet long, shall have been completed through it. The present western terminus of the road is at Goshen, 171 miles from Richmond. Beyond this point it is being constructed to Covington, where it is designed to connect with the Covington and Ohio, also under progress. These two works will form a very direct route from the State capital to the Ohio river at Guyandotte, of about 300 miles in length.

The company were organized, and the road surveyed and let to contractors, in 1837. On the 27th of November, 1838, it was opened as far as Louisa, 35 miles, at a cost of about \$310,000. This excluded motive power and rolling stock, which by agreement were to be supplied by the R. F. & P. Co., the latter party having undertaken to operate the road for one-half the gross earnings and the expense of repairs. This agreement continued till the beginning of 1843, when it was replaced by one lasting three years and a half longer, allowing one-half the gross receipts and \$1,500 per annum extra for working the road. Since the termination of the latter, in 1846, the company have operated the road with their own machinery.

The road was at first laid with a very light flat bar rail. In 1841, the company commenced to re-lay it with a heavier rail of the edge pattern. Previous to this time they had received authority to extend the road as far as Gordonsville. This section was let in 1839 and finished in 1840, at a cost of about \$8,000 per mile. An addition of \$115,000 was made to their capital stock on account of the construction of this extension. To the new stock the State subscribed three-fifths, or \$69,000; the balance was raised by private subscription.

In June, 1845, a resolution was adopted by the stockholders, asking for authority to extend their line to the Blue Ridge. The measure was at first unsuccessful, but in the following session, liberty was granted to build the road. This was followed, in 1847-8, by an application to build an independent line from the Junction to Richmond; as the company were unable to come to terms with the Richmond, Fredericksburg, and Potomac company, with reference to the rates to be charged for transportation. Both these works were put under contract shortly afterwards, the former to be finished to Charlottesville by the beginning of 1849, and eight miles further by the close of that year. To build the first of these, an increase to their stock was authorized to the extent of \$300,000, of which two-fifths were taken by the Commonwealth. On account of the application of net earnings to finishing and equipping the road, an extra dividend of ten per cent. in bonds, payable in 1852, was declared to the old stockholders, to the amount of \$38,400.

In March, 1849, an act was passed by the General Assembly for constructing a railroad across the Blue Ridge, including a tunnel, at the expense of the State, with a view of connecting with the Louisa road. The act required its acceptance by

the company, and that the latter should pay annually to the Commonwealth 50 cents for each passenger and 10 cts for each barrel of flour transported through the tunnel, the company operating the road and keeping it in thorough repair. The measure was duly accepted at the next annual meeting. Authority was also given the Directors to issue bonds to an amount not exceeding \$80,000, for the purpose of completing that part of the road between Richmond and the Junction. By the terms of the contract for construction, payment was to be made—one-third in the company's stock, one-third in cash, and one-third in ten year bonds. The work was opened in the early part of 1851. During the previous year the road had been completed to Charlottesville, and that part between Waynesborough and Staunton put under contract.

The following is an abstract of the company's General Account, as returned for the year ending 30th Sept., 1850.

Individual subscriptions—1836-38.....	\$225,000
Do. 1847.....	100,000
Do. 1848.....	55,000
Do. 1849.....	37,200
Do. 1850.....	100,000
Total.....	\$517,500

Subscribed by Commonwealth—

In 1836-38.....	\$190,000
In 1847.....	149,200
In 1849.....	45,700

Co's. bonds guaranteed by the State.....	100,000
Co's. bonds to contractors and others.....	65,780
“ for dividends.....	38,256
Dividends unpaid.....	2,106
Bills and accts payable.....	49,856
Transportation receipts since commencement.....	478,770

Total.....\$1,637,172

Cost of Construction:

From Junction to Gordonsville.....	\$411,244
“ Gordonsville to Woodville.....	250,212
“ Waynesboro' to Staunton.....	30,822
“ Junction to Richmond.....	251,405

Unpaid subscription by Commonwealth.....	\$943,983
“ “ by individuals and counties.....	38,134
Dividends declared since commencement.....	140,550
Property held, as rolling stock, shops, &c.....	117,200
Transportation expenses since commencement.....	86,853
Cash and accts receivable.....	270,839
	39,655

Total.....\$1,637,172

The name of the corporation was changed this year to the *Virginia Central Railroad Company*.

In the latter part of 1851, arrangements were made for extending the road from Staunton west to Covington. The surveys showed a practicable route, with grades ascending eastward of only 40 feet, and westward 50 feet per mile, except at two points in crossing the Alleghany, where the maximum grade was 60 feet, and on which it has been proposed to use extra power. The grading and masonry of 20 miles of this were accordingly put under contract in December, 1851—to be finished by July, 1853. Fifteen miles additional were let the same year.

About the same time, in consequence of instructions given to the Board at the previous annual meeting of stockholders, preparations were made for re-laying that part of the road between Junction and Gordonsville with an edge rail, not less than 51 lbs. to the yard. The iron was accord-

ingly procured on very favorable rates, and the work of re-laying prosecuted through 1852, till its completion in the following year. Part of the cost of this was met by an issue of coupon bonds, which were negotiated at favorable rates.

The road was opened from Charlottesville to Meachum's river, 10 miles, on the 6th of December, 1853. This brought them to the eastern terminus of the State work which is 15 miles long.—The slow progress of the latter, however, induced the company to build a temporary track over the Ridge. This was undertaken in 1853, and completed early in 1854. Though having grades at some points of nearly 300 feet to the mile, it has been operated so far without the occurrence of any accidents to travelers or the company's interests in any shape.

A subscription of \$200,000 to the western extension was made by the City of Richmond in 1853. This enabled the company to put all the heavy work between Millboro' and Jackson river under contract—the grading to be completed by Dec., 1854.

At the annual meeting in 1853, it was proposed to build a short line connecting the city of Richmond with the road at Charlottesville; as other parties had been applying for a charter to construct such a work, which would save 27 miles' distance between these points. Application was accordingly made at the ensuing session of the Legislature, for an amendment of the charter to that effect, which was readily obtained. The new line will be about 70 miles long. It is proposed to keep the old line by Gordonsville still in operation as a local road.

The work of re-laying the track between Richmond and the Junction, and between Gordonsville and Charlottesville, was continued in 1854. Part of the new track is laid with a 60 lb. rail. An additional subscription of \$100,000 was made this year by the city of Richmond. Valuable improvements were made in the company's stations and depots, and large additions to their machinery, besides completing the main line to Staunton, which was done early in the year.

According to the last report, made up to September 30th, 1855, the revenue for the year was as follows:

Passengers.....	\$156,576 59
Freight.....	205,634 73
Mails, &c.....	17,154 71

Total.....\$379,366 03

—Or an increase of 32½ per cent. on the previous year. The working expenses amounted to \$206,974 99, or fifty-four per cent. of receipts.—As the net earnings for several years have been applied to construction, a scrip dividend of 6 per cent. was declared.

During the year, 33 miles have been opened west of Staunton, making 171 miles in all. The mountain track has continued to work well. The short line between Richmond and Gordonsville has been surveyed. Eight miles are graded beyond the point to which the road is now operated. Three thousand five hundred tons of rails were purchased last year, in England, for cash, at very advantageous rates. Between Millboro' and Covington, the whole line, except some light work, is under contract. This section of the road is said to be unusually direct for one penetrating a mountain region. The company have on hand and under

contract sufficient heavy rails to finish re-laying the old line to Charlottesville. We presume that this work has been already completed. The road and its equipment are in good condition. The company, in connection with the Orange and Alexandria, carry the great Southern mail between Washington and Richmond.

The rolling stock consists of 26 locomotives (8 of which are light,) 22 passenger and baggage cars and 247 others of various kinds. The locomotives have been principally supplied from Norris's and Baldwin's Works, Philadelphia, and the Tredegar Works at Richmond.

Col. E. Fontaine has filled the Presidential office for many years. H. D. Whitcomb Esq., is the company's present Superintendent; and J. Garrett Esq., is their Secretary and Treasurer.

In looking over the history of this work, which is one of the oldest in the State, the idea that "great things often spring from small beginnings," will at once strike us. The company's original design was to build a line some 28 miles long only, as a mere tributary of the R. F. & P. road, and to be operated by the latter. With the growth of their returns, their ideas enlarged, until the design of opening up a great Central avenue to the Ohio presented itself to their minds. For many years they had to contend against heavy influences, to which it is unnecessary to allude here. Their stock at one time had sunk to 25 per cent.; while they were threatened with an injunction against operating that section between Richmond and the Junction. That these difficulties have been in a great measure overcome, and the work placed on a secure foundation, is due to the energy and perseverance with which their affairs have been conducted.

GENERAL ACCOUNT.

Receipts.

From State on acct subscriptions....	\$1,613,384
" acceptances by Board of Works.....	41,800
" subscribers, other than State....	1,145,592
" rent, premium, and interest.....	3,565
" bonds guaranteed by State, payable 1860.....	100,000
" Coupon bonds, issued April, 1854, payable 1884.....	411,000
" bonds for loans not guaranteed..	126,623
" " work done between Richmond and Junction..	54,667
" " work done west of Blue Ridge.....	103,708
" " div'ds in '48, now due.....	566
" " '51, due 1866.....	79,680
" " '53, due 1875.....	95,960
" " '55, due 1865.....	72,552
" receipts from transportation since commencement.....	1,674,511
" debts and acc'ts due.....	127,123
	\$5,858,114

Disbursements.

For construction between Richmond and Staunton.....	\$1,756,148
For relaying between Richmond and Charleston.....	334,499
For temporary track across Blue Ridge.....	140,762
For equipment.....	451,128
For construction west of Staunton....	1,502,978
For real estate, surveys, &c.....	21,493
For interest from 1st Oct. 1850.....	153,819
For 180 shares of stock taken back...	9,000
For dividends since commencement...	365,882
For transportation since ".....	940,563
For cash on hand and accounts receivable.....	182,340
	\$5,858,114

Statement showing the Cost; Mileage; Cost per mile; Gross Receipts; Current Expenses; Net Receipts; Rate of Dividend; Receipts from Passengers; Receipts from Freight; Miscellaneous; Earnings per mile; Per centage of Gross Earnings; Do. of Net Earnings, of the Virginia Central R. R. from the opening of the first division to the present time.

Year.	Cost.	L'gth.	Cost per Mile.	Gross Receipts.	Current Expenses.	Net Receipts.	Dividend ends.	Receipts from Passengers.	Receipts from Freight.	Miscellaneous.	Earnings per mile.	Percentage of Gross Earnings.	Percentage of Net Earnings.
1853.....	\$287,080	35	\$8,204	.....	.....	.....	4½	.....	.....	.....	.....	.....	.....
1850.....	296,125	35	8,460	.....	.....	.....	4½	.....	.....	.....	.....	.....	.....
1851.....	407,340	49	8,313	.....	.....	.....	4½	.....	.....	.....	.....	.....	.....
1852.....	407,475	49	8,315	.....	.....	.....	4½	.....	.....	.....	.....	.....	.....
1853.....	403,720	49	8,361	\$38,846	\$16,007	\$22,839	None.	.....	.....	.....	.....	.....	.....
1854.....	403,720	49	8,361	87,625	14,944	72,681	None.	.....	.....	.....	.....	.....	.....
1855.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1856.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1857.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1858.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1859.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1860.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1861.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1862.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1863.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1864.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1865.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1866.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1867.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1868.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1869.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1870.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1871.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1872.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1873.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1874.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1875.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1876.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1877.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1878.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1879.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1880.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1881.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1882.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1883.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1884.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....
1885.....	403,720	49	8,361	40,874	19,676	21,198	None.	.....	.....	.....	.....	.....	.....

* 10 per cent. of this in bonds.

† In bonds, to the old stockholders.

‡ In bonds.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday on a par valuation of \$100.]

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	71	Tennessee and Alabama.	30	246,486	679,906	176,484	102,016	---	---	---	---
Androscoog & Kennebec.	55	642,243	1,473,080	2,245,020	190,605	12,807	none	18	Memphis and Charleston.	288	2,103,177	3,563,362	1,764,484	---	---	---	---	
Androscoog.	20	91,192	232,129	343,317	29,896	12,807	none	20	Mobile and Ohio.	527	2,300,000	3,666,991	1,310,668	---	---	---	---	
Kennebec & Portland.	72	1,211,395	1,607,229	2,470,596	228,747	114,642	18	18	Miss. Central.	188	642,534	628,303	---	---	---	---	---	
Portl., Saco, & Portsmouth.	51	1,567,020	1,119,537	1,486,567	259,330	124,038	6	90	N.O., Jackson, and G. N.	100	---	---	---	---	---	---	---	
Roston, Concord, & Montreal.	93	1,868,065	1,069,512	3,171,510	329,744	131,016	18	18	N.O., Opelousas & G. N.	350	1,309,428	476,148	1,825,812	---	---	---	---	
Cheshire.	53	2,083,825	940,919	3,181,997	372,892	131,016	8	86 1/2	Vicksburg, Shreveport, & Tex.	111	1,000,000	1,500,000	1,077,895	---	---	---	---	
Concord.	35	1,485,000	---	1,412,576	370,529	138,299	2 1/2	39 1/2	East Tennessee and Ga.	131	624,825	636,593	1,016,201	---	---	---	---	
Northern, N. H.	82	2,768,400	---	3,016,062	162,687	55,173	none	---	Nash. and Chattanooga.	161	2,819,330	1,497,081	5,843,694	316,090	112,177	none	---	
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	394,971	---	none	---	Ovington & Lexington.	98	---	---	---	---	---	---	---	
Kentland & Burlington.	120	2,233,376	2,662,398	5,373,425	820,119	214,793	6	81	Lexington and Frankfort.	29	431,091	159,299	478,067	---	---	---	---	
Vermont Central.	117	5,000,000	3,550,236	2,158,932	442,491	104,176	6	61	Lexington and Danville.	65	540,117	61,625	570,463	---	---	---	---	
Boston and Lowell.	27	1,830,000	300,510	4,179,535	906,790	42,000	7	83	Louisville and Frankfort.	65	698,236	669,061	1,589,566	244,014	96,902	6	---	
Boston and Maine.	83	4,076,974	150,000	600,000	---	---	---	---	Atlantic & Gt. Western.	264	866,939	77,294	613,231	---	---	---	---	
Berkshire.	21	700,000	---	---	---	---	---	---	Bellevue and Ind.	118	1,981,598	1,260,612	2,805,821	238,010	114,592	none	---	
Boston and N. Y. Central.	74	2,231,000	1,200,000	3,310,948	102,352	42,355	2 1/2	64	Cleveland and Erie.	95	---	---	---	---	---	---	---	
Boston and Providence.	55	3,160,000	---	3,611,821	272,247	100,078	3	64	Clev. Col., and Cincin.	141	4,473,721	574,127	4,646,138	1,162,601	557,905	9	101	
Boston and Worcester.	68	4,500,000	587,553	4,858,370	562,894	342,139	6 1/2	74 1/2	Clev. Zanes, and Cincin.	87	---	---	---	---	---	---	---	
Connecticut River.	52	1,691,110	524,043	1,802,244	277,770	102,942	4 1/2	---	Cleveland and Toledo.	103	2,676,428	2,689,301	5,124,629	736,272	896,986	10	71 1/2	
Eastern, Mass.	60	2,583,400	2,850,325	4,447,459	730,269	346,425	7	---	Clev. and Mahoning.	133	2,688,770	2,516,162	4,815,153	450,215	256,868	62 1/2	---	
Essex.	20	299,107	---	747,008	51,246	---	none	---	Cin., Hamilton & Dayton.	60	2,100,000	1,464,364	2,961,978	483,620	---	65	---	
Fitchburg.	47	3,540,000	334,992	3,739,965	704,638	272,716	6	---	Cin., Wilm. & Zanesville.	131	1,120,460	1,131,265	2,326,459	---	---	---	---	
Fitchburg and Worcester.	14	238,140	74,000	333,884	42,647	18,274	6	---	Col., Piqua, and I. dian.	72	---	---	---	---	---	---	---	
Lowell and Lawrence.	12	200,000	140,000	664,603	191,857	55,877	8	---	Columbus and Xenia.	64	4,418,250	3,110,932	1,440,447	340,781	168,949	82	---	
Nashua and Lowell.	14	600,000	---	---	---	---	6 1/2	---	Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	---	---	---	---	
N. Bedford and Taunton.	21	600,000	---	---	---	---	6 1/2	---	Dayton and Michigan.	140	1,076,692	303,011	1,185,826	---	---	---	---	
Newburyport.	14	137,200	154,564	287,413	32,677	4,666	---	---	Easton and Hamilton.	42	448,411	383,994	1,345,573	113,859	53,250	30	---	
Old Colony and Fall River.	37	3,015,100	---	---	---	---	10	---	Little Miami.	65	2,963,921	1,171,738	3,648,172	681,562	336,708	---	---	
Pittsfield & N. Adams.	18	450,000	---	---	---	---	2 1/2	---	Mad River and L. Erie.	205	2,461,650	2,572,932	4,446,061	---	---	---	---	
Vermont and Mass.	77	2,232,540	1,046,626	3,207,867	275,623	56,383	none	---	Ohio Central.	135	1,530,927	3,485,076	4,283,443	Recently opened.	---	---	---	
Western, Mass.	159	5,150,000	5,689,520	9,063,258	1,763,944	718,703	7	---	Ohio and Penn.	187	2,461,700	3,219,000	6,670,700	1,111,626	662,117	9	---	
Worcester and Worcester.	46	1,411,000	218,244	1,947,703	209,118	82,959	2 1/2	---	Pittsbg. Mayv. & Cin.	50	---	---	---	---	---	---	---	
Hartford and N. Haven.	120	1,845,610	2,090,124	4,060,869	256,685	119,611	none	---	Sand'y, Manaf. & Newk.	127	1,350,000	2,208,357	3,552,357	328,958	164,479	none	---	
Hart'rd, Prov. and Fishkill.	120	1,845,610	2,090,124	4,060,869	256,685	119,611	none	---	Scioto & Hocking Valley.	135	408,975	509,060	888,858	---	---	---	---	
Housatonic.	110	2,000,000	474,177	2,428,066	307,792	18,561	none	---	Springf., Mt. Vernon & P.	113	1,000,000	960,000	---	---	---	---	---	
Naukatick.	62	992,000	2,252,647	4,960,407	906,018	335,611	none	---	Tol., Washash & St. Louis.	242	2,500,000	4,530,000	---	---	---	---	---	
N. York and N. Haven.	60	373,255	735,165	1,450,318	103,986	217	none	---	Cin., Log. and Chicago.	255	4,196,679	1,008,126	2,080,433	---	---	---	---	
N. Haven and N. London.	66	506,000	1,907,826	1,627,827	137,000	3,717	none	---	Evansville & Crawfordsv.	109	708,945	1,177,596	1,844,541	127,400	64,552	---	---	
N. London, W. & Palmer.	66	1,122,300	796,886	2,500,488	304,651	95,456	6 1/2	---	Ind. and Cincinnati.	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	65	
Norwich and Worcester.	100	1,482,766	1,402,244	2,597,963	123,147	60,762	none	---	Indiana Central.	68	608,129	1,251,387	1,609,090	321,400	186,224	46 1/2	---	
Buffalo, Conn. and N. Y.	82	798,439	2,587,849	3,401,868	507,778	52,030	none	---	Ind., Clev. & Pittsburg.	83	834,157	1,101,971	1,671,544	---	---	---	---	
Buffalo and N. Y. City.	81	1,300,000	1,030,000	2,343,849	254,615	264,855	10	---	Jeffersonville.	60	1,014,262	694,000	---	206,544	94,818	none	---	
Buffalo and St. Line.	35	687,000	531,318	1,093,624	120,849	58,589	none	---	Lafayette and Indianapolis.	64	---	---	---	---	---	---	---	
Oayuga & Susquehanna.	144	3,757,891	8,833,804	12,391,363	1,753,968	608,010	none	---	Madison and Indianapolis.	87	1,647,500	1,568,881	3,237,381	---	---	---	---	
Hudson River.	146	1,876,148	626,558	2,518,261	279,520	102,657	none	---	New Albany and Salem.	288	2,636,121	5,281,948	6,043,189	646,827	371,402	none	10	
Long Island.	334	24,154,861	14,462,742	35,523,918	5,483,981	3,162,126	50 1/2	---	Perru and Indianapolis.	73	---	---	---	---	---	---	---	
New York Central.	464	10,024,958	25,126,660	33,439,431	5,483,981	3,162,126	50 1/2	---	Terre Haute and Ind.	73	924,100	456,000	1,405,821	239,992	189,323	10	85 1/2	
New York and Erie.	134	5,716,050	3,827,595	8,127,358	492,394	154,554	none	---	Chicago and Rock Is'ld.	182	3,141,500	2,387,155	6,214,162	---	---	---	---	
New York and Harlem.	119	1,011,527	4,522,413	6,435,565	518,527	145,733	4 1/2	---	Chicago and St. Louis.	220	---	---	---	---	---	---	---	
Northern, N. Y.	37	374,920	219,594	677,754	106,764	53,880	none	---	Chic. St. Paul & N. W. du Lac.	178	2,300,000	1,325,000	3,625,000	---	---	---	---	
Oswego and Syracuse.	25	610,000	140,000	888,182	231,348	70,327	6 1/2	---	Galena and Chicago.	295	4,334,800	1,180,304	5,866,263	1,566,710	942,231	17	122 1/2	
Rensselaer & Saratoga.	51	599,900	1,053,234	1,891,966	188,959	37,666	none	---	Illinois Central.	707	1,419,440	18,001,426	17,008,099	---	---	---	96 1/2	
Saratoga and Washington.	71	731,614	1,118,751	1,636,117	152,648	66,407	none	---	Peoria and Quawwa.	93	509,889	815,454	1,388,342	---	---	---	---	
Saratoga & Binghamton.	27	439,492	493,500	1,107,873	125,045	152,752	5 1/2	---	Ohio & Miss. (Wat. Div.).	147	1,780,296	3,292,403	4,870,586	Recently opened.	---	---	---	
Troy and Boston.	97	1,370,428	854,768	2,040,543	124,301	44,825	none	---	Terre Haute and Alton.	178	2,281,420	1,256,000	3,537,424	---	---	---	---	
Watertown and Rome.	50	1,000,000	1,177,376	2,177,376	398,964	552,456	12	---	Detroit and Milwaukee.	135	638,000	1,128,964	1,966,969	---	---	---	---	
Bellevue and Delaware.	94	1,500,000	4,765,134	1,682,486	60,673	61,700	none	---	Mich. Central.	282	6,021,916	6,142,023	10,300,147	2,215,283	879,556	90 1/2	---	
Camden and Amboy.	60	240,125	1,269,223	1,499,185	60,673	61,700	none	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	91 1/2	
Camden and Atlantic.	81	3,253,925	798,596	4,306,338	824,032	440,447	10	---	Green Bay, Mil. & Ch.	155	764,074	442,726	1,193,768	---	---	---	---	
New Jersey Central.	75	2,000,000	1,632,085	3,066,230	378,145	180,796	7	---	Milwaukee and Miss.	200	988,665	1,827,584	2,704,593	465,051	307,632	85	---	
Morris and Essex.	62	1,155,715	351,500	1,549,622	223,596	99,377	6	---	Milwaukee & Watert'n.	72	354,861	132,000	514,238	---	---	---	---	
Camden and Valley.	56	1,154,500	28,411	1,212,911	---	---	---	---	Milwaukee and Horicon.	92	---	---	---	---	---	---	---	
Del. Lack. & Western.	109	2,865,175	1,865,807	4,140,366	---	---	---	---	Milwaukee & La Crosse.	69	---	---	---	---	---	---	---	
Erie and North East.	26	600,000	---	---	---	---	---	---	Racine and Miss.	68	---	---	---	---	---	---	---	
Harris'g & Lancaster.	38	---	---	---	---	---	---	---	Hannibal & St. Joseph.	---	292,351	580,000	823,310	---	---	---	---	
Little Schuylkill.	28	---	---	---	---	---	---	---	North Missouri.	13	1,138,268	684,294	1,093,336	---	---	---	---	
Northern Penn.	67	---	---	---	---	---	---	---	Pacific.	130	2,803,692	3,903,174	4,463,726	160,000	---	---	---	
Pennsylvania.	256	12,104,820	9,665,884	17,158,495	3,499,192	1,977,533	86 1/2	---	St. Louis and Iron Mt.	---	445,170	---	188,115	---	---	---	---	
Phil. and Reading.	96	8,219,672	10,444,442	18,464,114	3,781,639	2,140,429	10	91 1/2	Panama.	49	3,743,900	---	6,561,852	618,850	416,756	9 1/2	103 1/2	
Phil. Wm. and Baltimore.	96	6,000,000																

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	-----	87
Buffalo and State Line	500,000	Do. inconvertible	7	April, October ..	"	1866	-----	95
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	-----	99
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	90	92
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	-----	-----
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	-----	90
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	-----	75
Cincinnati, Hamilton, and Dayton ..	600,000	1st mortgage inconvertible	7	20 Jan. 20 July ..	"	1867	-----	80
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862 ..	7	Jan'y, July	"	1868	72	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	-----	87
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	-----	93
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1861	-----	93
Do. do.	1,250,000	Do. on Branches	7	March, Sept.	"	1873	-----	85
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	-----	87
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	-----	87
Do. do.	1,000,000	Do. inconvertible	7	April, October	"	1862-72	-----	75
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	75
Do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	-----	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	-----	90
Port Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	76	80
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	-----	96
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	87 1/2	99
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	89	93
Green Bay, Milwaukee, and Chicago ..	400,000	Do. convertible	8	10 April, 10 Oct. ..	"	1863	93	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1872	-----	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	-----	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	89	91
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	-----	-----
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	-----	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859 ..	7	Feb'y, August	"	1865	-----	76
Little Miami	1,500,000	Do. inconvert.	6 1/2	May, 2 Nov.	"	1863	78 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	93	100
Do.	600,000	Do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N. Y.	1862	96	100
Do. do.	650,000	Do. 2d do. 1858 ..	8	April, October	"	1863	90	95
Do. do.	1,250,000	Do. 3d do. 1860 ..	8	June, Decemb.	"	1877	87 1/2	88
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	-----	101
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	-----	80
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	-----	100
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	-----	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	-----	84
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860 ..	6	Jan'y, July	Phila.	1860	95	96
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N. Y.	1861	-----	85
Shelburnville and Indiana	1,600,000	Do. convertible	7	Jan'y, July	"	1865	-----	78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	-----	-----
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862 7/12	-----	77
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	74

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked
Baltimore and Ohio.....	2,500,000	Mortgage.....	6	April, October	Balt.	1885	82	82
Do, do.....	1,128,500	Do.....	6	Jan'y, July.....	Balt.	1875	89	90
Chicago and Rock Island.....	2,000,000	1st mortgage, conv. till 1858	7	10-Jan. 10-July	N.Y.	1870	95	96
Erie Railroad.....	3,000,000	1st mortgage.....	7	May, Novemb.	"	1867	106	106
Do.....	4,000,000	2d mortgage, convertible	7	March, Sept.....	"	1859	96	97
Do.....	6,000,000	3d mortgage.....	7	March, Sept.....	"	1883	92	93
Do.....	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.....	"	1875	57	58
Do.....	4,351,000	Convertible, Inscription.....	7	Feb'y, August.....	"	1871	80	81
Do.....	3,500,000	Convertible.....	7	Jan'y, July.....	"	1862	64	64
Hudson River.....	4,000,000	1st mortgage, Inscription.....	7	Feb'y, August.....	"	1860-70	99	100
Do.....	2,000,000	2d do. do.....	7	16 June, 16 Dec.	"	1860	84	86
Do.....	3,000,000	3d do. convertible.....	7	May, Novemb.	"	1870	64	66
Illinois Central.....	17,000,000	Mortgage, inconvertible.....	7	April, October.....	"	1875	81	81
Do. (Free Land).....	3,000,000	M'ge 345,000 acre-priv 7 aha's	7	March, Sept.....	"	1860	85	86
Michigan Southern.....	1,000,000	1st mortgage, inconvertible.....	7	May, Novemb.	"	1860	92	92
New York and Harlem.....	1,800,000	Do. do.....	7	May, Novemb.	"	1861-72	80	81
New York and New Haven.....	750,000	No mortgage, do.....	7	June, Decemb.	"	1855/60/6	78	80
New Haven and Hartford.....	1,000,000	1st mortgage, do.....	6	Jan'y, July.....	"	1873	97	97
Northern Indiana.....	1,000,000	Do. do.....	7	Feb'y, August.....	"	1861	90	95
Do. Goshen Branch.....	1,500,000	Do. do.....	7	Feb'y, August.....	"	1868	85	85
New York Central.....	8,287,000	No mortgage, do.....	6	May, Novemb.	"	1883	85	86
Do. do.....	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	99	100
Panama, 1st issue.....	900,000	Convertible till 1856	7	Jan'y, July.....	"	1866	104	105
Do. 2d do.....	1,475,000	Do. till 1858	7	Jan'y, July.....	"	1866	104	105
Reading, issued 1843.....	1,573,000	Mortgage, inconvertible.....	6	Jan'y, July.....	Phila.	1860	93	94
Do. do. 1844, '48, '49.....	1,300,000	Do. convertible.....	6	Jan'y, July.....	"	1860	93	94
Do. do. 1849.....	3,460,000	Do. inconvertible.....	6	April, October.....	"	1870	82	83

CITY SECURITIES.		On'd	Ask'd	CITY SECURITIES.		On'd	Ask'd
	Int'l st payable.	p. ct.	p. ct.		Int'l st payable.	p. ct.	p. ct.
New York, 7 per ct. 1857	Feb'y, May,	100	-----	Milwaukee, 7 per ct. coup.	X	Divers	82
Do. 5 do. 1858-80	August and	97	98½	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	78
Do. 5 do. 1870-76	November	98	100	Philadelphia, 6 per ct. 1876-08	X	Jan'y, July	90½
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	96	98	Pittsburgh, 6 per ct. coup.	X	Divers	75
Allegheny, 6 per ct. coup.	X Jan'y, July	68	70	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	Do.	95
Baltimore, 6 per ct. 1879-90	Quarterly	97½	198½	Racine, 7 per ct. coup. 1873 X	10. Feb'y, Aug.	Do.	80
Boston, 5 per ct. coup.	X April October.	98	100	St. Louis, 6 p r ct. coup. Long X	Divers	77	79
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99	101	Do. do. Municipal.	X	Do.	78
Cleveland, 7 per ct. cp. W.V. 1879 X	Do. do.	101	02	Sacramento, 10 p et cp. 1862-74 X	Do.	Do.	78
Cincinnati, 6 per ct. coup.	X Divers	85	87½	S. Francisco, 7 p et cp. 1865, pay. N.Y. X	May, Novemb.	Do.	88
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	87	88	Do. 10 p et. cp. 1871 X	Do. do.	Do.	90
Detroit, 7 per ct. cp. W.V. 1873-78 X	Feb'y, August.	160	102	Do. 10 do. pay. N.Y.	X	Jan'y, July	103
Louisville, 6 per ct. cp. 1880-83 X	Divers	78½	79½	Wheeling, 6 per ct. coup.	X	Divers	75
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	72	72½	Wheatsville, 7 do.	X	April. October	97½

For the week ending December 25th, 1856.

For the week ending December 20th, 1900.		Per ct.
Indianap. & Cin., 2d Mort.	80	77½
Cin., Wil. & Zanes 2d Mort.	7 per ct.	64
Covington & Lexington, 2d Mort.	7 per ct.	65
Ohio & Mississippi, 2d Mort.	7 per ct.	65
Covington & Lexington, 10 p. ct. Income		61
Little Miami, 6 p. ct. Mort.		77
Indianap. & Cin., 7 per ct. Dividend.		67
Cin., Ham. and Dayton, 1d Mort.	7 per ct.	87
STOCKS		
Cin., Wilm. and Zanes., 25—Cin., Ham. and Dayton, 63—		
Col. & Xenia, 83—Cincinnati & Chic., 10½—Central Ohio, 10.		
—Covington and Lexington, 23—Dayton and Western, 20—		
Eaton and Hamill on 35,—Fort Wayne and Southern, 10—		
Indiana Central, 45—Indianapolis and Cincinnati, 75—Little		
Miami, 88,—Mad River and Lake Erie, 24—Marquette and Cin.,		
17½—N. Albany and Falein, 10—Ohio and Mississippi, 3½—		
Peru and Indianapolis, 25—Hillsboro' and Cincinnati, 17½—		

For the week ending December 20th, 1863.

BONDS.		
\$8,000 Cov'g. & Lex. 7 per ct. 2nd Mort	.....	65
3,000 "	1st per ct. Income	61
5,000 Ohio & Miss 7 per ct. 2nd Mort	.....	33
		(& Int.)
3,000 "	.....	45
6,000 Cin., Wil. & Zanev. 2nd Mort. 7 per ct.	.....	68
2,000 Cin., Ham. and Dayton, 7 per ct. duo in 1880-84	.....	"
5,000 Virginia State 6 per ct., Jan'y Coupons, &c.	.....	96
1,500 Cin., Wilm. and Zanev. 7 per ct. Income	.....	50
1,000 Cin. & Western 8 per ct. Real Estate	.....	45
2,000 Cin. & White Water Canal Co., with interest from May, 1846	.....	7 1/2
STOCKS.		
200 Shares Cin., Har. and Indianap. Straight Line	.....	7
34 " Cincinnati & Chicago (no interest)	.....	10
100 " Cincinnati & Chicago	.....	9 1/2
12 " Little Miami	.....	85
0 " "	.....	86
27 " Covington & Lexington	.....	21 1/2
80 " Mad River & Lake Erie	.....	25
100 " Eaton & Hamilton (30 days)	.....	80
20 " Columbus & Xenia	.....	60
61 " Indiana Central	.....	46 1/2
250 " Springfield, Mt. Vernon and Pittsburgh	.....	10
25 " Ohio and Mississippi and Pittsburgh	.....	4
40 " "	.....	4

LONDON, Dec. 14th, 1866.

During the week the Money market has not been so firm as it was at the date of our last advices. Notwithstanding the large arrivals of gold, which we have noticed in our previous circulars, Specie does not accumulate in the vaults of the Bank of England. The monthly returns of the Bank of France for Dec. 13th, as compared with November, show a considerable falling off in the Bullion in the Head Office, but a more than corresponding increase in that held at the Branches. A rumor became current yesterday that the Russian Government had contracted for a loan of £8,000,000, through M. Stieglitz of St. Petersburg; it was further said that subscription lists for it were opened in Berlin, through Mendelssohn, at 86, though up to the last advices without much excess. The interest 5 per cent., to be payable at Berlin, Hamburg, and Amsterdam. This had the effect of flattening prices. Consols which we quoted last week at 87 $\frac{1}{2}$ a 90, are now 88 $\frac{1}{2}$ a 90, ex-Dividends, having been in the interval 89 $\frac{3}{8}$ a 92, also ex-Dividends. Russian 5 per cent stock has fallen 1a 2 per cent. here, and still more on the Continent. There is an entire absence of any farther information on the question of peace, but there is less belief in its probability than was the case last week.

Money is in active demand both for advances on stock for the payment of a farther instalment of the Turkish loan, due to-day, and for ordinary mercantile purposes. There is, however, no pressure, and rates continuing without alteration may be quoted $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent.

The demand for American securities is not active, and transactions are chiefly confined to those of the Illinois Central Railway. Their shares have been sold at \$14 (\$26 paid.) Their 5 per cent. Bonds at 70½. Construction Bonds 7 at 75½, now 76, and Freehold Bonds, which have been done at 77½, can be bought to-day at 77. Erie 1883 Bonds are 85. The following are mostly nominal—Michigan Central 8 per cent.—both issues, 93a95. New York Central 7 per cent.—83a 95. Pennsylvania Railroad 1st Mortgage 7 per cent.—88a90, and 2d mortgage sterling 89a91.

Pennsylvania State 4 per cent. Inscriptions are quoted 74a76, and Bond 79a81. Maryland Sterling Bonds 90a92. United States 6 per cent. have been sold at 106; and Virginia 5 per cents at 83a 85.

In cotton there has been some movement—chiefly on account of the small stock, kept low by the contrary winds preventing the arrival of shipments now on the way. There was a very active demand on Saturday and Monday, and prices rose fully $\frac{1}{8}$ over those of Friday, at which advance they remain, although the market is again flatter.

In Manchester there has been a cheerful tone during the week, and generally goods are a little dearer, probably not amounting to more than that prices have been obtained this week which sellers asked in vain last week. In yarn the market is also for some numbers $\frac{1}{8}$ in favor of sellers.

The corn market has declined 3s. to 4s. and is steady at that reduction.

Sugar has probably reached a turning point.—There is still a lack of enquiry for it, and sales are few. The decline from the highest point, established by a sale of 5,000 bags good East India, on Wednesday, is 14s. and 15s.

ROBT. BENSON & CO.

De Coppet and Co.'s Circular--Annual Review.

[TRANSLATED EXTRACT.]

New York, Tuesday, Dec. 31, 1855.

At the close of another year, a retrospective glance over the various phases which have effected the commerce and financial condition of this country may not be without interest. At the opening of it we were but scarcely emerging from a crisis occasioned by over-importation, and in a great measure by a too rapid development of our internal improvements, and especially the construction of railroads. The banks, principally those of the West, in lending their credit to the attainment of this object, involved themselves beyond the bounds of prudence; and embarrassment, followed in many cases by failure, had the effect to withdraw from the ordinary channels the capital and banking facilities necessary for an easy and healthy transaction of the business of the country. For a period of more or less duration, every branch of commerce had been embarrassed, and nearly all articles of trade much reduced in value; and stock, the most easily affected of all moneyed interests, had fallen to very low prices.

Early in the beginning of the present year, a relaxation in the money market began to be felt. For months previously the banks had continued their contraction. The mercantile community finding no profit, and even heavy loss, in most branches of trade, as well of imports of domestic manufacture, as of shipping, had reduced considerably the amount of its operations. Thus taking but few new engagements, old ones soon ran out, and a liquidation, as it were, was operated, which prepared commerce with returning confidence to assume safely again a greater degree of activity. Stocks first affected by stringency of money, and by the symptoms of a financial crisis, first, also gave unmistakable signs of returning confidence in more prosperous times, and, stimulated by a considerable expansion of the banks during the first half of the present year, and by the prospect of rich harvests, they rose considerably.

The flattering prospects of the growing crops were soon fully realized. Grain of all kinds (of which, owing to the partial failure of the previous year, more than the usual quantity was planted,) yielded a full harvest, sufficient to furnish an ample supply, not only for domestic consumption, but also a large surplus for export. The comparative failure of crops in France and England at the same time that the Black Sea, owing to the impediments of war, could not furnish its usual supply to Western Europe, caused an early demand for breadstuffs, and harvest was scarcely finished, when the greatest activity in the transportation of produce to the seaboard prevailed in every part of the Union, and from that time shipments on a large scale, and

at very high prices, have steadily been pressing forward.

A well supported demand from Europe for cotton, that important staple has also occasioned larger shipments than usual, up to the present time. Two of the most important branches of industry, railroads and the shipping, have thereby received a great stimulus, and been employed to their fullest capacity, and at most remunerating rates. The former of these interests (after having in many cases been momentarily stopped in the progress of its construction by the money crisis of 1854) has been again steadily pushing forward, although with more caution and judgment. Many roads have been finished which are now brought into activity, and contribute in developing the resources of the country, and rendering markets accessible to produce which heretofore was either not grown at all for want of these facilities, or consumed on the spot in an unprofitable manner.

The shipping, a leading interest of the country, had been suffering considerably from the general contraction of business, during the crisis to which we have alluded; an entire inaction or employment at scarcely remunerating rates was the consequence.

DECOPPET & CO.

Marie & Kanz' Money Circular for the European Steamer of the 2nd Inst.

[TRANSLATED EXTRACT.]

New York, Monday, Dec. 31, 1855.

Per Asia via Boston.]

Since our advices of 24th inst., the Stock Market has been slightly depressed without any marked movement. The pacific aspect of the recent intelligence from Europe, the dullness of Exchange and the prospect of easy money after the middle of January have restored confidence, and a general disposition is manifested to operate for a rise. But this tendency has been more than counteracted during the week by an extraordinary demand for money. This demand is caused by the payments to be made on the 2d Jan'y, amounting to some \$8,000,000 to \$10,000,000; it affects more particularly loans payable on demand. The differences paid for carrying stocks are equivalent to an interest of 24 per cent. per annum. In view of this pressure, stocks have been well sustained.

State stocks show no change, with few sales. Missouri 1 per cent. lower. City and county bonds have been sold in small quantities, prices show an upward tendency. Railroad bonds are firm—Illinois Centrals alone active. Erie 1875 bonds first fell 1 per cent., afterwards improving $\frac{1}{4}$. Freeland bonds still in demand with few sellers. Railroad shares were weak during the first three days, but closed firmer. Erie and Reading have been very active. Michigan Central and Southern have been more largely dealt in than usual.—Money has been in very active demand. Loans on call difficult at 77; first class names, 10a12.—Exchanges—bills are very abundant; quotations dull. Business limited except in sterling. London chiefly at 108 $\frac{1}{2}$ to 108 $\frac{1}{4}$. Paris, 5.20a5.21 $\frac{1}{2}$.

MARIE & KANZ.

Railroad to the Pacific.

The Report of the Secretary of War, accompanying the President's Message, takes strong ground in favor of the Southern route for the Pacific railroad; or the route of the 32nd parallel. The Report states that the Colorado Desert is susceptible of culture. The Secretary is quite favorable to this route, setting forth its advantages in glowing colors. The practicability of sinking Artesian wells along the route was tested. The contributions to physical science included in the results of these surveys are exceedingly valuable.

A portion of the Report is an elaborate consideration of the military defences of our Pacific territory. It is argued that a railroad to the Pacific is indispensable, for the reason that it will be the only means of throwing relief into the Pa-

cific country, in case of any collision with a maritime Power, and our Navy being inadequate to the convey of the necessary number of storeships, a railroad communication is not only likely to be a paying enterprise, but it will have the effect of fortifying the Western coast against attacks from abroad.

American Railroad Journal.

Saturday, January 5, 1856.

Payments of Dividends and Interests.

An unusually large amount in dividends and interests was paid on the 1st instant. There were comparatively very few defaults. We refer to Messrs. WINSLOW, LANIER & Co.'s list as evidence of how generally payments were made. We believe no security negotiated by that firm were ever in default.

Engineer's Apprentices.

An experienced and prominent Civil Engineer writes us as follows, concerning some remarks in our issue of the 15th ult:

"I heartily agree with you in all that you said last week, respecting the character of the mass of aspirants to engineer offices, and emolument upon all our railway improvements. The extent of their aspirations is too often limited to the particular grade of office which combines the least responsibility with the highest wages—or, I should rather say, the least labor with the greatest amount of spending money—and many of them are incorrigibly stupid or dissipated and uncontrollable youths who are put into Engineer corps (instead of being sent on a whaling voyage,) simply for the purpose of reformation by force of circumstances.

The First Transit Compass.

In our issue of the 15th ultimo, in noticing the field pocket book of C. S. Cross, C. E., we took occasion to state some facts concerning the first Transit Compass—an instrument made by Young of Philadelphia. We have since then received an interesting letter from Mr. CHAS. P. MANNING, whom we mentioned as having initiated in Ireland the American method of laying out Curves. Mr. Manning disclaims the honor in favor of "Richard B. Osborne Esq., an Engineer, who received his professional education in the service of the Reading Railroad Company under Messrs. Moncur and Wirt Robinson (where he finally occupied the responsible position of Chief of the Engineer Department, during the early struggles of that Corporation in its competition with its rival, the Schuylkill Navigation Co.) and from which road he went to Ireland, and took charge of the location and construction of the Waterford & Limerick Railway in 1846."

Mr. Manning says further: "I obtained from Mr. Young and sent to Ireland, probably, the first Transit Compass ever known in that country or in England; and soon afterwards joined Mr. Osborne as his Principal Assistant for the purpose of aiding him in the effectual introduction, at least upon that road, of the American system of location and construction."

We were familiar with these facts when we made the statement which Mr. Manning desires corrected. But our object was not so much to mention the party to whom the credit of introduction was due as to state a few facts immediately connected with the history of the instrument. Mr. Osborne introduced the instrument into Ire-

land, Mr. Manning initiated its use among the junior assistants.

"Mr. Osborne was the first to construct an Iron Bridge upon the plan of Howe's Patent Truss—several of which he put upon the W. & L. Railway and, I believe, he also built and placed upon the same road the first, eight-wheeled, double-truck passenger and freight cars (American plan) that were ever used in Great Britain."

Mr. Manning gives us a very entertaining sketch of the history of that first Transit made by Young, of which we remarked that we had in times past made use.

"Twenty and odd years ago—when a mere boy—I saw that instrument upon a lawyer's table and afterwards in a court-room—a dumb witness in behalf of the patentee. Nineteen years ago, after considerable service in tracing the centre line of the Washington Branch of the B. & O. R. R. it was used in making surveys for the extension of the last named road, westward from Harper's Ferry, and your humble servant carried and used it at that time in Washington County, Maryland, and in Ohio County, Virginia.

"In the last seven years the instrument accompanied me as a duplicate and was occasionally used upon the location and construction of the B. & O. R. R. through the wilderness west of Cumberland, and now rests upon its laurels in the office of the Balt. & Ohio R. R. Co. in Baltimore.

It was instrumental in setting the first peg that was driven for the extension of the B. & O. R. R. west of Harper's Ferry, and it was "hard bye" and able to do duty when the last peg was set for completing the track of that road upon the banks of the Ohio river.

In all material points Mr. Young has never been able to improve upon this original work of his hand, but in some of its minor parts he has effected desirable changes—such as the tangent screws connected with the clamp of the tripod—the substitution of a clamp and tangent screw for the old rack and pinion movement of the two compass plates—the subdivision of degrees into minutes by an improved graduation of the Vernier, &c., &c.

The original instrument had an index for counting the number of deflections made at one setting—also a small bubble upon the exterior of the telescope for the purpose of defining a horizontal line, without resorting to the aid of its companion, the ordinary Level—but these superfluities were soon thrown aside—and one of its peculiar features was, and is a Vernier graduated only to three minutes."

Liabilities of Stockholders in Banking Institutions.

The following is a portion of the Report of the Assignee of the Knickerbocker Bank, touching the liabilities of Stockholders in Banking Institutions. As it is one of the first instances of action under the law providing for the individual liabilities of stockholders, we give the view of the assignee upon the question of the construction of the law—

1. That stock could not be held by the president or cashier in trust for the bank. It must be held directly by the bank, and must not be held in anybody else's name for the bank. Such a transfer in trust is absolutely void, and confers no title on any one. And where stock thus held in trust has been paid for out of the funds of the bank, it is to be regarded as extinguished stock, and the capital reduced that amount. Five hundred and eighty-five shares are so extinguished in this case.

2. Stock subscribed but not paid for, although the subscriber may be liable to a suit for the amount, is, until it shall be actually paid for, to be regarded as not existing. Twenty shares are extinguished on this account.

3. Stock created on an increase of capital subscribed for by the cashier for the benefit of the

bank, and paid for by a loan or out of the funds of the bank, is to be regarded as having no existence. Thus 1,012 shares are extinguished.

4. For these causes the capital, which was nominally 16,000 shares, or \$400,000, is held to be in reality only 14,385 shares, or \$359,625.

5. Stock hypothecated as security for a loan, though actually transferred to the lender, is to be regarded as owned by, and the debts are apportioned to, the borrower, as the equitable owner, though the legal title be in the lender.

6. Though the law requires every bank to keep books in which shall be entered the names and residences of all the stockholders and of every assignor and assignee of stock, and though such book is open to the examination of every person, whether stockholder or not, under penalty of \$50 to the officer who refuses to exhibit such book, the omission of the bank to keep such an account of residences does not vitiate the transfer of the stock; it merely subjects the bank to a penalty of \$100 a day for every day such omission may continue, to be recovered by any one who may choose to sue for it.

7. In apportioning the debts of the bank among the stockholders, no regard is to be paid to the inability of any one to pay the assessments. The loss, if any, arising from this cause must fall upon the creditors, and not upon the solvent stockholders.

8. In making the apportionment, no allowance can be made for any debt owing by the bank to a stockholder, whether on a claim proven before the Receiver or for dividends unpaid. An offset of the amount can be made, not by the referee in making the apportionment, but only by the court, on special application for that purpose.

9. In cases of stock held by one person in trust for another, the liability for the debts of the bank is to be imposed on the trustee, and not on the person beneficially interested, unless it appears that such holding in trust is by the express direction of the latter, in which case the apportionment of the debts will be upon the party beneficially interested.

10. In cases of stock held by married women, the liability for the debt is to be imposed upon them, and not upon their husbands, they being regarded as single for this purpose, by reason of their thus owning separate property.

11. The general law of apportionment is that those stockholders are liable for the debts of the bank who were such at the time the debts were contracted and at the time default in the payment of them was made.

Improvement of the Navigation of the Ohio River.

The improvement of the Ohio river by a series of locks or dams so as to make it navigable at all seasons for steamers and heavy barges drawing five feet water, has for two years past occupied much of my attention. I was, therefore, gratified to find that an able paper upon this subject had been recently presented to the Board of Trade of Pittsburgh, containing much valuable information relative to this great scheme.

A copy of this paper has been forwarded to me, which I herewith send to you for publication in your JOURNAL, as the best means of bringing it before the commercial public.

I beg to premise generally, that no project more grand, or truly national, was ever submitted to the American people. Not a State east of the Mississippi but has an interest more or less direct in the consummation of this great object; and none was ever entertained, where the disparity between its expense, and the beneficial results certain to flow from it were so disproportionate.

It would open a superior navigation to that of the lower Mississippi between New Orleans and Pittsburgh and thus multiply the facilities of com-

mercial intercourse between the former city and the whole valley of the Ohio. Every State bordering on the Ohio, has a commercial interest in its speedy construction, which, so to speak, would give vitality to all their systems of improvement, the value of which cannot be estimated by dollars and cents,—while all the States east of the Alleghenies have a great stake in its completion, as furnishing to them a common channel, through which the swelling tide of Western commerce would steadily flow and be drained off by railroads and canals to the Atlantic cities.

Should a similar improvement be made in the Missouri and upper Mississippi, the most vivid imagination could not conceive of the blessings, which would thereby result to the untold millions, soon to inhabit the valleys of those mighty rivers.

There are many considerations, which should urge this most important enterprise upon the attention of the people of the United States, and especially upon the States lying in the great basin of the Mississippi.

The Atlantic cities from Boston to New Orleans would realize a vast increase of business with the West, and this would be regularly distributed through the year over all the railroads and canals connecting them with the Ohio valley, while the cities of the West would be freed from the ruinous disruptions of business, annually resulting from the ever changing stage of water in the Ohio. There are cities in the Ohio valley such as Pittsburgh and Cincinnati, and their name will soon be legion, which might afford to pay the interest on the entire cost of this great work, rather than suffer the disadvantages incident to the uncertain navigation of the river.

These disadvantages will be continually increasing, not only in proportion to the vast annual augmentation of business upon the Western waters, which will baffle all computation, and which will soon exceed the capacity of even the Ohio itself, in its unimproved state to accommodate, but also from the fact, that as the country is cleared off and cultivated, the absolute quantity of water discharged by the river will be lessened, and its navigation thereby rendered more and more inadequate to meet the commerce of the West, while all the lines of railways connecting the Ohio valley with the Atlantic cities, will suffer more and more from such irregularities.

A work so grand, so truly national, so intimately connected with the commercial interests of the whole country, cannot but meet the approbation of every enlightened mind. While its vastness and importance should, as suggested in the able paper following, preserve it from the corruption of Government control, still no object was ever presented to the American people, more worthy of a liberal donation of public lands by the Federal Government.

The cost of this entire work, it is believed, will fall below \$10,000,000. Considering the great abundance of materials for this improvement, distributed along the valley of the Ohio, and the ease and economy, with which they could be delivered along the whole extent of the work, this estimate is doubtless ample.

Should the Federal Government donate 2,000,000 acres of land, no one could for a moment pretend that such a donation would be disproportioned to the advantages and grandeur of this great enterprise.

The States bordering on the Ohio, might also well afford to make liberal donations, or loan their credit to facilitate its improvement. For such a purpose they might guarantee the bonds of a company, incorporated for this purpose as follows—

Pennsylvania to the amount of	\$1,000,000
Ohio do.	1,000,000
Virginia do.	1,000,000
Kentucky do.	1,000,000
Indiana do.	500,000
Illinois do.	500,000

Total amount.....\$5,000,000

The aid thus rendered by the Federal and State Governments would ensure the speedy completion of this noble undertaking, and enable the company having charge of it, to reduce its rates of freight and toll lower than upon any other work of the kind, in the United States; while its capacity for business would exceed that of any similar work in the world

It would be truly an American work worthy the Republic, and in some measure commensurate with the gigantic strides of the West, in commercial greatness. Upon its surface would soon float a business exceeding the present foreign commerce of the Union, added to the almost countless millions in value of trade now *in transitu* upon the Western waters, including the Great Lakes.

The mind labors to comprehend the magnitude of the business that would be transacted upon this great thoroughfare.

Every railroad now connecting the Ohio valley with the tide waters, would soon have to be supplied with double, triple and quadruple tracks, and still the annual increase of business will demand for its accommodation the construction of new railways and canals.

The improvement by locks and dams of many of the great tributaries of the Ohio would be the inevitable consequence of this great work; and short portages by improved railways or canals carried through capacious tunnels, or supplied by artificial reservoirs, would soon surmount the great Appalachian Divide, and unite the principal rivers on both slopes of the Alleghanias.

But I hasten to lay before your readers the important paper alluded to, to which I hope you will deem worthy of insertion.

REPORT OF THE PITTSBURG BOARD OF TRADE ON THE SUBJECT OF THE IMPROVEMENT OF THE OHIO RIVER.

There is no avenue of internal commerce in the United States, or perhaps in the world, in which so large a number of people are interested, as the Ohio River, whether we regard it in reference to its length, its central position, the vast productiveness of the region it traverses, both in the fruits of the soil and the products of its mines, or in view of the numerous railroads that connect it with all the great Atlantic cities, together with its natural connection with the great rivers through which its commerce may flow, without interruption or transshipment, to every part of the valley of the Mississippi. To render such a river permanently navigable, so that its commerce may not be subjected to those periodical interruptions to which it is now liable, is a work worthy of the best exertions of a great, wealthy and growing people.—So vast is the exchange of commodities effected in whole or in part through the medium of this river, that at least ten millions of the American people are directly interested in it; and the interests of more than eighteen millions would be favorably affected by any improvement that would render it a more reliable channel of trade. If,

therefore, any work may be called NATIONAL, this is the one.

Already, in its natural, unimproved condition, the tonnage of the Ohio is immeasurably beyond the capacity of all the railroads that traverse the Middle and Western States from East to West; and to keep pace with its regular increase would require an annual addition of one road to those already existing. On the score of economy, it is well known that freights on the river are far below the very lowest paying rates by railroad. It is not the object of the writer of this article to give a statistical detail of the trade of the Ohio. This has recently been done in the interesting and important memorial of the Board of Trade of Pittsburgh. They have well stated the amount of business done on this river; but neither they nor any other men can estimate the amount of loss occasioned by the frequent and long interruptions of its navigation from want of water. Could these be prevented, the trade of the river would soon be vastly augmented, and the exchange of commodities be carried on with steadiness and regularity, to the great benefit of all concerned.

From Pittsburgh to the mouth of the Ohio is stated by the best authorities to be 977 miles, with an aggregate fall of 425 feet, divided as follows:

	Miles.	Fall, p'r mile, in ft.	Av. fall in in's.
Pittsburg to Wheeling.....	88	79	10.77
Wheeling to Cincinnati.....	374	188	6
Cincinnati to Louisville.....	156	55	4.2
Louisville to Portland, (falls).....	3	25	100
Portland to Evansville.....	169	33	2.85
Evansville to Cairo.....	187	45	2.9
Aggregate.....	977	425	

To convert the river into slack water would require only fifty locks, or pairs of locks, of an average lift of 8½ feet, which would create pools of an average length of—

	Miles.
Between Pittsburg and Wheeling.....	10
" Wheeling and Cincinnati.....	17
" Cincinnati and Louisville.....	25
" Louisville and Portland, (falls).....	1
" Portland and Evansville.....	42
" Evansville and Cairo.....	37

The average fall of the river from Pittsburgh to Cairo is a small fraction over 44.100ths of a foot to the mile. There are few canals in the world, of any considerable length, with so small an amount of lockage in proportion to their length. From Pittsburgh to Johnstown, on the Pennsylvania canal, 105 miles, the lockage is upwards of 430 feet, being ten times greater, in proportion to the distance, that will be required on the Ohio river.—These facts cannot be too distinctly or emphatically set forth.

The Dams and Pools.

At the lowest stage of water there ought not to be less than five feet in the navigable channel at the upper ends of the pools; nor ought the lift from one pool to the other to be more than eight to nine feet. This would require the dams to be from eleven to twelve feet high from their foundations, and would cause the water of the pools to rise about two or three feet upon the dams immediately above, thus obviating, to a great degree, the necessity for excavations below the locks.—This would give a series of deep pools, affording a safe and easy navigation for the largest steamboats and the heaviest barges.

I have said that the lift from pool to pool ought not to exceed eight or nine feet. Less than this would be to multiply dams and locks unnecessarily—more would add to the height of the water during high freshets, and cause the river to overflow its banks more than it now does. A rise of water equal to sixteen feet in the natural channel of the river, would restore the inclined plane corresponding to the natural fall of the river, and cause the water to flow on a level over the crest of

the dams, except a slight depression or trough just below the dams, caused by the accelerated movement of the water over them. When that is the case, the height of the flood is no greater in consequence of the dams. The inclined plane being restored, the volume of water in the river is urged forward with all the velocity due to the natural fall of the river, be it six feet or six inches to the mile. The dams occasion a momentary acceleration in the current, and nothing more. This is sound theory; and experience, in thousands of instances, has attested its soundness. All fears, therefore, of an increase of the disastrous effects of high floods, in consequence of such dams, may be dismissed as groundless.

Locks.

The Ohio river, so deepened and slackened, would be converted into the most stupendous and capacious canal in the world. Forming, as it does, the principal link in the chain of communication between the Atlantic States and the Great West, and traversing as it does, a thousand miles of country of unsurpassed fertility and productiveness, it would be folly to attempt to assign limits to the amount of tonnage that would float upon its bosom. Certainly nothing less than double locks ought to be thought of; and these ought to be of sufficient capacity to admit of steamboats of the largest class, or four coal barges. These locks need not be raised more than sixteen feet above low water; for before the river should rise high enough to overflow locks of that height, the dams would cease to offer any obstruction to navigation.

Economy of Propelling Power.

The resistance offered by water to vessels moving through it, is in the ratio of the squares of their velocity. Thus, if it requires the power of one horse to move a boat one mile per hour thro' still water, it will require the power of four horses to move it two miles per hour, and so on. But we will put it in a tabular form.

	Horse power.
1 mile per hour, the power of.....	1
2 miles " "	4
4 " " "	16
8 " " "	64
16 " " "	256

Of course the same rule applies to the force of natural currents acting upon vessels; that is, it requires four times as much power to stem a current of two miles per hour as it does to stem a current of one mile, and so on, as above stated. From this it will be seen what a vast saving of propelling power is secured by slowness of movement.—We see this principle practically exemplified on the Hudson river, where from twenty to forty heavy barges, schooners, sloops and canal boats are often attached to a single tow-boat, and the whole fleet creeps along at the rate of from two to five miles an hour, according to the state of the tide. Thousands of tons are thus propelled by a single engine at extremely low rates. Now, let the Ohio be converted into a deep slackwater, and we should witness the same thing upon it, especially during low water. In fact, freights could be carried cheaper at such times than during high water; because, owing to the gentleness of the current, tow-boats could carry almost any quantity of barge or canal boats either up or down. It is not an extravagant estimate to put the aggregate saving of propelling power at an amount more than sufficient to yield a handsome remunerating dividend upon the cost of the improvement.

But other most important advantages to proprietors of boats would be gained. Their boats would not then, as now, be compelled to lie idle during most of the summer and fall months for want of water. Neither would they be obliged, as they now frequently are, to start with half a load, and grind the bottoms of their boats at that.—Neither would they be liable to stick on bars and ripples, often at great expense and damage. These advantages, in which the whole business community would share with them, would render steam-

boats a far more safe and desirable species of property; and if from the reductions of the rates of freight, they should clear less on a single trip than they sometimes now do, their earnings would amount to more in the course of the year. But it may be safely assumed that a sure navigation, and a uniform tariff of rates, would bring a three-fold greater amount of trade to the river than would ever seek it were things to remain as they are.

The Coal Trade.

It is but a few years since coal in any considerable quantity began to be shipped down the Ohio from the region around Pittsburgh; but now the shipments reach millions of bushels annually, and the quantity is rapidly increasing, and must continue to increase indefinitely. The region to be supplied is capable of sustaining many millions of people, and is increasing in population at a ratio that has no parallel in any other country. To pretend to estimate the quantity of coal that the people of such a region will require, both for domestic and manufacturing purposes, would be folly.—Suffice it to say, that in twenty years it must exceed what is carried on any other channel of conveyance in this country, or perhaps in the world. The supply is inexhaustible. The Monongahela, Youghiogheny, Allegheny, and the upper Ohio itself, all traverse one great coal field, and every tributary, every ravine, may be made to pour its tribute into this great central artery. So much as to the supply and demand.

The usual method of carrying coal to the lower markets at present is to load it into square, flat-bottomed boats, generally a little over one hundred feet long, by sixteen and twenty wide, and about six deep, known by the various appellations of arks, flat-boats, and "broad horns." One of these boats will carry from 8,000 to 10,000 bushels, or from 280 or 330 tons. They are run in couples; and from twelve to fifteen men are required to manage them. They are rigged with several pairs of sweeps to urge them forward, and steering sweeps fore and aft to keep them in the channel. But in spite of all these, they are often stranded and lost; and the loss of the boat is not unfrequently attended with loss of life. It is only in times of high water that these boats can run at all; and then too much coal is often thrown upon the market at once, to the great inconvenience of wholesale purchasers, and often to the serious detriment of the shippers. Never, perhaps, was there a great trade carried on more irregularly and fitfully. All parties suffer. Sometimes there is so much coal at the wharves of the larger cities on the lower Ohio that purchasers cannot be found for it; at other times the supply is almost exhausted. In the course of a single season the price of coal in Cincinnati has varied from ten to forty cents per bushel. These boats are never brought back.

Latterly, however, barges are coming into use. They are about 100 feet long, 16 wide, and 5 feet deep. One end has a long and easy rake, the other is square. When ready to go out, two of them are coupled together by the square ends, thus forming one long double boat, having a rake at both ends. They are thus attached to steam tow-boats and taken down the river; and when the cargoes are discharged they are towed back. This, in the present condition of the river, requires a large expenditure of power, owing to the numerous rapids that they have to contend with.—These, too, require high water; but not quite so much as the "broad horns."

Were the river converted into a slackwater navigation, these barges would be the very thing; and then low water would be better than high water; because a tow-boat could govern downwards or tow back more than five times as many as it now can. And, what is still more important, the trade could be prosecuted with safety and regularity; and much less capital would be needed in proportion to the amount of business done. Were it possible to estimate the advantage that would accrue to the immense population directly interested in this article of prime necessity, both producers

and consumers, in rendering its transit regular, steady, safe and cheap, there is little doubt that they would be found great enough to warrant the expenditure, even if no other interest were to be beneficially effected.

Ice.

Upon the setting in of cold weather, large quantities of ice form and float down the Allegheny and Ohio rivers. As the water falls and the ice increases in quantity, it grounds upon shoals and bars, and against the shores, and continues to accumulate until "the river closes," to use a popular phrase. Whatever floating ice comes down afterwards, lodges against the barriers thus formed, and in this way the river often becomes filled with ice, in heavy, confused and irregular masses, far exceeding in thickness what would form upon still pools. Before it gorges it is often so heavy as to put a stop to navigation for several days; and afterwards all navigation is suspended until it breaks up and runs off.

On the Monongahela slackwater the case is altogether different. The pools become sheeted over like ponds. There are no floating or moving masses of ice; and it is easy to keep a channel for boats open during the continuance of frosts that fill the Allegheny and upper Ohio with ice. J. K. Moorhead, Esq., states that for several consecutive years the average interruption of navigation from this cause was only 15½ days. The Ohio, if converted into a series of pools, would be effected by frost just as the Monongahela is; and as the business upon it would be vastly greater, the frequency of the passage of boats would keep an open channel all winter, the only interruption would be the running off of the ice after breaking up. The quantity of ice would be far less than now forms by aggregation; for when water is once covered with a sheet of ice, and that generally with more or less snow, congelation goes on very slowly, compared with what takes place on water fully exposed to a frosty atmosphere. It seems paradoxical, at first view, that less ice should form upon a slow moving stream than upon a rapid one; but a little reflection will convince any one that it is so. So far, therefore, as ice is concerned, we may confidently expect that it will not occasion one half the obstruction to navigation, when the river shall be converted into a slackwater, that it now does.

Pittsburg and the First Dam.

Great inconvenience is experienced at Pittsburg for want of greater depth of water during most of the year. The channel of the Monongahela along the levee has a pretty good depth, but it is narrow during low water. The Allegheny is shoal and the current strong—too strong for the advantageous use of tow-boats. A dam that would raise the water eight feet at McKee's Rocks, two miles below the city, would swell it at least six feet on both sides of the city, backing the Monongahela against dam No. 1 of the slackwater, and rendering the Allegheny a slackwater of good depth to some distance above Sharpsburg. What a magnificent harbor for the commerce of the three rivers would such a pool afford! It would be worth more to that city than would pay for three such dams.

Cost, etc.

The length of the Ohio is, say one thousand miles. It follows, therefore, that the improvement will cost as many thousands per mile as the entire work will cost millions. Men better qualified to judge of such matters than the writer have estimated the expense at from seven to ten millions of dollars. This gives from seven to ten thousand dollars per mile—about half the expense of an ordinary canal, or about one-third the average cost of a railroad. Now, as it will be of ten times the capacity of either, and probably accommodate ten times the amount of business that a reasonably profitable canal has to do, it follows that the tolls need not be one-tenth as much as those assessed upon the tonnage of ordinary canals. The tax upon the business of the river may therefore be very light, and yet the work pay good divi-

dends upon the stock. On a work of such magnitude we can only arrive at proximate estimates of what the tariff of tolls ought to be to make it pay, by comparing it with similar works already existing, both in reference to its length, its relative cost, and the probable amount of its business. But the less the tax laid upon the commerce of the river the better for the country at large. The consumer of coal in Cincinnati, Louisville, Memphis or New Orleans, and the consumer of flour in Pittsburg, Baltimore, Philadelphia, New York or Boston, will both be benefitted by such policy; and when it can be shown that a large majority of the American people will participate in the benefits of the improvement, surely we may confidently ask Congress for a donation equal to at least one-third the cost of the work, not to swell the dividends of stockholders, but to enable the company to make the navigation almost free. I say a donation, because I believe it is not at all desirable that the general government, or even the State governments, should become shareholders, and be participants in its management, except by the enactment of laws necessary to the regulation and control of the corporation. Experience has taught us that public works, under National or State management, are not only unprofitable, but demoralizing and dangerous. Far better that the work should be done solely by individual effort, than that it should become an arena for the struggles and trickery of politicians and place hunters. But let Congress give as much to this work as it gave to the Illinois Central Railroad—and that was a clear donation—and it will soon be accomplished."

To the merchants of New York no subject since the opening of the Erie canal has been of so much importance. A wise forecast should prompt them to look well to all the avenues opened, and which may hereafter be opened, for the outlet of the trade of the great West.

The Ohio river being thus improved every canal leading from it to Lake Erie, would be surcharged with business, and the Erie canal, would require a still greater enlargement to pour its increased volume of trade into the Great Emporium. New York should remember that if the Erie canal gave to her her commercial impetus, the Ohio canal, for such would be the character of the Ohio river when improved, with a capacity twenty times as great, must work mighty changes in the growth and prosperity of those cities which will participate most in its advantages.

The speedy enlargement of the Erie canal, the improvement of the Alleghany river by locks and dams, or the construction of a canal along its valley as far as a Solean, are measures which in connexion with the great project in question, will deeply concern the commercial pre-eminence of New York. So also on the South the water line through Virginia, between the Great Kanawha and the James rivers, as well as the great trunk railway extending from Norfolk to the great southern bend of the Ohio, by a route of far easier gradients across the Alleghanies than any other, and also the construction of the great air line railway between New York and Norfolk, are all of vast commercial interest to the Empire City, and should at once engage her earnest attention of her enterprising merchants. With all her great natural advantages and the present proud pre-eminence New York should adopt the wise maxim that eternal vigilance alone will secure to her the proud distinction of being the commercial centre of the world.

Yours &c.

PETER CLARK.

NEW YORK, Dec. 22, 1855.

Train Across the Chattahoochee River.

On Christmas, the passenger train on the Opelika Branch Railroad crossed the Chattahoochee river on the elegant and substantial bridge just finished by our fellow citizen, John D. Gray.—This completes the union between Georgia and Alabama, and greatly facilitates the communication between these two cities, and adds to the advantage of the lower over the upper line of railroad travel through the State.—*Columbus Times.*

Indianapolis, Cleveland, and Pittsburg Railroad.

The receipts of this road, formerly the Bellefontaine and Indianapolis road, for the past six months have been as follows—December is partly estimated:

	1854.	1855.
July.....	\$15,816 44	\$15,310 91
August.....	19,770 89	21,095 82
September.....	21,312 94	26,583 57
October.....	22,983 86	30,502 86
November.....	21,162 81	33,126 38
December.....	25,719 17	39,904 98
Total.....	\$126,796 11	\$166,522 62
Increase 1855.....		\$39,726 51

Maryland and Delaware Railroad.

The Eastern [Albort county] Star announces that the Maryland and Delaware Railroad was formally commenced at Greensborough, on Thursday last, by the President and Directors of the company. Addresses were delivered on the occasion, and the grading of the road to the extent of several hundred yards completed on that day.

Georgia and Florida Railroad.

We are gratified to state that the Board of Directors of the Georgia and Florida Railroad, have let the grading of twelve miles of the road from Americus, to be completed by the first day of October next. The contract price was 12½ cents per cubic yard, one-third stock and two-thirds cash.—*Albany Patriot.*

Post-Office Department.

The Report shows a net increase of 862 post-offices during the year ending 30th of June, 1855,—the whole number of offices at that date being 24,410, and on the 30th of November, 24,770. On the 30th of June last there were 7,033 mail routes, at an estimated length of 277,908 miles. The total annual transportation of mails was 67,401,166 miles, costing \$5,345,238. Compared with the service of the year previous, there is an increase of 3,397,025 miles of transportation, or of about 5½ per cent., and of \$675,221 cost, or about 14 4-100 per cent. The increase by railroad service is 2,483,132 miles; by modes not specified, 3,575,177 miles,—while the transportation by coaches is less by 2,325,628 miles, and by steamboat 1,335,656. This change results mainly from the reletting of contracts in many of the Southern and Western States and Territories. On the 30th of June last there were in service 319 route agents at a compensation of \$235,170 65-100; 29 local agents at \$19,328; and 981 mail messengers at \$100,471 65, making a total of \$354,970 30 to be added to the cost of transportation. This makes the total amt for the current year, \$5,824,989.30, which will probably be increased to \$6,000,000 by new services and routes. The cost of foreign mail service, not included here, amounts to \$611,467.

The expenditures of the Department for the last fiscal year amount to \$9,968,342, and the gross revenue derived from postages [inland and foreign] are \$6,642,186 13, which, adding the annual appropriations made in compensation of mail service to the Government, by the acts of 3d March, 1849, and 3d March, 1851, amount to \$7,342,186 13.—Deducting the balance against the United States, due to foreign powers, for postal accounts, from the above, the actual gross revenue of the Department for the year ending 30th June, 1855, will be \$7,335,177. The gross revenue of 1854, after de-

ducting foreign balances, amounted to \$6,816,651 61, making a difference in favor of 1855 of \$518,519 10. *The excess of expenditure for 1855 over that of 1854 is \$2,626,206 16. The condition of the Department goes to show that the rates fixed by the act of 3d March, 1851, will not enable the Department to sustain itself by its own resources.*

The expenditure of the Department for 1856 is estimated at \$10,199,024 and the means available for the same year \$9,010,873, leaving a deficiency of \$1,188,151 to be provided for.

Reference is again made to the fact that the Collins line of steamers receives from Government \$658,000 for twenty-six trips, while the British Government paid the Cunard line \$866,700 for fifty-two trips, which in the opinion of the Post master General is amply sufficient.

Railroad Iron.—Locomotives.

6,000	Tons Rails, 58 to 61 lbs. per yard.
1,000	" " " 55 " " "
200	" " " 49 " " "

Several LOCOMOTIVES of best manufacture, adapted to a variety of gauges, on hand and for sale by

H. H. GOODMAN & CO.,
No. 7 Wall st.,
New York.

DIVIDEND NOTICE.

The Semi-Annual Interest falling due in this city on the first day of Jan'y, 1856, on the following named Securities, will be paid on and after Wednesday next, the 2d proximo, at the office of the undersigned, on presentation of the proper Coupons, viz:—

The Bonds of the State of Indiana, for Banking purposes, issued in 1834, being the \$1,300,000 loan, 5 per cents.

Bonds of the City of Pittsburgh, Pa., issued to the Ohio and Pennsylvania Railroad Company, 6 per cents.

Bonds of the City of Pittsburgh, issued to the Pittsburgh and Connellsville Railroad Company, 6 per cents.

Bonds of the City of Allegheny, Pa., issued to the Ohio and Pennsylvania Railroad Company, 6 per cents.

Bonds of the City of Chillicothe, Ohio, issued to the Marietta and Cincinnati Railroad Company, 7 per cents.

Bonds of the City of New Albany, Inda., issued to the New Albany and Salem Railroad Company, 7 per cents.

Bonds of the City of New Albany, Inda., issued to the New Albany and Sandusky City Railroad Company, 6 per cents.

Bonds of the Town of Harmer, Ohio, issued to the Marietta and Cincinnati Railroad Company, 7 per cents.

Bonds of Franklin County, Ohio, issued to the Cleveland, Columbus, and Cincinnati Railroad Company, 7 per cents.

Bonds of Franklin County, Ohio, issued to the Columbus and Xenia Railroad Company, 7 per cents.

Bonds of Greene County, Ohio, issued to the Columbus and Xenia Railroad Company, 7 per cents.

Bonds of Stark County, Ohio, issued to the Ohio and Pennsylvania Railroad Company, 6 per cents.

Bonds of Richland County, Ohio, issued to the Ohio and Pennsylvania Railroad Company, 6 per cents.

Bonds of Allegheny County, Pa., issued to the Pittsburgh and Connellsville Railroad Company, 6 per cents.

Bonds of Allegheny County, Pa., Special Loan of \$75,000, 6 per cents.

Ross County (Ohio) Bonds, issued to the Marietta and Cincinnati Railroad Company, 7 per cents.

Athens County (Ohio) Bonds, issued to the Marietta and Cincinnati Railroad Company, 7 per cents.

Washington County (Ohio) Bonds, issued to the Marietta and Cincinnati Railroad Company, 7 per cents.

Van Wert County (Ohio) Bonds, issued to the Ohio and Indiana Railroad Company, 7 per cents.

Allen County (Ohio) Bonds, issued to the Ohio and Indiana Railroad Company, 7 per cents.

Allen County (Indiana) Bonds, issued to the Ohio and Indiana Railroad Company, 7 per cents.

Crawford County (Ohio) Bonds, issued to the Ohio and Indiana Railroad Company, 6 per cents.

Bonds of Champaign County (Ohio), issued to the Columbus, Piqua, and Indiana Railroad Company, 7 per cents.

The Ohio and Pennsylvania Railroad Company, Mortgage Bonds, 7 per cents.

The Marietta and Cincinnati Railroad Company, 1st Mortgage Bonds, 7 per cents.

Fort Wayne and Chicago Railroad Company, 1st Mortgage Bonds, 7 per cents.

Indiana Central Railroad Company, Income Bonds, 10 per cents.

The First Mortgage Bonds of the Indianapolis and Bellefontaine Railroad Company, 7 per cents.

WINSLOW, LANIER & CO., 52 WALL ST.
NEW YORK, December 29th, 1855.

DIVIDEND NOTICE.

OFFICE CLEVELAND, COLUMBUS, & CINCINNATI R. R. CO. }
Cleveland, Dec. 16, 1855. }

At a meeting of the Directors of the Cleveland, Columbus and Cincinnati Railroad Company, held this day, a Dividend of Five per cent. on the capital stock of the Company from the net earnings of the road for six months ending December 31st, was declared payable to the Stockholders on and after Jan'y 2nd, 1856, in Cleveland, at the office of WINSLOW, LANIER & CO. The transfer books in Cleveland and New York will be closed from Dec. 20th to Jan'y 10th. By order of the Board.
T. P. HANDY, Treasurer.

DIVIDEND NOTICE.

OFFICE OF THE HEMPHIELD RAILROAD CO. }
Philadelphia, Dec. 25, 1855. }

The Semi-Annual Interest falling due on the 1st day of January, 1856, on the Bonds of the City of Wheeling, Va., issued to the Hemphfield Railroad Company, will be paid on and after the 2nd day of January next, at the office of WINSLOW, LANIER & CO., No. 52 WALL ST., NEW YORK, upon presentation of the proper coupons.

WM. HART CARR, Treasurer.

DIVIDEND NOTICE.

The Coupons falling due on the 1st Jan'y next, on the Six per cent. Bonds of the City of Covington, Ky., issued to the Covington and Lexington Railroad Company, will be paid on and after the 2d proximo, at the office of WINSLOW, LANIER & CO., 52 WALL ST., NEW YORK, on presentation of the proper coupons.

S. J. WALKER, Treasurer.

December 29th, 1855.

DIVIDEND NOTICE.

The Semi-Annual Interest falling due on the 1st of January next, on the First Mortgage Bonds, and the Real Estate Bonds (special mortgage) of the Bellefontaine and Indiana Railroad Company, will be paid on and after the 2nd proximo, at the Banking Office of WINSLOW, LANIER & CO., No. 52 WALL ST., NEW YORK.

JNO. BROUGH, President.

December 29th, 1855.

DIVIDEND NOTICE.

The Semi-Annual Interest falling due on the 1st of January, 1856, on the First Mortgage Bonds of the Dayton and Michigan Railroad Company, 7 per cents, will be paid on and after the 2nd proximo, at the office of WINSLOW, LANIER & CO., 52 WALL ST., NEW YORK.

HENRY S. MAYO, Treasurer, D. & M. R. R. Co.
December 29th, 1855.

DIVIDEND NOTICE.

OFFICE MICHIG. SOUTH. & NORTH. IND. R. R. CO.
No. 18 William st.
NEW YORK, Dec. 29, 1855.

The Board of Directors of this Company have declared a Semi-Annual Dividend of Five per ct. on the old stock, payable to Stockholders on and after the 15th day of January next; after which date the Construction Stock of the Company can be exchanged for old stock. The Transfer Books of the old stock will be closed from the 5th to the 15th day of January.

EDWIN C. LITCHFIELD, Treasurer.

Lawrence Scientific School, HARVARD UNIVERSITY.

THE next Term of this Institution will open on the first day of March, 1856, and continue twenty weeks. Instruction by Recitations, Lectures, and Practical Exercises, according to the nature of the Study, will be given in:

Botany.....	by Prof. Gray.
Chemistry, Analytical and Practical.....	" " Horsford.
Comparative Anatomy and Physiology.....	" " Wyman.
Engineering.....	" " Euastia.
Mathematics.....	" " Pierce.
Mineralogy.....	" " Cooke.
Physics.....	" " Lovering.
Zoology and Geology.....	" " Agassiz.

For further information concerning the School, application may be made to Prof. E. N. HOSKINSON, Dean of the Faculty.
CAMBRIDGE, Mass., Jan'y, 1856. 6t52

CINCINNATI.**HEWSON & HOLMES,**
AUCTIONEERS AND STOCK BROKERS,

Have regular sales of Stocks, Bonds, and other Securities,

EVERY
WEDNESDAY AND SATURDAY,
At 1 o'clock at the Merchant's Exchange,
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SPECIAL SALES

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OFFICES—Nos. 83 and 85 Walnut street,
Where they offer at private sale

A GREAT VARIETY OF
State, County, City and Railroad BONDS and STOCKS,
NEGOTIATE
LOANS, NOTES, BILLS OF EXCHANGE,
AND COLLECT

DIVIDENDS, LEGACIES, DEBTS, &c.

REFERENCE—Ohio Life Insurance & Trust Company Bank.

New Works on Civil Engineering.

THE Field Practice of laying out Circular Curves for Railroads.—By JOHN C. TRAUTWINE, Civil Engineer—3d edition in pocket-book form.

A new and rapid method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Diagrams.—By John C. Trautwine, Civil Engineer—2nd edition with 10 Copper Plates.

Price One Dollar each—postage on the Curves Three Cents—
and on the Excavation and Embankments, Six Cents.

For sale by

WILLIAM HAMILTON,

Hall of the Franklin Institute,

January 18, 1856.

Philadelphia.

CINCINNATI STOCK EXCHANGE.**KIRK & CHEEVER,**
Stock Brokers and Railroad Agents,
NO. 88 WEST THIRD STREET,
CINCINNATI, OHIO.

Railroads Stocks, Bonds, &c., bought and sold on commission.
Regular sales at public auction at the MERCHANTS' EXCHANGE.

By S. J. McCORMICK, Auctioneer.

AUCTION SALE,

OF AN

Extensive Manufacturing Establishment.

ON TUESDAY, the 15th day of January, 1856, at 10, A. M., on the premises, at the foot of Wolfe-st., in the city of Alexandria, Virginia, will be sold the valuable MANUFACTURING ESTABLISHMENT, owned by the Virginia Locomotive and Car Manufacturing Company, (formerly Smith & Perkins).

The REAL ESTATE comprises a LOT OF GROUND and WHARVES fronting on the River Potomac, and bounded as follows: Commencing at a point on Wolfe-st. 108 feet east of Union-st., the line runs south, binding on a 20 feet alley, 176 feet 7 inches; thence east to the channel of the River Potomac; thence north 176 feet 7 inches; thence west binding on Wolfe-st. to the beginning, and contains about 48,350 square feet of ground, exclusive of water front. There is sufficient depth of water to float the largest class of vessels. This property is connected by a switch with the Orange and Alexandria Railroad, and is improved by the following BUILDINGS, all built of brick, and with a view to security against fire: 1st Machine shop, which has a ground floor 131 by 102 feet, second story 131 by 32 feet, third story 81 by 32 feet; 2d Blacksmith shop 74 by 35 feet; 3d Boiler shop 166 feet by 40 feet, and 4th Car Building shop 117 by 40 feet. The TOOLS comprise a complete assortment of modern Machinery, suitable for manufacturing Locomotive, Marine, and Stationary Engines, and all classes of Iron Machinery, and also Passenger and Freight Cars and Railroad work of all kinds. The Machinery is sufficient to work about 300 men to advantage, and there is ample Shop room to work 500 men, if required. The FOUNDRY PROPERTY consists of the entire square of ground, bounded by Wilkes, Pitt, Gibbon, and St. Asaph-sts., (with the exception of a lot 22 by 118 feet deep,) and contains (exclusive of the lot 22 by 118 feet,) about 84,600 square ft. of ground. A ground rent of \$22 per annum on the above lot, 22 by 118 feet, will be included in the sale. This property fronts immediately on the Orange and Alexandria Railroad, and is improved by a substantial brick fire-proof FOUNDRY, 100 by 60 feet, with all the requisite Cupolas, Cranes, Ovens, Flasks, Sheds, &c., for a first class Foundry business. The entire property above-named, both real and personal, will be sold together, and presents a favorable opportunity for parties having sufficient capital to engage in a profitable business in a desirable location.

TERMS OF SALE.—\$12,000 in cash, \$9,037 59 to be paid on the 1st Feb'y, 1861, with interest payable semi-annually; \$32,448 46, to be paid on the 1st of May, 1864, with interest payable quarterly, and the residue in 1, 2 and 3 years, with interest payable semi-annually. The deferred payments to be made on the 1st of February, 1861, and the 1st of May, 1864, to be secured by deed of trust on real and personal estate described above, and the other payments specified above, to be secured by deed of trust on the same property and negotiable notes with approved endorsers.

Immediately after the above sale, will be sold the entire stock of materials on hand, comprising Lumber, Coal, Pig Iron, Scrap Iron, Bar and Boiler Iron, &c., &c.

TERMS.—All sums under \$100, cash, over \$100, four months with approved endorsement.

Parties desiring to examine the property, or wishing further information, will please apply to
RICHARDS C. SMITH,

6t49

Alexandria, Va.

ENGINEERING.

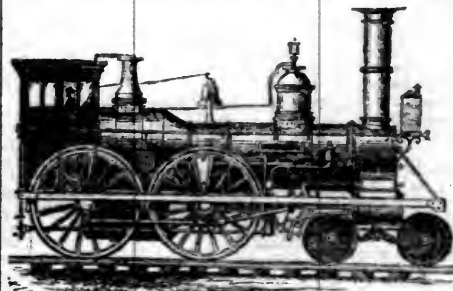
THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dodgeon's Hydraulic Jack, Sewall's Salinometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1y17

Locomotive Engines.**TAUNTON LOCOMOTIVE**
Manufacturing Company, at
TAUNTON, MASS.

Manufacture Locomotive Engines, with inside or outside connections, of best materials and workmanship, and of the most approved patterns.

They also manufacture LOCOMOTIVES adapted to burn Bituminous and Anthracite coal.

WM. A. CROCKER, Treasurer,
W. W. FAIRBANKS, Sup't.
Taunton, Mass.

Offices—In BOSTON—No. 28 India street.
In NEW YORK—No. 32 Cliff street.

REFERS TO H. H. GOODMAN & CO., No. 7 Wall st.,
AND RAILROADS GENERALLY.

THIRD STREET
STOCK EXCHANGE,
CINCINNATI.**J. L. Hickman and Company,**
STOCK AND REAL ESTATE BROKERS,

AND
Auctioneers;

No. 36 West Third Street, Masonic Building.
Public Stock Sales daily
AT 11 O'CLOCK A. M.,

AT THE THIRD ST. STOCK EXCHANGE AS ABOVE.

AT PRIVATE SALE.—J. L. H. & Co always have for sale a choice variety of State, County, City and Railroad Bonds and Stocks; also, Bank and Insurance Works, and other Securities. NEGOTIATE LOANS on Stock, Notes, Bills of Exchange, Mortgages, &c. REAL ESTATE SALES, whenever required, at the STOCK EXCHANGE, or on the premises.

KASSON'S
LOCOMOTIVE EXPRESS

For the receipt and transportation of
LOCOMOTIVES, PASSENGER AND BOX CARS
OF ANY GAUGE
To the Western and South-western States.

Proprietors:

Wm. M. Kasson & Son { No. 90 Exchange st., Buffalo.
No. 62 Beaver st., New York.

Agents:

J. O. GREEN, Dunkirk, N. Y.
O. B. BUTLER, Cleveland, O.
ANDREW & WILSON, Cincinnati, O.
JAS. HOOKER, Indianapolis, Ia.
R. M. MITCHELL & Co., Chicago, Ill.
SAMUEL SPRANCE, Alton, Ill.

N. B.—A Circular descriptive of our unequalled facilities, and our manner of doing this business, as well as our experience in, and our prompt attention to it, together with prices and other particulars, will be furnished to parties desiring the same, upon personal application to us, or by letter to our address or that of either of our agents.

42U

NEW ENGLAND Mutual Life Insurance Co.,

BOSTON, MASS.—Chartered April, 1835.

Branch Office—110 Broadway, New York.

JOHN HOPPER, Attorney and Counselor, Agent.

CAPITAL \$750,000,

After paying a five years' dividend to all insured, (in cash, not in scrip), of 30 per cent., amounting to

\$141,000.

The entire surplus profits are divided among all the members every five years, thus avoiding the unnecessary and uncertain tendency of large accumulations of unpaid dividends, erroneously called capital, and also affording a certain and good rate of interest upon the outlay of premiums.

\$100,000

Is deposited with the Comptroller of the State of New York, to meet the requirements of the law, to secure policy holders in this State.

This is the oldest American Mutual Life Insurance Company and one of the most successful.

Insurance may be effected for the benefit of a married woman beyond the reach of her husband's creditors. Creditors may insure the lives of debtors.

DIRECTORS.—WILLARD PHILLIPS, Charles P. Curtis, Thos. A. Dexter, Sewell Tappan, A. W. Thaxter, Jr., Charles Hubbard, Marshall P. Wilder, William B. Reynolds, Caleb Reed, B. F. STEVENS, Secretary.

Messrs. W. W. Stone, (Lawrence, Stone & Co.), Wm. G. Lambert, (A. & A. Lawrence & Co.), Henry L. Pierson, Hon. A. Oakley Hall, District Attorney, of New York City, are referred to relative to the character and standing of this institution.

AGENTS:

MAINE—N. P. Deering, Portland.
 NEW HAMPSHIRE—John S. Harvey, Portsmouth.
 VERMONT—T. W. Bruce, Middlebury.
 MASSACHUSETTS—Hartley Williams, Worcester; W. H. Taylor, New Bedford; S. W. Stickney, Lowell; L. Thorndike, Salem; H. S. Noyes, Springfield; J. B. Swan, Nantucket.
 CONNECTICUT—Chas. Robinson, New Haven; J. W. Goodwin, Hartford; H. P. Eaton, Norwich; Nathl. Greene, Bridgeport; J. C. Learned, New London.
 RHODE ISLAND—Charles H. Maza, Providence.
 NEW YORK—John Hopper, 110 Broadway, New York City; H. N. Dowd, Albany; J. W. Bissell, Rochester; Leonard Wilson, Buffalo; O. S. Moss, Lockport; B. B. Burt, Oswego; J. H. Edmonds, Utica; D. E. Battershall, Troy.
 PENNSYLVANIA—Robert Ralston, Philadelphia.
 DISTRICT OF COLUMBIA—Charles Fletcher, Washington.
 OHIO—Charles Bradburn, Cleveland; B. Urner, Cincinnati.
 MISSOURI—Alonzo Outler, St. Louis.
 ILLINOIS—O. N. Holden, Chicago; George W. Woodward, Galena.
 KENTUCKY—James G. Breed, Louisville.
 SOUTH CAROLINA—H. S. Hayden, Charleston; H. E. Nichols, Columbia.
 ALABAMA—R. S. Bunker, Mobile.
 MICHIGAN—Edward A. Lansing, and Philip Furber, Detroit.
 WISCONSIN—Philetus Hale, Milwaukee; L. C. Spofford, Fond du Lac.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8 1/4 a. m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p. m., for Newburgh direct, without change of cars.

ROGELAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m., for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

On Sundays One Express Train—at 5 a. m.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

1st D. C. McCALLUM, General Supt.

TORONTO & OSWEGO STEAMBOAT LINE.

Alteration of Hours.

THE trains on the OSWEGO & SYRACUSE RAILROAD having changed their hours of departure, in connection with the Railroads to New York, these steamers will, in future leave Toronto as follows:

"CHAMPION" Sunday, Tuesday, and Thursday, at 5 p. m. punctually.

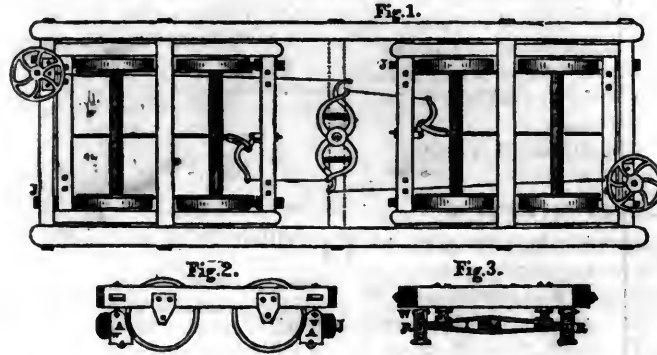
"MAYFLOWER" Monday, Wednesday, and Friday, at 5 p. m. punctually.

Passengers by these boats may depend on making connection with the Train arriving in New York on the ensuing evening, thus making the most agreeable and expeditious route to that city, and avoiding all night travel on railroads.

Toronto, Sept. 21st, 1855.

411f

L. PAIGE'S IMPROVED CAR BRAKE BLOCKS. PATENTED JANUARY 16, 1855.



The improvement consists in attaching to each end of the brake beam metallic sockets, (R) seen in Fig. 2. The shoes (J) are placed in the sockets, and secured therein by means of the face plates (A), which form one side of the sockets. See Figs. 2 and 3. The face plates being secured to the socket by means of screw bolts, (w) which pass through the top and bottom of the sockets and face plates. The shoes extend entirely through and out of the socket in opposite directions, and may be adjusted, as they are worn, by unscrewing, and thereby loosening the face plates, by which the shoes may be shoved nearer the wheels. The face plates being secured tightly against the shoes when they are properly adjusted, and thereby firmly securing the shoes in the sockets. Thus when the old shoes are shortened by use, the making of new ones is obvious, as it will be seen that by placing the shoes in sockets, they may be used until they are almost wholly worn out; whereas the ordinary shoes, by being permanently attached to the beam, (I) must be replaced by new ones, when shortened a trifle by use. The end of the grain of the timber of which the shoes are formed is placed in contact with the wheel thus securing a large amount of friction and obviating all liability to take fire.

The attention of Railroad Companies is respectfully invited to a careful examination of this improvement, as being one of great practical importance and utility. PAIGE'S ADJUSTABLE BRAKE COMPANY are now prepared to apply the improvement to one or more Cars on any road throughout the United States that may wish to give it a trial, and no road will be asked to purchase the right until they have fully tested and are satisfied in regard to the merits of the invention. We are also prepared to negotiate on favorable terms for the sale of rights to any person or persons who may wish to purchase.

Any communication addressed to the undersigned or to the Patentee at Cavendish, Vermont, will receive prompt attention. J. P. DERBY, Agent, Cavendish, Vt.

The Brake is in use on the Hudson River, Boston & Lowell, Rutland & Burlington, and Cheshire railroads.

ALBERT M. SMITH'S Patent Premium Reclining and Self-Adjusting CAR SEAT.



the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use, (as a High or Low Back), as if made specially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement to apply to old Seats or for new Seats at the office of

ALBERT M. SMITH,

Patentee and Manufacturer,

13 NORTH ST. PAUL STREET, ROCHESTER, N. Y.

or **TAULMAN & LOW, Agents,** 157 BROADWAY, NEW YORK.

BAILEY'S Patent Reclining Car Seat.

Patented October 10th, 1854.

THIS VALUABLE IMPROVEMENT IN CAR SEATS, combines utility, comfort, elegance of appearance and economy of space, and is unrivaled by any seat now in use. It can be made to recline at any desired angle at the will of the occupant, without any of the usual fastenings or catches. It is simple in construction, not liable to get out of order, and neither in weight of material nor cost exceeds the ordinary Car Seat.

Railroad Companies and Car Builders are invited to call and examine the seat at the office of

WARD & SINGLAI, 102 Broadway, N. Y., or

BRIDGES & BROTHER, 64 Courtlandt st., N. Y., where orders are received.

London Agency for Sale of Bonds, &c.

MESSRS. LANCE & CO. are making more generally known in England, the great advantages of American Securities for investment.

During the present year Messrs. Lance & Co. have disposed of a large amount of American and Canadian Railway Bonds, and are fast extending their connection; they will be happy to correspond with parties having good Amer. Securities for sale.

Messrs. LANCE & CO. have had experience in the purchase and shipment of iron, and offer their co-operation to those about to negotiate for the disposal of bonds and the purchase of rails.

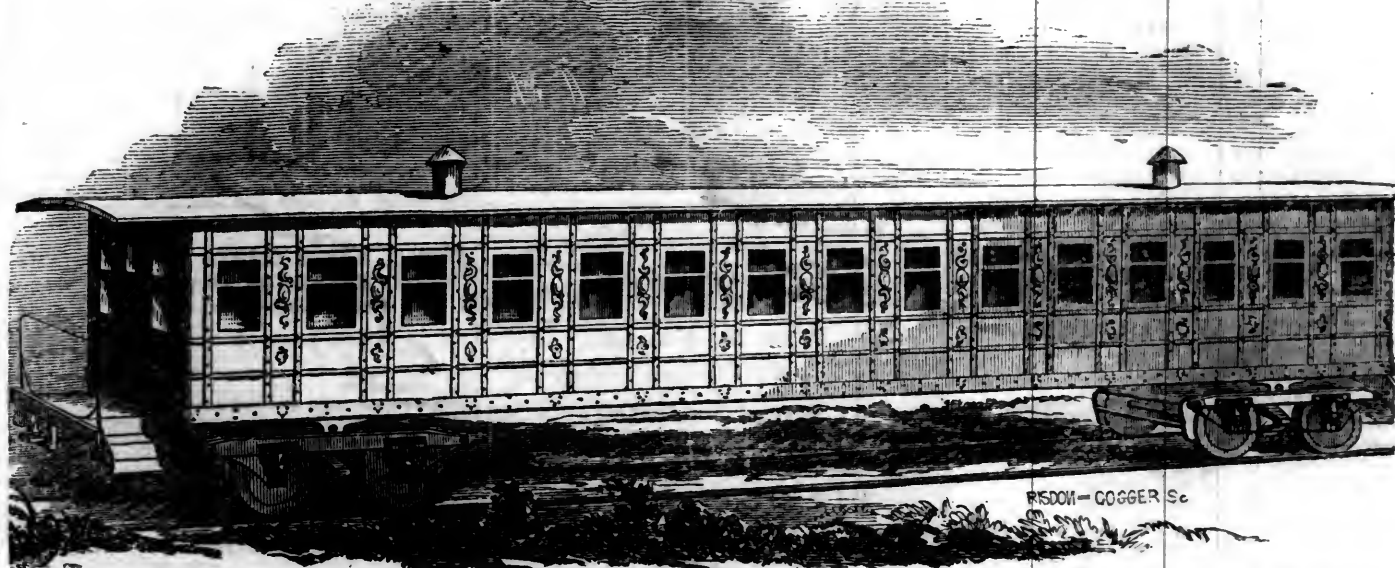
Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published.

LONDON, Oct. 1855.

10 Regent st., WATERLOO PLACE.

Gm49

LA MOTHE'S PATENT IRON RAILROAD CAR.



WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

The New York and Liverpool UNITED STATES MAIL STEAMERS.

The ships composing the line are the following:—
ATLANTIC, Capt. West. PACIFIC, Capt. Eldridge.
BALTIMO, Capt. Comstock. ADRIATIC, Capt. —

These ships have been built by contract, expressly for government service. Every care has been taken in their construction, as also in their engines, to ensure strength and speed, and their accommodations for passengers are unequalled for elegance and comfort. Price of passage from New York to Liverpool, in first class cabin, \$130, in second do, \$75; exclusive use of extra size state rooms, \$325; from Liverpool to New York, 30 and 20 guineas. An experienced surgeon attached to each ship. No berth secured until paid for.

PROPOSED DAYS OF SAILING.

FROM NEW YORK.	FROM LIVERPOOL.
Wednesday, Nov. 28.....1856	Saturday, Dec. 15.....1855
Wednesday, Dec. 12.....1855	Saturday, Dec. 29.....1855
Wednesday, Dec. 26.....1855	Saturday, Jan. 12.....1856
Saturday, Jan. 5.....1856	Wednesday, Jan. 23.....1856
Saturday, Jan. 19.....1856	Wednesday, Feb. 6.....1856
Saturday, Feb. 2.....1856	Wednesday, Feb. 20.....1856
Saturday, Feb. 16.....1856	Wednesday, Mar. 5.....1856
Saturday, Mar. 1.....1856	Wednesday, Mar. 19.....1856
Saturday, Mar. 15.....1856	Wednesday, April 2.....1856
Saturday, Mar. 29.....1856	Wednesday, April 16.....1856
Saturday, Apr. 12.....1856	Wednesday, April 30.....1856
Saturday, Apr. 26.....1856	Wednesday, May 14.....1856
Saturday, May 10.....1856	Wednesday, May 28.....1856
Saturday, May 24.....1856	Wednesday, June 11.....1856

For FREIGHT or PASSAGE APPLY TO
EDW'D K. COLLINS, 66 Wall st., N.Y.
BROWN, SHIPLEY & CO., Liverpool.
STEPHEN KENNARD & CO., 27 Austin Friars, London.
B. G. WAINWRIGHT & CO., Paris.

The owners of these ships will not be accountable for gold, silver, bullion, specie, jewelry, precious stones or metals, unless bills of lading are signed therefor, and the value thereof therein expressed.

Shippers please take notice, that the ships of this line cannot carry any goods contraband of war.

All letters must pass through the post office; any other will be returned.

NOTICE.—The day of departure of this line from New York for 1856 will be Saturday, commencing January 5, and every alternate Saturday; and from Liverpool, Wednesday, commencing Jan'y 23, and every alternate Wednesday. 6m1

Railroad Iron.

225 TONS Welsh Iron, 56 lbs. to the yard, in store and to arrive. For sale by
CLARK & JESUP, 70 Beaver st., N. Y.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$13 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Supt.

ENGINEER'S FIELD BOOK

By C. S. CROSS, Civil Engineer.

THIS work is designed as a pocket companion, and embraces all the necessary tables for prosecuting railroad surveys, in the most compact form.

It is subdivided as follows:

- 1st. The method of staking out railroad curves and keeping field notes.
- 2d. Railroad curve tables for expeditiously determining the points at which commences the curving.
- 3d. Application of the Prismoidal formula in determining the quantities of excavation and embankment of canals and railroads from transverse sections.
- 4th. Excavation and embankment tables for expeditiously determining the cubic yards from mean area.

It is a plain, clear and most valuable book for practical Railroad Engineers.

For sale at this office. Price \$1.

Railroad Instruments.

THEODOLITES, TRANSIT COMPASSES AND LEVELS on a new principle, with Fraunhofer's Munich Glasses, Surveyors' Compasses, Barometers, Chisels, Drawing Instruments, etc., all of the best quality and workmanship, for sale at unusually low prices by
E. & G. W. BLUNT,
New York, Dec. 1, 1851. No. 179 Water street.

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK.

(ONE DOOR SOUTH OF BEAVER STREET.)

RAILROAD AGENTS

AND COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION

FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

ROGERS, KETCHUM, & GROSVENOR,

LOCOMOTIVE ENGINE BUILDERS,

Paterson, New Jersey,

Having extensive facilities, are prepared to furnish promptly, of the best and most improved description,

Locomotive Engines AND TENDERS

AND OTHER VARIETIES OF RAILROAD MACHINERY.

Address Paterson, N. J., or 74 Broadway, N. Y.

Lord & Wright,

Counsellors at Law Cincinnati Ohio.

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ENGINEERS.

Atkinson, T. C.,
Mining and Civil Engineer,
Alexandria, Va.

Barnes, Oliver W.,
Chief Eng. Pittsburg and Conellsville R.R. Co., Pittsburg, Pa.

Edward Boyle,
Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York
Office 123 Chambers st.

Clement, Wm. H.,
Little Miami Railroad, Cincinnati, Ohio.

James Converse,
Chief Engineer Galveston, Houston & Henderson Railroad,
Galveston, Texas.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
64 Broadway, New York.

Davidson, M. O.,
Civil and Mining Engineer. Office Swanton Coal and Iron Co.,
61 Exchange Place, BALTIMORE, Md.

C. Floyd-Jones.,
Division Engineer 3d and 12th Divisions.
ILLINOIS CENTRAL RAILROAD.
Vandalia, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Gilbert, Wm. B.,
Syracuse and Binghamton Railroad, Syracuse, N.Y.

Gzowski, Mr.,
St. Lawrence and Atlantic Railroad, Toronto, Canada.

Grant, James H.,
Nashville and Chattanooga R. R., Nashville, Tenn.

Theodore D. Judah,
Chief Engineer, Sacramento Valley Railroad,
Sacramento, Cal. 1y23

Robert B. Gorsuch,
Civil and Mechanical, Steam and Hydraulic Engineer,
Tabernacle Building, 340 Broadway, N.Y. 18tf

Holcomb, F. P.
Ohio Eng. Augusta and Waynesboro, and Savannah & Sa-
cola Railroads, Marietta, Ga.

S. W. Hill,
Mining Engineer and Surveyor, Eagle River,
Lake Superior.

D. Mitchell, Jr.,
Chief Engineer Pittsburgh and Steubenville, and Chartiers Valley
Railroads, Pittsburgh, Pa.

Samuel McElroy,
Assistant Engineer, New York Navy Yard.

Mills, John B., Civil Engineer,
Sackett Harbor and Saratoga R. R., 24 William St., N. Y.

Septimus Norris,
Civil and Mechanical Engineer, Philadelphia.

Saml. & G. H. Nott,
Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,
Civil Engineer, Office 73 South 4th st., Philadelphia.

Prichard, M. B.,
East Tenn. and Georgia Railroad, Knoxville, Tenn.

W. Milnor Roberts,
Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

Sanford, C. O.,
South Side Railroad, Virginia.

Charles L. Schlatter,
Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.

Straughan, J. R.,
Ohio and Indiana Railroad, Bucyrus, Ohio.

Steele, J. Dutton,
Pottstown, Pa.

Shanly, Walter,
Chief Engineer Bytown and Prescott Railway,
Prescott, Canada.

Charles B. Stuart,
Consulting Engineer, 23 William str., New York.

Edward W. Serrell,
Civil Engineer, 23 William st. New York.

Trautwine, John C.,
Civil Engineer and Architect, Philadelphia.

Troost, Lewis,
Alabama and Tennessee Railroad, Selma, Ala.

A. B. Warford,
Chief Engineer, Susquehanna Railroad, Harrisbu Pa.

Wm. J. Young
HAS removed his Engineering and Surveying Instrument Man-
ufactory to No. 33, North Seventh Street, Philadelphia.

Knox & Shain,
Manufacturers of Engineering Instruments, 46 1/2 Walnut st.,
Philadelphia. (Two premiums awarded.)

BUSINESS - CARDS.**Railroad Suspension Bridge.**
NOTICE.

BENJAMIN WATKINS, at Port Gibson, Mississippi, Archi-
tect and Engineer, will erect Suspension Wire Cable
Bridges for railroad crossings from two hundred to three
thousand feet span, and wooden bridges of three hundred feet
span for any purpose of crossing, and he will also erect foot
bridges for man and horse crossing with short or long spans in
any part of the United States upon fair terms. Please address
as above.
November 12th, 1855.

The Troy Iron Bridge Co.

ARE prepared to erect Iron Bridges or Roofs, or any kind
of bearing trusses, girders, or beams, to span one thou-
sand feet or under, of any required strength, in any part of the
country. Their bridges will be subjected to severe tests, and
can be built for about the price of good wooden ones. Address
D. & G. L. BLANCHARD, Troy, N. Y.
April 1st, 1855.

W. G. ATKINSON,

CIVIL ENGINEER, SURVEYOR AND DRAFTSMAN,
CUMBERLAND, Maryland.

RAILROAD routes located, planned and estimated. Maps
and Reports furnished. Researches made for Coal, Iron,
Copper, Lead and other Minerals, Metals, &c. Contract work
in Tunnels and heavy Graduation measured and reported in
detail. Topographical Drawings executed and Lithographs
supplied by skillful artists. Mines explored, new Works laid
off, and Geological Plans prepared. 8tf

H. SAWYER

(of the late firm of SAWYER & HOBBS),
Manufacturer of Transits and Levels.

HAS removed to Union Place near Warburton Av., Yonkers.
N. Y.

J. S. Sewall,

CIVIL ENGINEER,
ST. PAUL MINESOTA.

Rollins & Haviland,
STOCK BROKERS.

38 Exchange Place New York.
JOHN T. ROLLINS. WALTER HAVILAND.

INCRUSTATION
OF BOILERS.

WEISSENBORN'S PATENT

Incrustation Preventor

effectually obviates incrustation by separating the incrusting
matter from the water before it enters the boiler, while at the
same time it is of great value as a HEATER and CONDENSOR.
The apparatus occupies but little space, is simple in construc-
tion and management, and applicable alike to stationary, loco-
motive and marine engines.

Testimony can be furnished of its successful operation for
several months during which it has been in use here, and for
two years in Europe, with water containing an unusual propor-
tion of lime.

Drawings and full descriptions will be furnished to parties
desiring them. For right to use this invention, apply to
E. W. SARGENT, Delmonico's Hotel,
No. 25 Broadway, New York.

SEYMOUR, MORTON & CO.**General Railroad Agency,**

OFFICE-METROPOLITAN BANK BUILDING,
110 Broadway, New York.

ARE prepared to contract for the construction and equip-
ment of railroads in any part of the country; also to
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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American Railroad Journal.

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New York, Saturday, January 12, 1856.

Why the United States is a Pacific Nation.
In the present crisis of European affairs, and in the rumors of embroilments in which the United States are to be engaged, it may be well to consider the disposition of our people, and the probability of their becoming involved in wars provoked by themselves.

We are charged with being, and are believed by foreigners to be a turbulent, aggressive and ambitious people. This idea is an inference drawn rather from the precedents of former republics, (between which and ourselves there is very little in common,) than from any thing in the history of our own, which proves us to be a most pacific people. The moment of the danger of a hostile encounter, our Government is ever ready to take all measures to avert it, and to accept any proposition for peace that does not compromise our national dignity and self-respect. This action on the part of the Government only reflects the sentiments of the people, which, so long as it is forcibly and unequivocally expressed by a community whose political organization is entirely popular, is certain to determine the conduct of its rulers.

The pacific character of our people will be readily appreciated by all who understand the entire equality which exists in our political organization, and the independence of the great mass of our people. All have equal political rights. Wealth and social position, of course, vary according to the qualities of the different members that compose society: but as the humblest of these can, by the proceeds of the labor of six months, become possessed of one hundred acres of fertile soil, by the culture of which he may reach a state of independence in a very few years, almost every man of ordinary capacity reaches such a position,—one in which he has more to lose than to gain by any disturbance of the pacific relations of the country. But this is not all. Ours is a country in which labor may not only place all our people above want, but the immense resources of the country, joined to entire freedom of action, holds out to every man the hope, that, by enterprise and energy, he may reach a position of competence at least, if not wealth. All, consequently, have their favorite scheme which is to produce such a desired result. One engages in ship-building,—another the construction of a railroad,—another works a mine of iron or coal, another undertakes the manufacture of lumber,—another tries his hand in one of the numerous branches of agriculture. All are intent upon their several vocations. All lay out a plan of operations fully equalling, and in most instances exceeding their means. They take the most favorable view of the future, and predicate success upon the existence of the most favorable condition of both foreign and domestic markets. To a people so employed a disturbance in the money market, which may cut off their means, or lessen the demand for, and price of their products, is a great calamity. War would be the entire defeat of the most cherished objects and aims of life. They consequently shun it as a pestilence, and are ready to submit to almost any sacrifice to avoid it.

The picture we have drawn is applicable to four-fifths of our whole male population. All aim to be rich by some laudable pursuit. They know very well that they cannot get rich by war. As for glory, a dollar will outweigh in their estimation, the rhetoric and bombast of a thousand Fourth-of-July orations. We are a money-loving

people. The great mass are in the enjoyment of all that is requisite to a good degree of comfort. All are intent upon bettering their condition. To all such hopes a war would be the death knell. The mere rumor of war would embarrass the whole country. The prospect of one would ruin thousands, while its actual existence would reduce the great mass of our people to comparative poverty. In other countries, war is declared by those who suffer from it only in a slight degree. Those who fight the battles seldom rise above the grade of day laborers. War in such cases becomes the game of diplomacy, and is entered upon, or peace made, not with any reference to their effect upon the people, but their bearing upon traditional ideas, or the maintenance of a status in itself hostile to the best interest of humanity. In the United States, the people stand upon a plane, higher as regards their social, political, and material condition than any other. They consequently have more to lose by war. Under no circumstances could it fail to be a dreadful calamity. In this country, those who would suffer the most, wield the power of State. There is no danger, therefore, that we shall rush into a war, so long as we have more to lose than to gain by one,—not till power and wealth become concentrated in few hands, and the mass of the people powerless, or poor, ignorant, and degraded. Then the country might embark upon schemes of avarice or ambition. But so long as the present equilibrium in the social body is maintained, and wealth, intelligence, and political privileges so universally diffused, there is no doubt we shall remain as we are, the most pacific people on the globe. A peaceful disposition is the natural result of our condition. We shall never be provoked into war, without good cause, and shall be ready to make peace upon any reasonable apology. Those who entertain a different notion of us, have a very inadequate idea of the character and condition of our people.

Mechanics Wanted.

We call attention to the advertisement, in another column, of the Mobile and Ohio Railroad Company for engine drivers and mechanics for that road. The company's works are situated at a healthy location, near Mobile, Alabama.

Victoria Bridge.

Below we give pretty full extracts from the reports of Messrs. Robert Stephenson, and A. M. Ross, on the Victoria Bridge, to the Chairman and Directors of the Grand Trunk Company. The principal object in these is to answer objections as to the cost of this undertaking on the plan adopted. The subject is divided into four different points;—first, the *Approaches*; second, the *Foundations*; third, the *Upper Masonry*; and fourth, the *Superstructure* or roadway.

The Approaches are said to be 700 feet long on the south, and 1,300 on the north side, running into the river, until the latter attains, at summer level, a depth of 30 inches. On the side facing the current, the slope is three to one; on the other, one to one. The embankments are solid, formed of large masses of stone faced with rubble masonry, and constructed in a most substantial manner. The abutments are each 242 feet long. The foundations are placed on solid rock, and in no place at a great depth below the surface. In laying these, a species of Cofferdam has been used, which has given satisfaction. It has been found, however, that the river bed is very irregular, presenting large, loose fragments of rock strewed about. This necessarily required some modifications in the plan of operating. In the circumstances, the only proper course is considered to be to carry the masonry down to the solid rock; and not to rest it upon a concrete, confined in "Caissons," as certain parties suggested. Such a foundation is not only impracticable, but extremely dangerous. On this point Mr. Stephenson says:

"These considerations lead me therefore to the conclusion, that the present design for the foundation is as economical as is compatible with complete security."

As to the upper masonry which is estimated to cost 50 per cent. of the whole structure, this is regulated by the number of piers, and the latter by the width of spans. The centre span is 330 feet; and the others 242 feet each, which are considered to be the most advantageous in all respects. The piers are surrounded by powerful Ice Breakers.

The masonry of the piers, considering the temperature and the shocks to which the work must be exposed, is believed to be no more costly than is required for the purpose.

In reference to the *superstructure* or roadway of the Bridge, we copy at length from Mr. Stephenson's report.

"The next point to be discussed is the construction of the superstructure, or roadway; and here, owing to the misconception which seems to exist on this subject, amongst some Engineers, I am compelled to enter somewhat into technical details, in reference to the treatment and construction of beams.

The matter has been already debated before the Institution of Civil Engineers, at great length arising out of a paper read by Mr. Barton on the construction of the bridge, over the river Boyne, erected under the direction of Sir John Macneill.

In the design of this bridge the Engineer has adopted what is technically termed the "Trellis" system of beam or girder, for the avowed purpose of saving material, as compared with the plain tubular system adopted in the Britannia, and now proposed for the Victoria Bridge.

It has been already stated that the design and cost of masonry materially depend upon the comparative expense, which may be incurred in the construction of the roadway, since the spans or

openings adopted are really governed by this item in the estimate. It is, therefore, doubly necessary that this part of the proposed design should be analyzed with great care.

Notwithstanding the discussion which took place at the Institution of Civil Engineers, as to the comparative merits of constructing beams in almost every variety of detail, it certainly appears, as far as I am able to form a judgment that much error still prevails regarding the simple principles that should, and indeed must, govern the arrangement of every beam bridge.

The tubular system is openly declared by some to be a wasteful expenditure of material for the attainment of a given strength—in short, that, in the scale of comparative merit, it stands at the lowest point. This, if it were the fact, would not be extraordinary, since it was the first proposed for carrying railways over spans never before deemed practicable; but in the following remarks I hope to convince you, in the simplest manner, that (except in particular cases) whilst it is not a more costly method of construction, it is the most efficacious one that has hitherto been devised.

At present there may be regarded as existing three methods of constructing wrought iron girders or beams for railway purposes.

FIRST.—The *Tubular Girder*, or what is sometimes called the *Box-girder*, when employed for small spans, with which may also be named the *Single-ribbed girder*,—the whole belonging to the class known as the "*Boiler-plate*" girders.

SECOND.—The *Trellis Girder*, which is simply a substitution of iron bars for the wood in the trellis bridges, which have been so successfully employed in the United States, where wood is cheap and iron is dear.

THIRD. The *Single Triangle girder*, recently called "Warren," from a patent having been obtained for it by a gentleman of that name.

Now, in calculating the strength of these different classes of girders, one ruling principle appertains, and is common to all of them. Primarily and essentially the ultimate strength is considered to exist in the top and bottom,—the former being exposed to a compressive force by the action of the load, and the latter to a force of tension; therefore, whatever be the class or denomination of girders, they must all be alike in amount of effective material in these members, if their spans and depths are the same, and they have to sustain the same amount of load.

On this point, I believe there is no difference of opinion amongst those who have had to deal with the subject. Hence, then, the question of comparative merits, amongst the different classes of construction of beams or girders, is really narrowed to the method of connecting the top and bottom *webs*, so called. In the tubular system, this is effected by means of continuous plates riveted together; in the trellis girders, it is accomplished by the application of a trellis work, composed of bars of iron forming struts and ties, more or less numerous, intersecting each other, and riveted at the intersections; and in the girders of the simple triangular, or "Warren" system, the connection between the top and bottom is made with bars,—not intersecting each other, but forming a series of equilateral triangles,—these bars are alternately struts and ties.

Now, in the consideration of these different plans for connecting the top and bottom *webs* of a beam, there are two questions to be disposed of; one is—which is the most economical? and the other—which is the most effective mode of so doing? But while thus reducing the subject to simplicity, it is of the utmost importance to keep constantly in mind, that any saving that the one system may present over the other, is actually limited to a portion, or per centage of a subordinate part of the total amount of the material employed.

In the case now under consideration, namely, that of the Victoria tubes, the total weight of the material between the bearings is 242 tons, which weight is disposed of in the following manner:

	Tons.
Top of Tube.....	76
Bottom of do.....	82
Sides of do.....	168
Total.....	242

Assuming that the strain per square inch, in the top and bottom, is the same for every kind of beam—say 4 tons of compression in the top, and 5 tons of tension in the bottom—the only saving that can be by any possibility be made to take place being confined to the sides, must be a saving in that portion of the weight which is only about one-thirty-four per cent of the whole. How, therefore, can 70 per cent. of saving be realized as has been stated, out of the total weight, when the question resolves itself into a difference of opinion on a portion which is only 34 per cent of such weight?

I am tempted to reiterate here much that was said by several experienced Engineers on the subject, during the discussions already alluded to, at the Institution of Civil Engineers; but the argument adduced on that occasion could only be rendered thoroughly intelligible by the assistance of diagrams of some complexity, and I think sufficient has been said to demonstrate, that no saving of importance can be made in the construction of the roadway of the Victoria Bridge, as it is now designed by the substitution of any other description of girder. Yet, lest this should be considered mere assertion, permit me to adduce one or two examples, where the close-sided tubular system, and the open-sided system, may be fairly brought into comparison with each other in actual practice.

The most remarkable parallel case, which occurs to me, is the comparison of the Victoria-tubes under consideration, with a triangular, or "Warren" bridge, which has been erected by Mr. Joseph Cubitt, over a branch of the river Trent, near Newark, on the Great Northern Railway.

The spans are very similar, and so are the depths. In calling your attention to the comparison, you must bear in mind, that all possible skill and science were brought to bear upon every portion of the details of the Newark-Dyke-Bridge, in order to reduce the total weight and cost to a minimum.

The comparison stands thus—

VICTORIA BRIDGE, AS BEING ERECTED.

Span, 242 feet; weight, including bearings, 275 tons, for a length of 257 feet.

NEWARK-DYKE-BRIDGE AS ERECTED.

Span, 240 feet, 6 inches; weight, including bearings, 292 tons, for a length of 254 ft.

which shows a balance of 17 tons in favor of the Victoria-tubes.

The Newark-Dyke-Bridge is only 13 feet wide, while the Victoria-tube is 16 feet, having a wider gauge railway passing through it.

This is a very important case, as the spans and depths are all but identical, and it will therefore enable you to form a judgment upon that point which has caused so much controversy at the discussion alluded to. It is true that in the Newark-Dyke-Bridge a large proportion of the weight is of cast iron, a material I have frequently adopted in the parts of tubular bridges subject to compression only, but from its brittle character I should never recommend it for exportation, nor for the parts of a structure that are liable to a lateral blow.

It has been suggested, that there is much convenience in the arrangement of the trellis, or "Warren" bridge, as it may be taken to pieces, and more conveniently and economically transported overland than "Boiler plates;" this may be correct under some circumstances, but it cannot hold good for a work like the Victoria bridge over the St. Lawrence.

I am aware that girders upon the "Warren" principle have been adopted in India, and I am not prepared to call in question the propriety of their application in certain cases, but what

have been aiming at in these observations is, to prove to you that no economy over the plain tube can be effected in the case of the Victoria Bridge. I may add, that it has sometimes been urged that the workmanship in trellis, or "Warren" girders, is of a less expensive character than that required in tubes. I am bound to confess my utter inability to understand such a statement; for, after many years of practical experience as a manufacturer of iron of every description, I do not know of any class of workmanship that bears so small a proportion to the value of the material as Boiler-plate work. If there be any difference in the cost, it ought certainly, to be in favor of tubular beams.

Another example may be mentioned of a tubular beam, somewhat similar in dimensions to the last described, and one which is actually erected on a continuation of the same line of railway, as that on which the Newark-Dyke-Bridge is situated, namely,—over the river Aire, at Ferry Bridge.—Although the similarity is not so great with this as with the Victoria tube, yet I believe it is sufficiently so to form another proof that the advantage is in favor of the solid side.

As before:

NEWARK-DYKE-BRIDGE.

Span, 240 ft., 6 in.; weight, 292 tons.

FERRY BRIDGE.

Span, 225 ft.; weight, 235 tons.

The difference between these weights is more than sufficient to compensate for the difference of span; besides which, in the Ferry bridge, made according to my designs and instructions, I was lavish in the thickness of the side plates, and the bearings which are included in the above weight were stiffened by massive pillars of cast iron.

For a further example, let me compare the Boyne trellis bridge (held by some to be the most economical) with the present Victoria tubes.

The Boyne bridge has three spans, the centre one being 264 feet, and the height is 22½ feet. It is constructed for a double line of way, and is 24 feet wide. The total load, including the beam itself, the rolling load at two tons per foot, and platform rails, &c., amount to 980 tons, uniformly distributed.

The bridge is constructed upon the principle of "continuous beams," a term which signifies that it is not allowed to take a natural deflection due to its span; but being tied over the piers to the other girders, the effective central span is shortened to 174 feet; in fact, this principle changes the 3 spans into five spans. Now the effective area given for compression in this centre span is 113½ in., which gives a strain for the 174 feet span of nearly 6 tons to the inch in comparison.

The Victoria tubes are so dissimilar in form and circumstances, to the Boyne bridge, that it is a troublesome matter to reduce the two to a comparative state. However, the Victoria tubes are known to be 275 tons in weight—242 feet in span, and 19 feet average depth, the strain not being more than 4 tons per inch for compression, with a uniform load of 514 tons, which includes its own weight, sleepers and rails, and a rolling load of 1 ton per foot.

The Victoria Bridge has not been designed upon the principle of continuous beams for practical reasons, including the circumstance of the steep gradient, on each side of the centre span, and the great disturbance which would be caused by the accumulated expansion and contraction, of such a continuous system of iron work, in a climate where the extremes of temperature are so widely apart; otherwise the principle alluded to, was first developed in tubular beams, namely in the Britannia bridge.

But since we are only now discussing the merits of the sides, let the Boyne bridge be supposed to have sufficient area in its top to resist four tons per inch, (the proper practical strain) and let the spans be not continuous; it will be found by calculation that the area required at top will be 364 inches, instead of 113½ inches, and the weight of the span would be found by calculation to come out little short of 600 tons; whereas it is now 886

tons; and if we suppose the Victoria tube to carry a double line of way and 24 feet wide with a depth of 22½ feet, even if we double the size in quantity, the whole amount of weight will be certainly very little more than 500 tons for 242 feet span.

It will be necessary to conclude my remarks with some further observations relative to the comparisons under our notice, which are of vital importance in considering the design of such a bridge as that to be erected for the Grand Trunk Railway of Canada.

Independently of the comparative weights and cost, which I believe have been fairly placed before you, the comparative merits as regards efficiency have yet to be alluded to.

You may be aware that at the present time, theorists are quite at variance with each other, as to the action of a load in straining a beam in the various points of its depth, and the fact is now known, that all the received formulae for calculating the strength of a beam subjected to a transverse load require remodelling; therefore, at present it is far beyond the power of the designers of trellis or triangular bridges, to say with precision what the laws are which govern the strains and resistances, in the sides of beams, or even of simple solid beams; yet one thing is certain, which is, that the sides of all these trellis or "Warren" bridges are useless, for the purpose of connecting the top and bottom and keeping them in their proper positions; they depend upon their connection with the top and bottom webs, for their own support; and since they could not sustain their shape but collapsed immediately, and were disconnected from these top and bottom members, it is evident that they add to the strain upon them; and consequently to that extent reduce the ultimate strength of the beams.

In the case of the Newark Dyke bridge, when tested to a strain of 6¾ tons to the inch, its deflection was 7 inches in the middle, and when tested with its calculated load of one ton per foot run, the deflection was 4¾ inches. The deflection of the Victoria tubes by calculation will not be more with the load of one ton per foot, than 1-6 inch; and we have had sufficient proof of the correctness of this calculation in existing examples. That of the Boyne bridge with a uniform load of 580 tons, was 1-9 inch with the spans shortened in effect as described.

Many other bridges of similar spans to those above named, have been constructed upon the "open side" or "truss" principle, which are (in every sense of the word) excellent structures, but since no comparison of economy between them and the Victoria tubes has been offered, it would be improper to class them with those (already named) which have actually been put forward as examples of economy to a large extent over the tubular system.

As an argument in favor of the trellis beams it has been stated, that no formula has been used to value the sides of a plate beam for horizontal strains;—and therefore, since the sides are thrown away, except for the office they perform in connecting the top and bottom webs, it is asked why should more material be placed in the sides than sufficient for that purpose? Now, I admit, that there is no formula for valuing the solid sides for strains, and that we only ascribe to them the value or use of connecting the top and bottom; yet we are aware that from their continuity and solidity they are of value to resist horizontal and many other strains, independently of the top and bottom, by which they add very much to the stiffness of the beam; and the fact of their containing more material than necessary to connect the top and bottom webs, is by no means fairly established.

It is also said that the "trellis" and "Warren" beams are usually made deeper in proportion to their span, than the tubes, and therefore the strain being less, a less quantity of material is employed in the top and bottom webs. An important consideration should be named in reply to this—

to—which is, that any change of proportion in the figure of a beam changes the amount of strain caused by the load, and consequently changes the weight of the beam itself. The resistance to horizontal strain in the above classes of bridges depends upon the distance between their top and bottom webs; such beams are said to vary in strength directly as their depths, and inversely as their spans.—With regard to tubular beams, a practical rule has been established, which determines that the depth shall not be less than 1-15 of the span; but although this is the minimum depth given, there is no reason to consider it the maximum depth; indeed the tubular bridges just named are of a greater depth than the proportion would give; for instance the depth of Ferry bridge is 1-11th of its span, and that of the Victoria tubes, next the centre opening, is 1-12th of the span. These proportions are, I believe, very similar to those that are usually adopted for Warren or trellis beams.

It is well known that the diagonal "struts" in these latter systems (which under pressure) deflect as if they themselves were beams, and any increase in the depth of the sides would be an increase of length in the diagonals; which in the "Warren" must be compensated by an increase in their sectional area; and in the trellis beam, if they are not increased in area, they must be in number, so as to make more intersections; therefore an increase in depth of the sides of these systems, would not only be a proportionate increase in their weight, but would be an increase per square foot of their surface. Now the sides of a tube [from their nature] may be increased in depth up to a reasonable practical limit without any increase in their thickness.

Having given you my views with respect to the comparative merits of the different kinds of roadway, consisting of "beams" that may be adopted in the Victoria bridge, I now proceed to draw your attention to the adaptation of the "suspension" principle, similar to that of the bridge which has been completed within the last few months by Mr. Roebling, over the Niagara river near the Great Falls.

You are aware that during my last visit to Canada I examined this remarkable work, and made myself acquainted with its general details; since then Mr. Roebling has kindly forwarded to me a copy of his last report, dated, May, 1855, in which all the important facts connected with the structure, as well as the results which have been produced since its opening for the passage of railway trains, are carefully and clearly set forth.

No one can study the statements contained in that report without admiring the great skill which has been displayed throughout in the design; neither can any one who has seen the locality fail to appreciate the fitness of the structure for the singular combination of difficulties which are presented.

Your Engineer, Mr. Alexander Ross, has personally examined the Niagara Bridge since its opening, with the view of instituting, as far as is practicable, a comparison between that kind of structure and the one proposed for the Victoria Bridge; and as he has since communicated to me by letter the general conclusions at which he has arrived, I think I cannot do better than convey them to you in his own words, which are subjoined below:—

"I find from various sources that considerable pains have been taken to produce an impression in England in favor of a Suspension Bridge, in place of that we are engaged in constructing across the St. Lawrence at this place. This idea, no doubt, has arisen from the success of the Niagara Suspension Bridge, lately finished by Mr. Roebling, and now in use by the Great Western Railway Co., as the connecting link between their lines on each side the St. Lawrence, about two miles below the Great Falls, of the situation and particulars of which you will no doubt have some recollection. I visited the spot lately, and found Mr. Roebling there, who gave me every facility I could desire for my objects. Of his last report on the completion of the work, he also gave me a copy, which you will receive with this: I have marked the

points which contain the substance of his statement. I also enclose an engraved sketch of the structure. Mr. Roebling has succeeded in accomplishing all he had undertaken, viz: safely to pass over railway trains at a speed not exceeding five miles an hour; this speed, however, is not practised,—the time occupied in passing over 800 feet, is three minutes, which is equal to 3 miles an hour; The deflection is found to vary from 5 to 9 inches, depending on the extent of the load, and the largest load yet passed over is 326 tons of 2000 lbs. each, which caused a depression of 10 inches. A precaution has been taken to diminish the span from 800 to 700 feet, by building up, underneath the platform at each end, about 40 feet in length, intervening between the towers and the face of the precipice upon which they stand; and struts have also been added, extending 10 feet further. The points involved in the consideration of this subject are, first, *sufficiency*, and second, *cost*. These are, in this particular case, soon disposed of. First, we have a structure which we dare not use at a higher speed than 3 miles an hour; in crossing the St. Lawrence at Montreal, we should thus occupy $\frac{3}{4}$ of an hour; and allowing reasonable time for trains clearing and getting well out of each other's way, I consider that 20 trains in the 24 hours is the utmost we could accomplish. When our communication is completed across the St. Lawrence, there will be lines, [now existing, having their termini on the South shore] which, with our own line, will require four or five times this accommodation. This is no exaggeration. Over the bridge in question, although opened only a few weeks, and the roads yet incomplete on either side, there are between 30 and 40 trains passing daily. The mixed application of timber and iron in connection with wire, renders it impossible to put up so large a work to answer the purposes required at Montreal; we must, therefore, construct it entirely of iron, omitting all perishable materials, and we are thus brought to consider the question of cost. In doing which, as regards the Victoria bridge, I find that, dividing it under three heads, it stands as follows:

First,—the approaches and abutments, which together extend to 3,000 feet in length, amount in the estimate to £200,000
 Second,—the masonry, forming the piers which occupy the intervening space of 7,000 feet between the abutments, including all dams and appliances for their erection 800,000
 Third,—the wrought iron tubular superstructure, 7,000 feet in length, which amounts to 400,000
 (About £57 per lineal foot.)
 Making a total of £1,400,000

"By substituting a Suspension Bridge the case would stand thus:—The approaches and abutments extending to 3,000 feet in length being common to both, more especially as these are now in an advanced state, may be stated as above at £200,000.

"The masonry of the Victoria bridge piers, range from 40 to 72 feet in height averaging 56 feet, and these are 24 in number, the number required for a suspension bridge admitting of spans of about 700 feet, would be 10, and these would extend to an average height of 125 feet. These 10 piers, with the proportions due to their height and stability, would contain as much (probably more) masonry as is contained in the 24 piers designed for the Victoria bridge, and the only item of saving, which would arise between these, would be the lesser number of dams that would be required for the suspension piers, but this I beg to say, is more than doubly balanced by the excess in masonry, and the additional cost entailed in the construction, at so greatly increased a height. Next as to the superstructure, which in the Victoria bridge costs £57 per lineal foot,—Mr. Roebling in his report, states the cost of his bridge to have been \$400,000 which is equal to £80,000 sterling. Estimating his towers and anchor masonry at £20,000, which I believe is more than their due: We have £60,000 left for the superstruc-

ture, which for a length of 800 feet is equal to £75 per lineal foot, giving an excess of £18 per foot over the tubes, of which we have 7,000 feet in length. By this data, we show an excess of nearly 10 per cent. in the suspension, as compared with which we have to deal, besides having a structure perishable in itself, on account of the nature of the materials; and to construct them entirely of iron, would involve an increase in the cost which no circumstance connected with our local or any other consideration at Montreal, would justify. We attain our ends by a much more economical structure, and what is of still greater consequence a more permanent one; and as Mr. Roebling says, no suspension bridge is safe without the appliances of stays from below, no stays of the kind referred to could be used in the Victoria bridge,—both on account of the navigation and the ice, either of which, coming in contact with them, would instantly destroy them. No security would be left against the storms and hurricanes so frequently occurring in this part of the world.

"No one, however, capable of forming a judgment upon the subject will doubt for one moment the propriety of adopting the suspended mode of structure for the particular place and object it is designed to serve at Niagara. A gorge 800 feet in width and 240 in depth, with a foaming cataract racing at a speed from 20 to 30 miles an hour, underneath, points out, at once, that the design is most eligible; and Mr. Roebling has succeeded in perfecting a work capable of passing over 10 or 12 trains an hour, if it should be required to do so. The end is attained by means the most applicable to the circumstances; these means, however, are only applicable where they can be used with economy, as in this instance."

In conclusion, therefore, I have to state to you my deliberate opinion, that the present design now being carried out for the Victoria bridge is the most suitable that can be adopted, taking all the circumstances into consideration, to which the question relates. In making this statement, I must ask you to bear in mind that I am not addressing you as an advocate for a tubular bridge, I am very desirous of calling your especial attention to this fact; for really much error prevails upon this point, through the impression that in every case I must appear as an advocate; no one is more aware than I am that such inflexible advocacy would amount to an absurdity.

I entirely concur in what Mr. Ross says respecting the propriety of applying the suspension principle to the passage across the Niagara gorge; no other system of bridge building yet devised, could cope with the large span of 800 feet, which was there absolutely called for, irrespective of the other difficulties alluded to.

Where such spans are demanded no design of "beam" with which I am acquainted would be at all feasible. The tube, trellis, and triangular systems are impracticable, in a commercial sense, and even as a practical engineering question, the difficulties involved are all but insurmountable.

Over the St. Lawrence, we are, fortunately, not compelled to adopt very large spans; none so large in fact, as have been already accomplished by the simple "girder" system. It is under these circumstances that the suspension principle fails in my opinion to possess any decided advantage in point of expense; whilst it is certainly much inferior, as regards stability for railway purposes. The flexure of the Niagara bridge, though really small, is sufficiently indicative of such a movement amongst the parts of the platform as cannot fail to augment where wood is employed, before a long time elapses.

I beg that this observation may not be considered as being made in the tone of disparagement; on the contrary, no one appreciates more than I do the skill and science displayed by Mr. Roebling in overcoming the striking engineering difficulties, by which he was surrounded. I only refer to the question of flexure in the platform as an unavoidable defect in the suspension principle, which from the comparatively small spans that are available in the

Victoria Bridge, may be entirely removed out of consideration. ROBT. STEPHENSON.

Finances of Pennsylvania.

Gov. Pollock's Message was delivered to the Legislature of Pennsylvania, on the 2nd inst. We learn from it that the receipts into the State Treasury, for the year ending November 30th, 1855, including a balance of \$1,240,928 72 from the previous year, were \$6,631,402 83. The total payments for the same period were \$5,385,705 52, leaving a balance of \$1,245,697 31 in the Treasury at the close of the last fiscal year. The receipts for the year, exclusive of the balance, were \$5,390,474 11. The ordinary expenses, including interest on the public debt, amounted to \$4,139,512 28; extraordinary payments, \$1,246,193 24. The latter were applied to the following objects, viz:—to the Portage Railroad over the Alleghany mountains, \$446,762 12; to the North Branch canal, \$87,562 67; to the Columbia Railroad for re-laying south track, \$133,100; to the payment of domestic creditors, \$1,629 85; to the redemption of loans, \$316,550 60; and relief notes cancelled, \$260,588.

The balance in the Treasury will be required for the payment of interest in February, and for unpaid appropriations. The interest on the State debts has been promptly paid, and her credit is now firmly established. The sum of \$335,011 39 is due to the Sinking Fund—to be applied to the redemption of relief notes now in circulation.

In consequence of the large appropriations to public works, the amount of State indebtedness is now a little above what it was five years ago. On the 1st of December, 1851, the funded debt was \$39,216,707 54, and the unfunded, \$897,528 95, making a total of \$40,114,236 99. On the 1st of December, 1854, this had risen to \$41,698,595 74 showing an increase of \$1,581,359 35. During the past year, however, this has decreased \$630,601 02. The debts consisted of the following:

Funded debt, viz:

6 per cent. loan	\$516,154 93
5 " "	38,903,445 54
4½ " "	388,200 00
4 " "	100,000 00

Total funded debt.....\$39,907,800 47

Unfunded debt, viz:

Relief notes in circulation	\$258,778 00
Int. certificates outstanding	29,157 25
Domestic creditors	1,264 00
Balance of temporary loan of April 19th, 1853	525,000 00
Balance of temporary loan of May 9th, 1854	346,000 00
Total unfunded debt.....	1,160,194 25

Total debt Dec. 1. 1855.....\$41,067,994 72

Total debt, as above stated, Dec. 1,

1854

Total debt, as above stated, Dec. 1,

1855

Decrease during the fiscal year....\$630,601 02

By an act passed in April 1, 1845, the Governor was authorized to issue State stock in payment of interest on the funded debt. Of this there has been issued to date \$4,105,150, bearing five per cent. interest, and redeemable on or after the first of August, 1855. No provision has yet been made for its redemption; but the Governor recommends

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St Lawrence	149	1,533,100	2,973,700	6,019,929	470,647	6	71		Tennessee and Alabama	30	246,486	679,900	In progr.				
Androscoog & Kennebec	55	642,343	1,473,080	2,345,020	190,605	90,797	18		Memphis and Charleston	288	2,103,177	958,275	3,563,362	176,484	102,016		
Androscoog	20	91,192	232,193	343,317	29,396	12,807	20		Mobile and Ohio	527	2,300,000	1,310,666	In progr.				
Kennebec & Portland	72	1,211,898	1,607,229	2,470,593	228,747	114,642	18		Miss. Central	188	642,534	628,308	In progr.				
Portland, Saco & Portland	51	1,507,000	119,237	1,486,327	259,330	124,038	6		N.O. Jackson, and G. N.	100	1,000,000	476,143	1,825,812	In progr.			
Boston, Concord & Montreal	93	1,069,092	1,069,512	2,771,310	233,234	120,834	2		N.O. Opelousas & G.W.	350	1,309,428	1,117,750	In progr.				
Cheshire	53	2,088,825	946,919	3,181,907	372,592	131,015	18		Vicksburg, Shreveport & Tex.	111	1,000,000	1,000,000	2,500,000	In progr.			
Concord	35	1,485,400	none	1,412,576	329,744	158,632	8		East Tennessee and Ga.	131	624,825	536,593	1,015,201	In progr.			
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,290	2		East Tennessee and Va.	151	2,319,330	1,497,081	3,843,664	316,090	112,177	none	
Concord & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	162,687	55,173	none		Nash. and Chattanooga	93	431,091	159,299	635,363	90,930	34,864		
Rutland & Burlington	120	2,235,576	2,662,396	6,378,425	394,971	none	none		Covington & Lexington	29	540,117	61,525	570,463	In progr.			
Vermont Central	117	5,000,000	5,000,000	8,463,368	280,119	214,793	6		Lexington and Big Sandy	65	998,236	609,061	1,589,566	244,014	96,902	6	
Roston and Lowell	53	1,530,000	525,635	2,188,505	480,174	102,942	8		Lexington and Danville	118	1,881,598	77,294	613,231	238,010	114,592	none	
Roston and Maine	21	4,076,074	none	4,179,535	906,790	421,561	8		Louisville and Frankfort	65	998,236	609,061	1,589,566	244,014	96,902	6	
Herkshire	21	600,000	none	600,000	102,552	42,335	none		Atlantic & Gt. Western	254	868,939	77,294	613,231	238,010	114,592	none	
Roston and N.Y. Central	74	2,234,000	1,200,000	3,310,948	102,552	42,335	2		Bellefontaine and Ind.	118	1,881,598	77,294	613,231	238,010	114,592	none	
Roston and Providence	68	3,460,000	421,700	3,611,821	272,347	100,078	3		Cleveland and Erie	105	4,473,721	374,127	4,548,133	1,162,601	557,905	9	
Roston and Worcester	68	4,500,000	687,553	4,866,370	952,994	342,139	6		Clev. Zanesv. and Cin.	141	4,473,721	374,127	4,548,133	1,162,601	557,905	9	
Connecticut River	62	1,601,110	254,043	1,802,244	277,770	102,942	4		Clev. and Toledo	200	2,676,425	2,639,301	5,124,629	736,272	396,986	10	
Eastern, Mass.	20	229,107	469,311	747,008	51,246	none	none		Clev. and Mahoning	103	2,676,425	2,639,301	5,124,629	736,272	396,986	10	
Essex	47	3,540,000	334,992	3,739,955	704,637	272,716	6		Clev. and Pittsburgh	133	2,676,425	2,639,301	5,124,629	736,272	396,986	10	
Fitchburg	14	229,107	469,311	747,008	51,246	none	none		Cin. Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	489,620	65		
Fitchburg and Worcester	12	200,000	140,000	363,658	56,135	28,823	6		Cin. Wilm. & Zanesv.	131	1,200,450	1,131,265	2,326,459	In progr.			
Lowell and Lawrence	12	200,000	140,000	363,658	56,135	28,823	6		Col. Piqua, and I. dian.	72	1,418,850	331,032	1,440,447	340,781	168,949	82	
Nashua and Lowell	21	600,000	none	533,953	198,491	66,533	6		Columbus and Xenia	54	1,418,850	331,032	1,440,447	340,781	168,949	82	
N. Bedford and Taunton	14	137,260	154,554	287,413	32,677	4,666	none		Dayton, Xen. & Belpre	63	437,833	422,658	860,496	In progr.			
Newburyport	57	3,015,100	314,834	3,434,164	649,656	142,800	6		Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.			
Old Colony and Fall River	15	450,000	none	443,677	50,895	25,519	6		Eaton and Hamilton	42	448,411	835,994	1,345,573	113,859	53,256	30	
Pittsfield & N. Adams	77	2,235,540	1,046,626	3,267,867	275,523	56,383	7		Little Miami	65	2,968,921	1,171,785	3,648,179	681,562	336,708	25	
Vermont and Mass.	155	5,150,000	6,629,520	9,953,258	1,763,944	718,703	10		Mad River and L. Erie	205	2,451,650	2,572,932	4,446,661	In progr.			
Western, Mass.	46	1,510,000	181,244	1,394,708	209,118	82,959	2		Ohio Central	138	1,529,927	3,485,076	4,233,443	Recently opened.	none	20	
Worcester and Nashua	43	1,525,200	351,500	1,843,332	316,616	131,312	7		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,629	662,117	9	
Providence and Worcester	72	2,550,000	939,000	3,813,932	730,012	352,799	10		Pittsbg. Mayv. & Cin.	50	343,882	343,882	In progr.				
Hartford and N. Haven	123	1,845,610	209,124	4,060,869	258,685	119,611	none		Sand'y, Mans. & Newk.	127	1,350,000	2,206,357	3,552,357	328,958	164,479	none	
Hartf. Prov. and Fitchburg	110	2,000,000	474,177	2,429,066	380,792	18,351	none		Scioto & Hocking Valley	135	403,975	609,050	888,858	In progr.			
Housatonic	67	1,031,800	578,995	1,577,167	328,266	none	4		Spring, Mt. Vernon & P.	113	1,000,000	950,000	In progr.				
Naugatuck	62	2,992,000	2,252,447	4,980,407	906,015	335,611	none		Tol. Washash & St. Louis	242	2,500,000	4,630,000	In progr.				
N. York and N. Haven	60	734,258	735,165	1,459,318	103,986	217	none		Cin., Log. & Chicago	255	4,196,679	1,006,125	2,080,433	In progr.			
N. Haven and N. London	66	508,600	1,007,829	1,527,827	137,069	3,717	none		Evansv. & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,552	10	
N. London, W. & Palmer	60	2,122,300	709,856	2,506,488	504,651	95,466	6		Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	
Norwich and Worcester	100	1,482,766	1,402,244	2,597,063	121,147	60,752	none		Indiana Central	66	608,829	1,251,387	1,660,090	321,400	186,224	46	
Buffalo, Conn. and N. Y.	92	798,439	2,587,819	3,491,868	254,770	82,030	none		Ind., Clev. & Pittsburg	83	834,157	1,011,971	1,671,544	206,544	94,318	none	
Buffalo and N. Y. City	81	1,300,000	1,030,000	2,343,840	507,618	264,855	10		Jeffersonville	66	1,014,252	694,000	1,608,252	206,544	94,318	none	
Buffalo and St. Line	55	687,000	331,318	1,038,621	120,949	58,589	none		Lafayette and Indianapolis	64	1,647,500	1,589,881	3,237,381	645,827	371,402	none	
Canoga & Susquehanna	144	3,757,801	8,933,804	12,391,363	1,753,998	603,010	31		Madison and Indianapolis	87	1,647,500	1,589,881	3,237,381	645,827	371,402	none	
Hudson River	88	1,875,148	628,938	2,518,261	279,520	102,657	none		New Albany and Salem	283	2,535,121	2,851,848	6,643,189	150,000	90,000	10	
Long Island	364	21,154,86	14,462,742	25,253,913	6,563,583	3,162,126	8		Peru and Indianapolis	73	828,314	558,314	1,386,628	150,000	90,000	10	
New York Central	464	10,012,985	12,128,669	33,439,451	6,488,993	2,627,118	8		Terre Haute and Ind.	73	924,100	456,000	1,465,321	239,992	159,323	10	
New York and Erie	133	6,716,050	3,522,416	8,127,388	942,304	154,854	17		Chicago and Rock Ind.	182	3,141,600	2,387,156	5,214,162	In progr.			
New York and Harlem	119	1,311,527	4,527,618	5,435,565	518,527	145,733	4		Chicago and St. Louis	220	2,300,000	1,235,000	3,625,000	In progr.			
Norfolk, N. Y.	57	374,920	219,394	677,754	106,764	53,880	none		Galena and Chicago	298	4,334,800	1,189,304	5,866,283	1,506,710	942,231	17	
Dawson and Syracuse	25	610,000	140,000	888,182	231,348	76,327	5		Illinois Central	707	1,419,440	18,001,426	17,698,099	In progr.			
Rensselaer & Saratoga	54	899,900	1,053,234	1,891,993	182,959	37,666	none		Peoria and Quincy	93	569,889	818,544	1,388,342	In progr.			
Saratoga and Washington	71	731,614	1,118,751	1,636,117	152,648	66,407	none		Ohio & Miss. (Wst. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	none		
Syracuse & Binghamton	27	439,192	495,500	1,077,873	152,648	66,407	none		Terre Haute and Alton	178	2,281,420	1,256,000	3,537,424	In progr.			
Troy and Rensselaer	97	1,370,428	854,768	2,040,543	393,954	152,752	5		Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.			
Watertown and Rome	50	1,000,000	1,177,376	2,177,376	124,901	44,825	none		Mich. Central	282	6,021,916	1,142,023	10,300,147	2,215,283	879,656	90	
Watertown and Delaware	41	1,500,000	4,763,154	1,682,458	532,456	12	123		Mich. South & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	
Camden and Amboy	60	240,125	1,269,223	1,499,185	60,673	61,760	none		Green Bay, Mil. & Ch.	155	764,075	442,726	1,193,755	In progr.			
Camden and Atlantic	31	3,253,925	798,596	4,396,358	824,082	410,447	7		Milwaukee and Miss.	200	988,665	1,827,584	2,704,599	465,051	307,682	87	
New Jersey Central	75	2,000,000	1,632,085	3,566,226	378,145	159,795	10		Milwaukee & Waterf.	72	354,861	132,000	614,238	In progr.			
Morris and Essex	62	1,155,715	351,500	1,549,622	233,596	99,377	6		Milwaukee and Horicon	92	81,000	81,000	In progr.				
Camden Valley	50	1,184,500	281,411	1,212,911	In progr.				Milwaukee & La Crosse	69	81,000	81,000	In progr.				
Del. Lack. & Western	20	600,000	150,000	750,000	In progr.				Racine and Miss.	68	292,351	580,000	823,310	In progr.			
Delaware and Lancaster	38	2,965,175	1,865,897	4,140,365	In progr.				Hannibal & St. Joseph	13	1,138,208	684,204	1,003,336	In progr.			
Little Schuylkill	27	2,000,000	2,000,000	2,000,000	In progr.				North Missouri	130	2,803,692	3,903,174	6,463,736	160,000	In progr.		
Northern Penn.	236	12,104,820	6,965,884	17,158,495	3,499,192	1,077,533	80		Pacific	445,170	186,115	186,115	In progr.				
Pennsylvania	96	8,219,672	10,244,442	18,464,114	3,781,639	1,240,429	10										

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	87	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	95	
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	99	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	90	92½
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	90	
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	75	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	93	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87½	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	92½	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	86	
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87½	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	87½	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	75	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	65	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. do.	7	Feb'y, August	"	1863	95	96
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	87½	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	89	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	89	91
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76	
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	78½	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	98	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101½
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96	100
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	90	95
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	87½	88
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	101	
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	80	
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	100	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	84	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	95	96
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N.Y.	1861	85	
Stouboville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	78	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77½	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	74

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82	82½
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	80	80½
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95	96½
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106	
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	97
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	92½	93½
Do. do.	4,000,000	No conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	87½	88
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	80	81
Hudson River	3,500,000	Convertible	7	Jan'y, July	"	1862	84	
Do. do.	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99½	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	84	86
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	64	66
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	81½	81½
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1860	85½	86½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80½	81
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1856-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	90	95
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83½	85
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	85½	86
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	99½	100½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	104	105
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	104	105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	82½	83

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Asked p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Asked p. ct.
New York, 7 per ct. 1857	Feb'y, May,	100		Milwaukee, 7 per ct. coup. X	Divers	82	84
Do. 5 do. 1859-60	August and	97	98½	New Orleans, 6 per ct. cp. R.R. X	Do.		78
Do. 5 do. 1870-75	November	98	100	Philadelphia, 6 per ct. 1876-98	Jan'y, July	90½	90½
Albany, 6 per ct. coup. 1871-81	X Feb'y, August.	96	98	Pittsburgh, 6 per ct. coup. X	Divers	75	76
Albany, 6 per ct. coup.	X Jan'y, July	68	70	Quincy, 8 per ct. coup. 1868 X	Jan'y, July		95
Baltimore, 6 per ct. 1879-90	Quarterly	97½	108½	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	80	85
Boston, 5 per ct. coup.	X April, October.	98	100	St. Louis, 6 per ct. coup. Long X	Divers	77	79
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99	101	Do. do. Municipal. X	Do.	78	79
Clev'Pd, 7 per ct. W.W. 1879 X	Do. do.	101	102	Sacramento, 10 p. ct. cp. 1862-74 X	Do.		78
Cincinnati, 6 per ct. coup. X	Divers	85	87½	S.F. & C. 10 p. ct. 1865, pay N.Y. X	May, Novemb.		88
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	87	88	Do. 10 p. ct. cp. 1871 X	Do. do.	90	92½
Detroit, 7 per ct. W.W. 1873-78 X	Feb'y, August.	100	102	Do. 10 p. ct. pay N.Y. X	Jan'y, July	103	
Louisville, 6 per ct. 1880-83 X	Divers	78½	79½	Wheeling, 6 per ct. coup. X	Divers		75
Memphis, 6 per ct. coup. 1882 X	Jan'y, July.		72½	Zanesville, 7 do. X	April, October		97½

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 1st, 1886.

BONDS.	Per ct.
Indianap. & Cin., 2nd Mort. 7 per ct.	77
Cin., Wil. & Zanes 2d Mort 7 per ct.	64
Covington & Lexington, 2d Mort 7 per ct.	65
Ohio & Mississippi, 2nd Mort 7 per ct.	46
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	78
Indianap. & Cin., 7 per ct. Dividend	67½
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	87

STOCKS.

Cin., Wil. and Zanesv., 25.—Cin., Ham. and Dayton, 63½.—	
Col. & Xenia, 83.—Cincinnati & Chic., 10½.—Central Ohio, 14.	
—Covington and Lexington, 23.—Dayton and Western, 20.—	
Eaton and Hamilton, 35.—Fort Wayne and Southern, 10.—	
Indiana Central, 45.—Indianapolis and Cincinnati, 16.—Little	
Miami, 88.—Mad River and Lake Erie, 24.—Marietta and Cin.,	
18.—Ohio and Mississippi, 34.—Peru and Indianapolis, 26.—	
Hillsboro' and Cincinnati, 18.	

By HEWSON & HOLMES.

For the week ending January 2nd, 1886.

BONDS.	Per ct.
\$3,000 Cov. & Lex., 6 per ct. Income	45 (Int.)
2,000 " " 10 per ct. Income	62½
5,000 Little Miami, 6 per ct. due in 1883	79
1,000 Ohio & Miss 7 per ct. 1st Mort.	67
6,000 Cin., Wil. & Zanesv. 2nd Mort. 7 per ct.	62
1,000 Cin., Ham. and Dayton, 7 per ct. due in 1880-86	
STOCKS.	
100 Shares Cin., Ham. and Indianapolis	7
200 " Ohio & Mississippi	3½
" " New Albany and Salem	5
100 " Cincinnati, Harrison, and Indianapolis	7
" Columbus & Xenia	82
" Marietta and Cincinnati	17
162 " Cincinnati & Chicago	10
" Covington & Lexington (30 day)	66
" Little Miami	87½
" " (15 days)	88
28 " Mad River & Lake Erie	25
10 " Indianapolis and Cincinnati	65

Annual Review for 1855.

From Maria G. Kane's Money Circular.

New York, Saturday, Jan'y 5.

The general movement of 1855 shows a marked falling off on the year previous—the export of produce constituting the single exception.

Business has steadily improved throughout the year, but at an increased ratio in the Autumn: and the final result has been a vast addition to the capital and solidity of the country. The stock market alone has, of late, appeared not to partake of the general improvement.

At the commencement of the year, we were just emerging from a financial pressure that had lasted eighteen months. The continued scarcity of money, the European war, and the short crops of 1854, had paralyzed business. In consequence of this stagnation, the capital usually employed in commercial transactions was thrown out of its legitimate channels. Our money market soon felt the influence of this accession, and, by the 15th of February, the specie in our Banks had risen to the unprecedented figure of \$17,400,000. Money became and remained abundant, in spite of the renewal of heavy specie shipments. The difficulty of using money to advantage induced purchases of stocks—in the first place, with a view to temporary investments, afterwards for purely speculative purposes. Attention was primarily directed to State stocks, subsequently to others, especially Reading, Erie, and the Western railroads.

The ascending movement began in January, and reached its turning point in August. It was momentarily checked in March and May by the heavy shipments of gold, and in April by the effects of the San Francisco troubles. But it received a new impetus in June, on the prospects of extraordinary crops and an unlimited European demand. Relying on these flattering anticipations, our Banks increased their loans and discounts, reaching in August the highest point ever known (\$101,154,000). Stocks then ceased to rise. The revival of business—in the West especially—was beginning to reclaim the capital which had been for some months diverted from its regular channels. We were then made to experience the difference between an easy money market caused by general stagnation, and that which grows out of profits realized by the community, after a period of great prosperity. The stocks which had been purchased in the Spring with floating capital, were thrown back on the market, prices fell, and the specie in the Banks declined rapidly.

In October, the purchases of gold at a premium for account of the Bank of France, and the great scarcity of money in London created a general feeling of apprehension. The export of gold at a period when the low rates of exchange led us to regard it as impracticable, alarmed our Banks, and they, to protect themselves against the unforeseen issues that might grow out of the state of things in Europe, and likewise to prepare themselves for the suspension of the Bank of France, which was currently expected, for a time curtailed their loans and discounts. A panic ensued, which caused an extraordinary decline in stocks. But the depression was of short duration, and prices soon reacted to their previous point. But confidence was only partially restored, and violent fluctuations continued to prevail, and the utmost sensitiveness to be manifested as regards the foreign news.

In December, the specie shipments having nearly ceased, and the advices from abroad leading us to hope for the possibility of an early peace, confidence began to revive and stocks gradually improved. But the demand for money occasioned by the preparations for the payments of the 2nd of January, counteracted these favorable influences and repressed the upward tendency.

In brief, the marked features of the year have been: for the first eight months—general stagnation, money abundant, stocks tending upward, reduced imports, and heavy specie shipments; for the last four months, great movements in produce, a general revival of business, a growing demand for money, in consequence of such revival, as well as through sympathy with the London market, increasing imports and falling off in the shipments of gold, and a declining stock market, accompanied by wide fluctuations.

The present state of the country inspires great confidence for the business of the new year. The balance of trade must be more than liquidated, for our leading houses having European connections have largely anticipated their Spring payments. The price of our produce continues so high, and the demand seems so unlimited, that we have every reason to believe that the export for 1856, of grain and cotton, will exceed that of 1847, thereby maintaining the exchanges in our favor.

To illustrate the resources of the United States, we give here the most reliable estimate that we have met with of the yield of our leading crops for the year 1855, although it can at best be but approximate, viz:

Wheat, bushels.....	180,000,000 to 185,000,000
Corn, bushels.....	to 1,000,000,000
Oats, bushels.....	to 400,000,000
Rice, lbs.	to 250,000,000
Rye, bushels.....	to 18,000,000
Barley, bushels.....	to 7,500,000
Potatoes, bushels.....	to 115,000,000
Sugar, lbs.	to 545,000,000
Cotton, bales.....	3,200,000 to 3,500,000

The exportations of Breadstuffs and Provisions for 1846-47, which exceeded those of any other year, amounted to \$68,701,921 against \$36,696,181 in 1854-55. According to carefully made estimates, those of 1855-56 will probably reach \$81,000,000 and the exports of Cotton and other Produce will be sufficient to establish a balance of exports in favor of 1856 over 1855 of about \$55,000,000 to \$60,000,000. It is therefore evident that with such prospects we might, were it not for the war, reasonably anticipate a great abundance of money until the month of August next.

But, if the war is to continue, another question presents itself about which opinions are widely at variance. The important part which European capital has performed in the development of this country, has bound us closely to its destinies—created a solidarity of interests; London cannot be injured, but New York must feel the blow.—But, one of the leading causes (next to the war,) of the present European pressure is the scarcity of breadstuffs, and this deficiency has to be supplied almost entirely to the advantage of this country. It remains then to determine whether

the United States, as a partner in the European community, enjoying the use of borrowed capital will prevail over the United States as an independent producer of corn and cotton, or *vice versa*. We feel inclined to the opinion, that the advantages of the exceptional position will be felt in the first instance; and, later, if the state of things abroad does not improve, we may have to take our share, but rather in a passive way, in the disturbances of the transatlantic finances.

[Appendix.]

COMMERCE OF THE UNITED STATES FOR EIGHT YEARS

	Merchandise.	Specie.	Total.
1848.....	\$148,638,704	\$6,360,224	\$154,998,928
1849.....	141,206,199	6,651,240	147,857,439
1850.....	173,509,526	4,628,792	178,138,318
1851.....	210,771,340	5,453,592	216,224,932
1852.....	207,440,398	5,595,044	212,945,442
1853.....	263,776,265	4,201,882	267,978,647
1854.....	298,874,091	6,906,162	305,780,253
1855.....	257,723,148	3,659,812	261,382,960

Total.....\$1,701,940,671 \$43,366,248 \$1,745,306,919

EXPORTATIONS.

	Produce of U. S.	Re-exported.
1848.....	\$180,203,799	\$7,986,806
1849.....	131,710,081	8,641,091
1850.....	134,900,233	9,475,493
1851.....	178,620,138	10,295,121
1852.....	154,947,188	12,037,043
1853.....	190,393,069	13,096,213
1854.....	215,157,504	21,661,137
1855.....	192,751,135	26,158,368

Total.....\$1,328,783,057 \$109,351,272

	Specie.	Total.
1848.....	\$15,841,615	\$154,032,131
1849.....	5,404,648	145,755,820
1850.....	7,522,994	151,898,729
1851.....	29,472,752	218,388,011
1852.....	42,674,135	200,658,366
1853.....	27,486,875	230,976,157
1854.....	41,422,423	278,241,064
1855.....	56,247,348	275,156,846

Total.....\$225,972,786 \$1,664,107,115

Balance.....81,199,804

\$1,745,906,919

PUBLIC DEBTS AND RESOURCES OF PRINCIPAL STATES.

	Debt.	Population.	Taxables.
U. States.....	\$40,583,631	\$26,500,000	.....
Alabama.....	4,231,880	771,623	\$79,233,027
California.....	3,314,583	264,435	56,982,320
Georgia.....	2,644,223	935,090	354,425,174
Illinois.....	13,994,615	1,800,000	239,376,775
Indiana.....	8,932,098	988,416	290,418,148
Kentucky.....	5,726,394	982,405	411,000,198
Louisiana.....	12,459,550	578,189	299,996,176
Maryland.....	15,132,909	583,034	243,537,091
Massa.....	6,852,730	1,133,259	573,342,286
Michigan.....	2,531,545	397,654	59,787,255
Missouri.....	5,385,900	682,044	137,247,707
N. York.....	25,250,000	3,466,118	1,266,666,190
N. Caro.....	2,928,668	869,039	226,800,472
Ohio.....	14,239,857	1,980,329	759,381,366
Penn.....	40,644,157	2,311,786	531,731,304
S. Carolina.....	2,287,156	668,507	.....
Tennessee.....	8,744,856	1,002,725	219,011,048
Virginia.....	24,705,479	1,428,863	431,000,000

RAILWAY PROGRESS.

	1854.	1855.	Inc.
6 Eastern States.....	3,672	3,923	251
4 Middle do.....	4,779	5,130	351
13 Southern do.....	4,868	6,189	1,321
8 Western do.....	6,560	8,000	1,440

Total miles.....19,879 23,242 3,863

TONNAGE OF UNITED STATES.

Notwithstanding the decrease of business, the tonnage of the United States has increase in the year 409,098 tons, amounting to 5,212,001 tons for 1854. The steam navigation comprises 770,285 tons, included in the above. The present tonnage

of this country exceeds that of Great Britain, (including her colonies,) for 1854, thus:

	Tons.
Tonnage of the United States in 1855.....	5,212,001
Great Britain in 1854.....	5,043,370
France.....	716,900

American Railroad Journal.

Saturday, January 12, 1856.

Why the Construction of Railroads should be a Common Right.

In a country possessing a government feeble from the feyness of the functions it assumes and the limited scope of its action, the greater the freedom allowed to individual action, the more perfectly does such government promote the great end of its organization—best good of the governed. In the United States, the State Governments from which originates all the legislation bearing upon the internal economy of our people, hardly presume to exert a supervisory care over the acts of such as obtain special privileges—to see whether or not these privileges are exercised with a due regard to private right. Even if possessing the best of intentions, a government, in the long run, is no match for the privileged interests who are always vigilant and prompt in action, and who possess the means of stifling, or diverting inquiry into their conduct, which are pretty certain to be applied unscrupulously without stint. In popular governments, the first germ of any movement may be almost always guided by a few artful and designing men, who are thus enabled to control the legislation, and in fact, most of the other departments of Governments. There is not one case in ten, in which any restraint is attempted to be imposed upon the action of private corporations. Their supposed interests are alone the rule of their conduct. Take the case of the Camden and Amboy railroad. Here is notorious abuse of private rights, for which no remedy exists. Through their wealth, they have become the paramount authority in the State, holding its legislation in their hands, and alike oppressing the people of New Jersey, and the whole country. Had the making of a railroad between New York and Philadelphia been a common right, the abuses complained of would never have had an existence. Had the people been left free to act, they would not for an instant have submitted to the monopoly which now rides them. The moment it became oppressive, they would have sought the appropriate remedy, a new road. But such road would probably never have been built, as the fear of it would have secured such conduct on the part of the persons owning the present one, as would have entirely obviated the necessity for another. No abuse, for which a correction always existed, would have been ventured upon. The simple right to correct any that might have been attempted, would have been enough. The assertion of such right would, probably never be called for. This illustration may serve to show the result of all kinds of special or partial legislation. Special legislation implies privileges conferred upon a favored class, for the misuse of which no sufficient remedy exists. More than this, Government may and often does divest itself of all power to interfere. In either case the result is pretty much the same—a sacrifice of the rights of the many to the few.

If Government can only imperfectly correct social wrongs, it should be careful not to be instrumental in committing them. It should never entrust the rights of one portion of the community to the keeping of another. The right of self-defense should never be taken away. Take the case of New Jersey. The Government of that State commits to a certain number of individuals the sole authority to construct railroads within certain portions of her territory. Shielded by this authority, those possessing it, at once become the oppressors of their neighbors and the public. As we have shown, no correction of such abuses exists. But were all the people of the State left in possession of equal rights, the remedy would be in the hands of those who alone can enforce it.

This is the ground for our advocacy of entire freedom of legislation in reference to the construction of railroads. It is the only policy that can secure proper conduct, under all circumstances, from those controlling these works. We think it would not be difficult to show that their best interests would be equally promoted by a system of legislation that should, in all cases, make success depend upon the manner in which they were constructed and managed, rather than from any fictitious advantage derived from legislation.

Iron Manufacture in the Interior.

The great staples of this country thus far, have been the products of agriculture, to which a new people are always devoted,—first from the necessity of self-preservation, and secondly, because till they become numerous, agriculture is more profitable than any other department of industry. In it, the labor of the individual can be made almost as productive as when combined with that of his fellow, or with capital. It is the conversion of raw materials into fabrics, that requires accumulations, both of capital and of laborers. Hence nearly all our population have been cultivators of the soil,—from which inferences, perhaps, have been drawn that our country is better adapted to agriculture, than manufactures. Such, of course, would be very erroneous ideas of our natural resources. Our vast territory is as rich in minerals as it is in soil. A large portion of it is underlaid with coal strata, with which to a greater or less extent, ores of iron are found. These are the grand agencies through which human labor and skill achieve the vast results which so distinguish the present from all preceding times. For every product, whether raw or manufactured, there are appropriate locations or districts, in which both can be produced at a cost so much below that of less favored ones, that the former come in time to be the sole points of production. The point to command the manufacture of iron must unite all the elements of production; the ores, fuel, the proper fluxes, &c., &c. Added to these must be a genial climate, abundant supply of labor and provisions, and means of sending the product to the consumers. It is the concurrence of all such conditions at certain localities, and the consequent diminution in the cost of manufacture, that is gradually closing numerous furnaces in this country where such conditions do not exist, centralizing the make of iron where they do. Such locations are found in Pennsylvania, in southern Ohio and Illinois, and, probably, in other portions of the country not yet thoroughly explored.

Now that our people have reached a stage, in which manufacturing becomes, for the reason stated, an appropriate branch of national industry, the manufacture of iron on a large scale is being commenced. The most favorable points for production, in many respects, are far in the interior, as the cost of transportation from foreign markets is equal to a sufficiently heavy protective duty. An additional advantage is a large and constant demand both for rails and other purposes. This demand which is already immense, and rapidly increasing, must soon be supplied from the domestic make. The time has come, consequently, when establishments must grow up to supply wants that cannot be well met by the foreign maker, but which can be by the domestic manufacturer at lower rates than those now paid for the imported article.

Works for this purpose, and upon a basis of sufficient magnitude have been commenced in the State of Illinois, on the Saline river, near its junction with the Ohio, and about 100 miles above the mouth of the latter. At this point, the great Southern Illinois coal field reaches the Ohio river, and is the most southerly point, where it outcrops upon the bank of this river. A company has recently been organized under a charter, granted January, 1851, which gives the corporation perpetual existence, with the right to hold such real estate and right of way as shall be deemed necessary by them to the successful prosecution of their business; with power to lay out wagon roads or railroads to such points on the Ohio or Saline rivers as they may see proper; to erect locks and dams on the latter stream, for the improvement of its navigation; to engage in the business of welling for salt water; the mining of coal, iron, clay, and other minerals; and the manufacture of the products of these, with such other commodities as the company may think promotive of their welfare.

In 1853, the parties on whom these rights were originally conferred, having disposed of the same, without first organizing the company, as directed by the act, the sale was sanctioned and the measure confirmed. In July, 1854, permission was granted to sell any part of their real estate, and to borrow money on bond and mortgage, at any rate of interest not exceeding ten per cent. per annum.

The company's property is situated at the mouth of the Saline river, in South-eastern Illinois, and occupies a tract having a frontage of two miles on the Ohio, and extending back some eighteen miles along the Saline. The latter stream is navigable at all seasons about three miles from its mouth and at high water, fourteen miles farther. The whole frontage on the Ohio affords, at all stages of the water, a good landing. About a mile up the Big Saline, the Little Saline enters the former, rising in a sandstone ridge, which forms a division between the coal formation and carboniferous limestone, containing the *hematitic* ore immediately adjoining, and on the company's premises.—These comprise, in all, over 4,000 acres, containing coal and iron, in which the ore occurs in large surface deposits, the overflow of dikes which traverse the limestone in determinate lines of fracture.

On this estate are three of these parallel fissures—one 24, and one 27 feet in width. The width of

the other has not yet been ascertained. These are crossed at right angles by another fissure 12 feet wide. It is believed that these are the only crevices hitherto discovered in the world bearing hematite iron. Two of these have been opened to the depth of 70 and 90 feet, respectively, the ore increasing in richness, and presenting all appearances of being inexhaustible in quantity. It is the proximity of these veins of *hematitic* ore to inexhaustible supplies of coal, that constitutes one of the leading elements in the value of the above estate.

On the premises, the company have already erected one charcoal furnace, capable of making annually from 1,800 to 2,000 tons of excellent pig iron. In addition to this, shops, mills, machinery, &c., have been provided, and about 300 acres of land put under cultivation, furnished with the necessary farm buildings. A large plot has been surveyed and laid out, on which it is proposed to build a city, to be designated *Suwanoo*, the Indian name for Beautiful. The site of this is on the Saline river, extending nearly two miles from its mouth. Near this point the coal deposits first crop out, and extend for eight miles along the edge of the river, on both margins, embracing an area of about 6,000 acres. The vertical thickness of all the coal measures on this estate, is 850 feet, in which occur thirteen seams of coal, seven of these, having an aggregate thickness of 32 feet, are believed to be workable.

Interstratified with the coal are no less than six seams of carbonate of iron occurring in the shales. From the examinations already made, it has been ascertained that from every acre may be taken over 7,800 tons of iron, or 5,000,000 tons to the square mile. Among these deposits are found sand-stone, fire-stone, fire-clay, &c.,—all of which are suitable for various useful purposes.

Three coal pits have already been opened upon the property, with railroads extending from them to the river.

The estate does not lie in one compact mass, the object being to secure such lands only as could be turned to useful account. At the mouth of the Saline, there is a tract of 2,400 acres designed, as already stated, for the site of a manufacturing city. Other sections have been secured containing the coal deposits, iron ores, clays, &c.; and others for their white-oak and cypress, with which they abound. Extensive forests of the last are owned by the company.

Feeling satisfied, from the central situation of the locality; its accessibility to all parts of the country; the immediate proximity of such large and superior beds of coal, iron, &c., to each other; and the immense demand for these products now existing, and destined to rapidly increase,—that the time has come when the enterprise can be legitimately presented to the public, the attempt is now made, in the confident expectation of results not only creditable to American industry, but highly remunerative to the capital invested.

The results already obtained would afford a reasonable dividend; but the amount accomplished, is so small in comparison to what is required to be done, that from \$1,000,000 to \$1,200,000 are still needed to put the concern in proper working order. This addition would enable the company to extend their coal mining operations, to build four blast furnaces, and a rolling mill, to make 500 bushels of salt per day, and afford sufficient funds

on hand to conduct their business in the most advantageous manner.

With such resources, it is believed that the profits of the company will pay an annual dividend of at least ten per cent., and leave a sufficient surplus for further extending their operations.

The parties already working these mines are not mere speculators, but have entered upon the undertaking as a permanent investment of their own capital, as well as that of others who may embark with them in the business.

There are other considerations to which we will refer only in brief. The site for Suwano is not only favorably situated as a commercial point on the Ohio, but occupies a track the most part lying high and being remarkably salubrious. No stagnant waters or swamp lands occur on any of the company's possessions. Not a single case of cholera, congestive, or yellow fever has been known to originate here, within the last dozen years. Salt springs overflow on various parts of the property. Being remote from the sea-board, the means of living are cheaper than in most parts of the country. Materials for building and other purposes are abundant. The numerous rivers and railroads all converging to a point in the great Mississippi valley, will render this region one of the best in the world for the export of products at all seasons, and to all sections of the country.

The company possess abundant elements of success, both as a coal mining, and manufacturing company. Their coal veins constitute the lowest out-crop of coal lying immediately upon the banks either of the Ohio or Mississippi rivers, and is consequently the cheapest source of supply of this indispensable article. Near this great deposit is the confluence of the most important rivers of the Mississippi basin. From the coal fields these rivers are accessible at all seasons of the year. The demand for coal for the use of steam-boats alone is immense. Coal, wherever it can be reached, is fast superseding wood, not only for the generating of steam, but for all kinds of manufacturing and domestic purposes. The demand for all these purposes is exceeding the supply. Coal is almost exclusively used in all the numerous towns and cities that line the banks of the Ohio and Mississippi rivers. From the above mines it can be sent by water thousands of miles in every direction. It is claimed, that entirely independent of the manufacture of iron, the proceeds of the coal business would yield a remunerating income on the capital to be invested on account of both.

There can be no doubt of a sufficient demand for all the rails the company can manufacture, at very high prices. Most of the rails used in the West are now imported. The import, some years, has been as high as 100,000 tons. The consumption will always continue to be large, both for new works, and to supply the wear and tear on old roads. All the materials that enter into the manufacture of rails, are found on the company's property. Labor in the West, is nearly as cheap as it is in the Eastern States, and is not, we presume, 25 per cent. higher than in the iron districts in England. With equal experience, and capital equally abundant, we ought to manufacture rails at a lower cost in this country than in England, from the lower price of all kinds of food, and from the almost entire exemption of property from taxation. There is no doubt we shall come to manu-

facture as cheaply in a few years. As it is, there is at present a very large margin for profit, as rails are selling at a distance from the seaboard in the United States at double their cost in Wales. There can be no doubt, therefore, that well managed concerns in the interior could supply the domestic demand at much less than what rails are at present selling for. The question of success in the above case is reduced to one of sufficient means and adequate management.

The capital stock of the company has been fixed at \$3,000,000, of which \$1,800,000 have been subscribed and paid in. It is now proposed to fill up the full amount of capital, by disposing of the remaining \$1,200,000 of stock. This amount would enable the company to appropriate for

General improvement.....	\$220,000
Rolling stock, tools, &c.....	40,000
Four blast furnaces, rolling mill, and dwelling houses.....	300,000
Transit means.....	240,000
Salt works.....	23,000
	<hr/> \$823,000

Leaving for working capital, say..... 400,000

The following estimate of profits, prepared from tables, for every item of which the most rigid scrutiny is challenged, is made for the first and second years' operations.

First Year.

Mining profit on 6,600,000 bushels of coal, at 4 cents per bushel.....	\$264,000
Transit profit on same.....	395,000
	<hr/> \$659,000

Net profit on first year's work..... \$659,000

For safety, take only one-half this, say..... \$329,500

Less, wear and tear on rolling stock, tools, &c., 20 per cent. on cost..... \$8,000

Less, wear and tear on railroad, houses, &c., 5 per cent. on cost..... 11,000— 19,000

Profit of first year..... \$310,500

Second Year.

No. of bushels of coal mined.....	16,016,000
Less, required for furnaces and mill.....	2,775,000

Mining profit (4 cts.) on.....	13,241,000—	\$529,640
Transit profit on.....	do	809,340

Total..... \$1,338,980

For safety, take one-half..... \$669,490

Less, wear and tear, as above..... 21,200

Net profit, second year..... \$648,290

From the above it will be seen that the first year's operations will afford to pay ten per cent., and leave \$10,000 as surplus. The second year's business has been estimated to yield a net profit of..... \$648,290

Add to this estimated profits on the make of rails..... 390,000

Estimated profits on the make of salt.. 30,000

And we have as total profits on the the 2d year..... \$1,078,290

Which after paying another dividend of ten per cent., or \$300,000, would leave as surplus, \$778,290.

This does not take into account other sources of gain, as sales of city lots, income from farms, mills, machine shops, foundry, fire-brick, &c. In view of all these, it is believed that not only can dividends at the above rate be declared; but a surplus accumulated sufficient to extend their works,

so as to make them commensurate in a great measure with the wants of the South and West.

The estimated cost of manufacturing 18,750 tons of pig iron, is given as follows:

For One Ton.

Two and a half tons ore, at \$1 00.....	\$2 50
One hundred bushels coal, at 3 cts.....	3 00
Half ton limestone.....	30
Labor, salaries, &c.....	2 50
Castings and other materials.....	72
Incidentals, including repairs.....	98

Total per ton..... \$10 00

—or for 18,750 tons..... \$187,500

Estimate for converting the above into 15,000 tons of rails.

	Per ton.
Sixty bushels coal, at 3 cts.....	\$1 80
Breaking, wheeling, &c.....	25
Boiling.....	5 60
Shingling.....	70
Muck-rolling.....	76
Shearing, piling, and heating.....	1 06
Rolling, &c.....	1 35
Sawing, trimming, and straightening.....	70
Miscellaneous, as wages, repairs, renewals, wear and tear, &c.....	5 28

Total, per ton..... \$17 50

—or for 15,000 tons..... \$262,500

Add cost of pig iron as above..... 187,500

Total cost of 15,000 tons..... \$450,000

Fifteen thousand tons of rails will sell, at \$56 per ton, for..... 840,000

Annual profit..... \$390,000

We have not sufficient space to go into a lengthy detail of the Geological Survey made a year ago by Dr. OWEN. This gentleman has a reputation, as a man of practical science, inferior, probably, to none in our country, and coming from such a source, statements will receive attention which might otherwise be regarded as beyond the mark. We extract from the close of his Report, the following:

"It would be difficult to find a location in the United States where so many workable beds of coal are concentrated in a limited space, as in this southern part of the middle coal field of Mississippi valley, adjacent to the Ohio river, five beds making their outcrop, from the summit of the bluff to low water; and three to four more beds can be won in the mile space intervening between the valley of the Saline and the Dutton cliff.

The quality of the coals generally, proves to be equal to any coals mined adjacent to the Ohio river, below Pittsburg, and superior to any coals I have yet examined from the Mississippi or Missouri rivers.

The shales intercalated with the coal measures, are often rich in iron-stones, capable of producing about 30 to 40 per cent. of excellent, soft, grey iron, of much tenacity, and well adapted for conversion into steel.

The slack and waste coal can be employed in the manufacture of salt, if not immediately at the mines, within a few miles of them.

The coal lands lie from ten to twelve miles north-east of the extensive iron region of the sub-carboniferous limestone formation, affording abundance of the hydrated brown oxide of iron, which will yield from 50 to 56 per cent of good malleable iron.

Almost every coal reposes on a bed of fire-clay, which will afford an abundant supply of this material so useful in manufacturing districts.

The dark limestone which locally overlies the upper coal, is capable of receiving a good polish and forms a beautiful black marble, where the rock is veined and free from imperfections.

An ample source of limestone for fluxing ores and other purposes can be obtained, either from the above-mentioned bed of limestone, over the upper coal, from the ferruginous calcareous rock, which crops out under the 4-inch coal in Round-hill branch, or from the hills on the south side of the Saline, below the Saw-mill where a bed of limestone equivalent to the Curlew limestone can be found.

As all the bulky materials required for the use of potteries, can be found close at hand, in the coal measures of the Saline, this vicinity would be a very favorable position for the establishment of such works, especially since, for certain kinds of queensware and porcelain, materials can be obtained within convenient distance.

The Shawneetown uplift, which is but seven miles north of the mouth of the Saline, has cast up the conglomerate and mill-stone grit, and thus cut off, in a north-easterly course, the productive coal measures of the Saline, underlying the anvil rock.

Up stream, beyond this axis of elevation, which crosses the bed of the Ohio river opposite Shawneetown, these coal measures are no longer accessible, but by deep shaling.

It is true that a contemporaneous zone of carboniferous strata rise again between Rockport and the Canaan coal mines; but so far as we are yet acquainted with these equivalent coal measures on the north-eastern margin of the middle coal field, the beds of coal are thinner, and also deeper seated, by reason of an extensive fault of sixty feet immediately south of the Trabee mines.

When we consider, at the same time, their increased distance, by over two hundred miles from the down stream markets, it appears evident that they can hardly come into competition with the south-western coal mines.

I may add, that I know of no coal locations on the intermediate higher coal measures, adjacent to the Ohio river, that can compare in accessibility and concentration of mineral wealth, to the 260 feet of strata described in this report, underlying the anvil rock. Indeed, if we take the whole range of the middle coal field, occupying the greater part of Illinois, the western part of Indiana, and the north-western part of Kentucky, we cannot find a locality at present known, where good coal can be worked to as great an advantage and profit, as south-west of the Shawneetown disturbance, and more especially, none which is so favorably situated for supplying the southern markets.—Since from Battery Rock, in Illinois, the coal measures recede from the Ohio river, with a strike line curving to the north-west, through Pope, Johnston, and Williamson counties, towards the south bend of Big Muddy, below its forks in Jackson county, so that no coal mine can be opened within a reasonable distance of the Ohio river below this point.

Battery Rock, on the Illinois side and the mouth of Tralawater, on the Kentucky shore, may therefore be regarded as the termination, in a south and west direction, of the productive coal measures of the middle coal field on the Ohio river.—Hence coal mines situated on, or adjacent to this part of that river, command the markets of the south, under more advantageous circumstances than those above them on that stream, or up the Mississippi and Missouri rivers, especially in the winter season, when coal is most in demand, and in low stages of water.

Savannah, Albany, and Gulf Railroad.

The following gentlemen were elected Directors of the Savannah, Albany, and Gulf Railroad Co., on the 1st inst.:

R. D. Arnold, S. Elliott, W. Duncan, H. D. Weed, R. Wayne, C. Green, F. S. Bartow, J. P. Screven, S. Cohen, H. Roberts, G. W. Garmany, J. Stoddard, J. R. Johnson.

At a meeting of the Directors, held on the following day, J. P. Screven was re-elected President.

New York Railroad Statistics.

We have received from Albany an abstract of some of the most important railway statistics for the year ending Sept. 30, as officially returned to the State Railway Commission. We annex the following table, which we have compiled from this document, of the earnings and expenses of the N. York roads:

	Earnings, year, Sept. 30, '55.	Expenses, year, Sept. 30, '55.
N. Y. Central.....	\$6,563,581	\$3,401,455
" and Erie.....	5,488,993	2,625,744
" and New Haven...	936,025	594,358
" and Harlem.....	1,035,577	801,451
Rome and Watertown...	404,374	281,899
Hudson River.....	1,812,084	1,208,142
Buffalo and New York City.....	288,392	256,496
State Line.....	679,750	323,987
Brooklyn City.....	322,116	.....
Eighth av.....	215,587	132,592
Sixth av.....	212,456	165,234
Third av.....	292,475	.....
Second av.....	174,883	.....
Canandaigua and Niagara Falls.....	59,766	70,839
Canandaigua and Elmira..	174,089	104,583
Cayuga and Susquehanna.	135,433	86,784
Flushing.....	36,432	38,902
Long Island.....	301,793	185,331
Ogdensburg.....	520,153	369,798
Oswego and Syracuse....	126,540	67,558
Rensselaer.....	241,149	130,681
Syracuse and Binghamton	159,489	136,981
Saratoga and Whitehall..	71,909	49,822
Troy and Boston.....	155,331	67,007
Troy and Greenbush....	85,659	81,664
Buffalo and Corning....	214,524	125,399
Black River.....	26,261	12,401
Blossburg.....	88,298	6,302
Hudson and Boston.....	44,873	34,647
Potsdam.....	26,385	.....

Total.....	\$20,843,385	\$11,310,071
Total length of roads.....	3,216 miles.	
Total construction.....	\$125,252,669	
Number of passengers.....	33,839,164	
Tons of freight.....	3,417,207	

Our Albany correspondent, it will be noticed, states the foregoing figures are not complete, owing to the crude returns made by some of the Railroad Companies.—[*New York Times*.]

Finances of the United States.

The Secretary of the Treasury in his late Report, gives the following as the revenue, disbursements, and debt of the United States for the year ending 30th June last:

The actual receipts into the Treasury for the fiscal year ending 30th June, 1855, were \$65,003,939 55. Balance in the Treasury 1st July, 1854, \$20,137,967 50. Total sum for the service of the fiscal year ending July 1, 1855, \$85,141,898.05.

The receipts from customs were.....	\$53,025,794 21
" lands.....	11,497,049 07
Miscellaneous.....	481,687 27
	\$65,003,930 55

The actual expenditures of said year were:

Civil, miscellaneous, and foreign intercourse.....	\$24,183,487 43
Interior.....	4,126,739 00
War.....	14,773,826 36
Navy.....	13,281,341 01
Redemption of public debt, interest and premium.....	9,844,528 24
	\$66,209,922 04

Balance in the Treasury 1st July, 1855..... \$18,931,976 01
The sum of \$9,844,528 24 was expended during the year, in payment of interest, premiums, and

redemption of the public debt, making the expenditures upon other objects \$56,365,393.80.

The receipts of the first quarter of last fiscal year were \$21,521,302 85. Estimated receipts for the remaining three quarters were \$42,500,000. It will be seen that the actual receipts have advanced nearly a million beyond these figures.—The expenditures for the first quarter of same year was \$16,169,330.63. Estimated expenditures for the remaining three quarters, \$48,176,590 59. The actual expenditures were nearly two millions in excess of these estimates.

The actual receipts into the Treasury for the quarter ending 30th September, 1855, have been \$19,774,460 13. The estimated receipts for the remaining three quarters are now set down at \$48,144,274 13. Add balance in the Treasury 1st of July, 1855, \$18,931,976 01. Making the estimated aggregate sum of \$86,850,710 27 for the service of said year.

The actual expenditures for the first quarter of said year—that is, the quarter ending 30th September, 1855—have been \$16,594,116 10. The estimated expenditures for the remaining three quarters, are \$54,632,730 81. Making the actual and estimated expenditures \$71,226,846 91; and leaving an estimated balance in the treasury on the 1st July, 1856 of \$15,623,863 36.

The estimated receipts into the Treasury for the fiscal year ending the 30th of June, 1857, are \$71,500,000. Balance in the Treasury on the 1st of July, 1856, \$15,623,863 36. Making the estimated sum for the fiscal year ending June 30, 1857, \$87,123,863 36.

The estimated expenditures for said year are \$57,451,365.58. Leaving an estimated balance in the Treasury on the 1st of July, 1857, of \$29,672,497 78.

In addition to the public debt, as above stated, there is due, under treaties with various Indian tribes, payable upon time, the sum of \$19,253,522 13. Besides which, the United States hold stocks in trust for various Indian tribes to the amount of \$3,822,700 57, and \$726,184.85 invested for the Smithsonian Institution. The United States hold the principal of the Smithsonian fund, amounting to \$515,169, under the act 18th Aug., 1846. and is bound to pay the interest annually, for which the stocks, stated in the tables, are held as indemnity. In addition, there was in the Treasury on the 1st July, 1855, the sum of \$683,373 66, balances of various trust funds.

The Secretary estimates the amount of gold and silver in circulation in the United States, at the close of 1855, at over \$250,000,000; and the bank notes at \$187,000,000, making \$437,000,000 in all, and showing a reduction of about \$17,000,000 in the amount of bank bills. The gold and silver bullion received at the mint and its branches, for coinage, during the year, was \$70,017,007. Export of gold and bullion, \$56,247,343, showing an excess of receipts over exports of \$13,769,664.

The table of export for the same fiscal year, in addition to the exports of gold, exhibits \$30,427,187 of manufactures exported, and \$26,158,368 foreign goods exported, exclusive of specie, and \$162,323,948 of all other articles, making the whole exports \$275,156,846, against \$261,468,520 imported, showing the excess of exports \$13,688,326, over the imports. There is no return or estimate of the gold imported by emigrants, and no return or estimate for the freights of our vessels that have contributed to our imports.

The table of tonnage for the same year exhibits our tonnage at 5,222,001 10-95ths tons, an excess over that of the preceding year of 410,000 tons; but it is proper to remark that the tonnage measurement of American vessels, under the present act of Congress, makes the measured tonnage less than the actual tonnage, while the unreported lost vessels may more than counterbalance the difference.

Progress and Condition of the Iowa Railways.

Many of our readers feel a deep interest in the progress of the various railroads in process of construction in our State, and we presume we could not fill a column to better purpose than in posting them up on the present condition of these roads, just as Winter is about to set in.

The Keokuk and Fort Des Moines road, in which our city has taken the deepest interest, has been a long time before the "public eye," and about six months ago a contract was made for grading the road from this place to Bentonsport, a distance of some forty miles. Since that time contractors have been constantly at work, though somewhat retarded by sickness in the Fall, and their monthly estimates of labor done range from five thousand to ten thousand dollars per month. A number of miles of grading has been completed, and preparations are in progress for extending operations to the neighborhood of Farmington, to continue work on the line of the road during the winter.

The contractors are men of means, energy, and experience, and arrangements have been made by the company, which it is thought will enable them to meet the regular monthly estimates, and furnish the iron for laying the track during the coming year.

The Keokuk, Mt. Pleasant and Muscatine road was brought prominently into public notice only during the past Summer. A growing interest is manifested on the part of our citizens as well as those interested along the line, and the energy of the officers of the company has enabled them to secure a liberal subscription in its favor in St. Louis as well as at home.

The contract let in the Summer for the construction of the road around the Rapids to Montrose has been prosecuted with energy, and the work is still progressing with a force of some sixty hands.

It is expected that the road will be in operation from this place to Montrose early in the Summer, and in the meantime surveys will be completed and arrangements made to continue with all convenient dispatch towards Mt. Pleasant.

The Fort Madison and Bloomfield road has not made as much noise in the world recently as it did sometime ago, and we believe that the work thereon has slackened off in like proportion. A considerable amount of work has been done towards grading the road between Fort Madison and West Point, but we are not very well posted as to its present condition or prospects for the future.

The Burlington and Missouri River railroad, which, according to the proclamation of various papers along the line, was to have been completed to Ottumwa a year ago, is still progressing slowly. A large portion of the grade has been completed between Burlington and Mt. Pleasant, and ties and iron for a part of the track are on hand. The present calculation is to complete the road and have the cars running to Mt. Pleasant during next season.

The Air Line road which comes next in our progress north, has experienced quite a revival recently, and has now two hundred hands employed on the Iowa side, as well as a large force on the Mississippi. The route we understand is not as yet permanently located through Iowa, and at present there seems to be some question as to whether it will pass through Brighton or Washington. If the road projected from Muscatine, should continue on through Washington to Oskaloosa, it would seem that the policy of the Air Line would be to go through Brighton, which would be an excellent route and would avoid the ruinous competition which must result between two roads over the same route. From present indications, it would seem that the Air Line is bound to go ahead at all events, and it becomes all those interested to put forth their best efforts to get "in the bill."

On the road from Muscatine through Washington, west, considerable grading has been done, and work is still progressing under the management of Farman & Co.

The road from Davenport to Muscatine was opened on the 20th, as we noticed at the time.

And the road from Davenport to Iowa City, it is expected, will be opened this month, preparation is being already in progress for a grand celebration at Iowa City on the occasion.—*Keokuk Whig.*

Finances of Kentucky.

The recent message of the Governor of Kentucky states that the surplus of receipts over expenditures in the Treasury, on the 10th of October last, amounted to the sum of \$255,731. According to the estimated receipts and expenditures for 1856, there will be a balance on the 10th of October next of \$5,601. "This view of our finances," says the Governor, "while showing a sufficient amount for all the necessary purposes of an economical administration of the government, at the same time admonishes us against lavish expenditure."

THE STATE DEBT.

From the 31st of December, 1853, to the 4th of September, 1855, there was paid of the principal of the State debt the sum of \$162,009. Since the Governor has been in office, \$31,000, up to the 30th November, 1855, have been paid—leaving the entire aggregate of the State debt on that day \$5,991,576 73. Of this sum, \$600,000 are held by the Southern Bank of Kentucky, the interest upon which it is bound to pay, and for which the State holds that amount of stock, and \$1,369,664 73 are held by the Board of Education, the interest upon which only may be considered a perpetual charge upon the Sinking Fund. The actual debt, the principal of which has to be provided for, is, therefore, \$4,021,912. Since the 30th November, 1855, up to which period the above statement is made, there has been redeemed of the public debt the sum of \$14,000. The semi-annual interest due the 1st day of January, 1856, has been forwarded to New York, and will be promptly paid.

THE SINKING FUND.

The total receipts of the Sinking Fund from 1st of January, 1854, to the 10th of October of the same year, including the balance then on hand, were \$391,103 80. The expenditures during the same period were \$242,695 05—leaving a balance in the Treasury on the 10th of October, 1854, of \$148,408 75. The receipts from the 10th of October, 1854, to the 10th of October, 1855, including the above balance, were \$662,494 50. The expenditures during the same period were \$519,015 87—leaving a balance in the Treasury on the 10th of October, 1855, of \$143,478 63. From the 11th of October, 1855, to the 30th of November, 1855, there was transferred to the Sinking Fund, of the surplus revenue, \$76,518 55, and for collection of revenue transferred, the sum of \$104,687 54—the three sums making an aggregate amount of \$324,684 72.

The expenditures from the 11th of October, 1855, to 30th of November, \$7,868 50—leaving a balance in the Sinking Fund, on the 30th November, 1855, of \$316,816 22. This balance is after the payment of the interest due 1st of January, 1856. This entire surplus may be safely used in purchasing the bonds of the State, and the Governor has accordingly sought to make such investment. The holders of bonds however, seem reluctant to bring them into market, and comparatively a small amount only has been purchased. This fund, by law, remained on deposit in the Banks without yielding anything to the Sinking Fund. The Commissioners concurred that as long as it remained uncalled for in Bank, it ought to command some reasonable interest.

Accordingly an arrangement was made with the Bank of Kentucky, that it should keep the sum of \$100,000 in the City of New York, without charge for its transfer, for the purpose of purchasing bonds of the State, upon which an interest of three per cent. per annum should be paid, and for the sum of the whole deposit of \$210,000, or any part of it, to be subject to call by the Commissioners, whenever wanted for investment or

any other purpose. The Governor says that it is desirable that this fund should be used as speedily as practicable in redeeming the debt, and no pains will be spared to effect that object.

RECOMMENDATIONS FOR IMPROVEMENTS.

The Governor represents the school fund to be in a healthy and prosperous condition, and urges, at considerable length, the importance of elementary common school education. He next reviews the charitable institutions of the State, and then passes to the militia system, recommending its reorganization. The Governor also recommends a sufficient appropriation to be made for continuing the Geological Survey of the State, and a further appropriation for encouraging the agricultural and mechanical interests. The Banks of Kentucky are in a sound condition, and the Governor does not think that it would add anything to the prosperity of the State to increase the number.

Finances of Maryland.

The annexed extract from the Governor's Message, shows the receipts, expenditures, and general financial condition of Maryland, at the 30th of September last.

"There was received into the Treasury, in the fiscal year ending the 30th of September, 1855, from all sources, the sum of \$1,200,762 68, to which is to be added the balance in the Treasury at the end of the preceding year, amounting to the sum of \$378,123 98, making the aggregate receipts for the year 1855, \$1,578,886 58.

The disbursements of the Treasury for the year ending 30th September, 1855, were in the aggregate \$985,964 53, leaving remaining in the Treasury at the end of the year, applicable to future demands, the sum of \$592,922 03.

There was received into the Treasury during the fiscal year 1855, on account of the Sinking Fund, the sum of \$263,025 87, all of which said sum was during the same period disbursed in investments for the use of the same. The amount of stock standing to the credit of the Sinking Fund on the 30th September, 1854, was \$3,158,637 53, and the amount added to the same, during the year 1855, was \$268,112 42, so that the aggregate value of the stock standing to the credit of that Fund at the close of the year 1855, is \$3,426,749 95.

At the close of the fiscal year 1855, the aggregate of the Public Debt of the State, was \$15,132,909. Of this amount the Baltimore and Ohio Railroad Company, pays the interest upon \$3,200,000, the Susquehanna and Tide Water Canals, furnish the means for paying the interest of \$1,000,000, and the Northern Central Railroad Company, hereafter furnish money to pay interest upon \$1,500,000, leaving to be derived from other sources, interest on the sum of \$9,432,909.

The Sinking Fund, as hereinbefore shown, holds of this debt \$3,426,749 95, of which amount, so held by the Sinking Fund, there was purchased, during the last two years, \$556,045 24, and there has been called in for redemption, and paid for out of the surpluses in the Treasury, for those two years, the amount of \$211,433 31, so that during the last two years there has been absorbed of the Public Debt absolutely, by cancellation and redemption, the sum of \$211,433 31, and virtually by purchase, for the Sinking Fund, the further sum of \$556,045 24, making an absorption, actual and virtual, of \$767,478 55, within that period."

On the present condition and future prospects of the State, the Governor says:

"No citizen of Maryland can contemplate this exhibit of the finances of the State, without experiencing the sincerest gratification. What a contrast is presented, between its condition now and the humiliating position it occupied but a few years ago! Then, we stood trembling upon the very verge of State insolvency, repudiation and dishonor; now, owing to the public virtue and indomitable energy by which the integrity of the State has been vindicated, and our plighted faith honorably maintained, we not only behold the dawn of our deliverance, but the broad open day

is clearly in our view, revealing to us a prosperous future, and animating laudably the pride of every citizen of the State. Let but the same spirit that has animated our people be continued, accompanied by that spirit of retrenchment and economy that should ever shape and direct public measures, and but a few more years will elapse before their toils and sacrifices for the preservation of the public credit will be abundantly rewarded by the rich fruition of their highest hopes. Wave after wave of public prosperity is bearing us farther and farther from the receding shores of insolvency and dishonor; the day is not far distant when the demands of the public creditors shall all have been cancelled to the last farthing, when the fetters fastened upon us by a vast indebtedness shall be broken, and the State once more shall stand erect in its own unborrowed strength, relieved finally of the galling thralldom of public debt.

The Treasury, for many years, has not exhibited such a condition of soundness, justifying such cheering hopes with regard to the future. Our public debt is now a manageable affair, completely within our grasp and under our control; nothing short of some great public calamity can occasion us further embarrassment.

It gives me a high degree of satisfaction to state that the various public works in which the interest of the State is so largely concerned, have participated to a very considerable extent in the general prosperity of the country. The operations of the principal of them, to wit:—the Baltimore and Ohio Railroad Company, and the Northern Central Railroad Company, have been characterized by a degree of success which encourages the most cheering anticipations."

Railroads in Virginia.

The annexed statement shows the lengths, cost, and interest of the State in the Railroads of Virginia:

Alexandria, Loudoun and Hampshire railroad—length 160 miles, in progress 63½, capital stock authorized by law \$3,500,000, State's interest, \$56,970.

Fredericksburg and Gordonsville railroad—length 45 miles, in progress 45 miles, capital stock \$460,000, State's interest \$72,879.

Manassas Gap railroad, (including the Loudoun branch)—length 162 miles, completed 69½, in progress 92½, capital stock \$2,800,000, State's interest \$1,024,000.

Norfolk and Petersburg railroad—length 80, in progress 80, capital stock \$1,500,000, State's interest \$191,079.

Orange and Alexandria railroad, (including branch to Warrentown and extension to Lynchburg)—length 157, completed 97, in progress 60, capital stock \$1,457,500, State's interest \$347,401 85.

Petersburg and Roanoke railroad—length 60, completed 60, capital stock \$769,000.

Richmond, Fredericksburg and Potomac railroad—length 76½, completed 76½, capital \$1,000,000, State's interest \$275,200.

Richmond and Petersburg railroad—length 22, completed 22, capital stock \$685,600, State's interest \$385,600.

Richmond and Danville railroad—length 142, completed 136, in progress 7, capital stock, \$2,000,000, State's interest \$1,181,200.

Richmond and York River railroad—length 38½, in progress 38½, capital stock \$500,000, State's interest \$77,598.

Roanoke Valley railroad—length 22, completed 22, capital stock \$430,000, State's interest, \$306,341.

South Side railroad, (from Lynchburg to City Point)—length 131, completed 131, capital stock \$1,400,000, State's interest \$80,500.

Virginia Central railroad—length 189 miles, completed 153, in progress 36, capital stock \$2,977,500, State's interest \$1,613,284 76.

Virginia and Tennessee railroad—length 205, completed 160, in progress 45, capital stock \$3,000,000, State's interest \$1,800,000.

Winchester and Potomac railroad—length 32 miles, completed 32, capital stock \$300,000, State's interest \$83,333 33.

Blue Ridge railroad—length 17 miles, completed 13, in progress 4, capital stock \$1,300,000, State's interest \$1,284,255.

Covington and Ohio railroad—length 224, in progress 63, capital stock \$1,000,000, State's interest \$798,574 85.

Clover Hill railroad—length 11½, completed 11½, capital stock \$250,000.

Greenville and Roanoke railroad—length 21, completed 21, capital stock \$289,100.

North Western Virginia railroad—length 103½, in progress 103½, capital stock \$3,500,000.

Tuckahoe and James River railroad—length 4½, completed 4½, capital stock \$68,600.

Seaboard and Roanoke railroad—length 80, completed 80, capital stock \$500,000.

Baltimore and Ohio railroad, (in Va.)—length 240, completed 240.

Making in all 2,002 miles of railroad in length, 1,332 completed, 670 in progress, \$29,687,300 capital stock, \$10,751,216 State's interest.

Sunbury and Erie Railroad.

A recent communication from the President of this road, and ex-Governor Bigler to the City Council of Philadelphia, gives the following view of its financial condition.

The Eastern Division of the road commences at the anthracite coal of the Shemokin Valley, at Sunbury, and extends to the bituminous coal fields above Farrandsville, a distance of about 80 miles. The total cost of this division, including the money already expended, is estimated at \$3,600,000.

The Western Division of the line, extending from the harbor of Erie to the coal beds in McKean county, a distance of 82 miles, has been estimated at a total cost of \$2,400,000. The construction of this division, except the iron, has been contracted for with a number of enterprising and responsible citizens of Erie and Warren counties, one-half the gross cost of the work to be paid in the municipal bonds of the city and county of Erie and the county of Warren; 25 per cent. in the bonds of this company, and the remaining 25 per cent. in cash.

The Middle Division, found between the points already named, a distance of 110 miles, embracing the heaviest part of the work, is estimated at a cost of \$5,500,000.

The cost of the several divisions, and the total cost of the road, are exhibited as follows, to wit:

Eastern Division	\$3,600,000
Middle "	5,500,000
Western "	2,400,000
	<hr/>
	\$11,500,000

The resources of the company, collected, and to be collected, and those only prospective, so as to exhibit the whole scheme, may be stated as follows, to wit:

Total amount of subscriptions collected, and to be collected.....	\$4,894,000
Municipal subscriptions of Erie city and county, and Warren Co., as provided for in the contracts for work, and not included in the above.....	550,000
Original capital to be raised, termed "the Consummation Stock".....	2,800,000
Proceeds of mortgage security.....	5,000,000
	<hr/>
Total.....	\$13,244,000

This aggregate covers no Municipal Subscriptions, except those of the cities of Philadelphia and Erie, and Erie and Warren counties.

The road east of Williamsport is now completed, and connecting with the Shemokin road at Sunbury, makes a continuous line from Williamsport to Mt. Carmel, a distance of 70 miles.

The mortgage heretofore resting on the road between Williamsport and Sunbury, has been satisfied, and the bonds issued under it cancelled, and

another has been created over the entire line, not to exceed the aggregate of \$6,000,000, with the condition that the bonds issued under it shall never exceed half the amount of capital previously invested in the construction and equipment of the road. We have reason to believe that this will afford a good system of credit for the company.

The payment of the remainder of the subscription of the Cleveland, Painesville and Ashtabula Railroad Company, (\$200,000) is dependent upon the action of the City Councils. Under the law, the payments are to be made coterminous.—Until the city makes provision to pay, no demand can be made upon the Ohio Company; and a failure in the former involves the loss of the latter.

Fort Wayne and Chicago Railroad.

The annual meeting of the shareholders was held, November 15th, and the following gentlemen were elected to serve as directors for the ensuing year:

Wm. B. Ogden, John Evans, Chicago, Sam'l G. Haas, Valparaiso, Ind.; Amzi L. Wheeler, Plymouth, Ind.; Wm. Williams, Warsaw, Ind.; Solomon W. Roberts, Pittsburg, Pa.; Samuel Hanna, Pliny Hoagland, and Joseph K. Edgerton, Fort Wayne.

Subsequently Joseph K. Edgerton Esq., of Fort Wayne, was elected President, Judge Hanna declining. Mr. Edgerton is a man of great business experience, energy and perseverance, and if his efforts are properly seconded by the stockholders, it is thought he will do a great deal towards the early completion of the road. The work is steadily progressing. Estimates to the amount of \$80,000 have been paid in the last two months. The tracklaying will be completed and the road opened to Columbia (20 miles) by 1st January next, and the eastern division of the road from Fort Wayne to Plymouth, (64 miles,) it is confidently expected, will be opened for business early in the Summer. At Plymouth this road connects with the Cincinnati, Peru and Chicago road, connecting Laporte with the Michigan Southern and Northern Indiana road. On the section of the Cleveland, Peru, & Chicago road of 28 miles, between Laporte and Plymouth, the iron is in part laid down, the tracklaying is progressing, and that section of the road will be open early in the Spring, and in time to meet the Fort Wayne and Chicago road at Plymouth, thus completing a connection for the latter road with Chicago. A large business will flow over the road on completion of this connection. The work west of Plymouth will be prosecuted with vigor. The Fort Wayne *Sentinel* states:—Should the means placed at the disposal of the President be sufficient, the road will be extended to Plymouth early in the Summer, at which point a temporary connection will be made with the Peru and Laporte road, giving us a very good Chicago connection. The whole line will be completed as early as practicable, and it will then, in conjunction with the Ohio and Indiana, form one of the best and shortest routes from Chicago to the East, and if properly managed cannot fail to attract a large share of business and prove profitable.—*Fort Wayne Republican*.

Trade of Milwaukee.

The Milwaukee *Sentinel* says that the following is a comparative statement of the shipments of leading articles from that port, from the commencement of the season to this and last year:—

	1855.	1854.
Flour..... bbls.	192,661	155,154
Pork..... "	36,536	25,918
Beef..... "	9,946	6,619
Beer..... "	10,760	8,874
Wheat..... b'sh.	3,008,996	1,917,954
Corn..... "	108,597	181,937
Oats..... "	14,027	410,957
Barley..... "	92,601	330,976
Rye..... "	61,646	109,717
Potatoes..... "	54,703	62,655
Wool..... lbs.	524,380	209,000
Malt..... b'sh.	17,920	.....
Lime..... bbls.	40,418	10,678
Brick.....	4,350	.....

Population of Massachusetts.

The following is a table of the total population of this State, as exhibited by each census since 1800, the amount of the increase in each decade, and the average gain per cent., per annum:

Years.	Census.	Increase in numbers	Average gain per ct. per an- num.
1800.....	422,845		
1810.....	472,040	49,195	1.11
1820.....	523,287	51,247	1.04
1830.....	610,408	87,121	1.55
1840.....	737,700	127,292	1.91
1850.....	973,715	236,015	3.20
1855 (5 yrs.).....	1,133,033	159,318	3.27

Increase in 55 years.....710,188
Census of 1800.....422,845

Census of 1855.....1,133,033

Massachusetts, with the poorest soil of any State in the Union, has the greatest number of inhabitants to the square mile, and is by far the richest in proportion to her population. The increase of her people are fully up to the ratio of that for the whole country, which shows that she finds full employment for them at home. The progress of her commerce and manufactures keeps pace with that of the agricultural interests of the country.

Mercantile Marine of the State of Maine.

The following statement shows the tonnage of vessels built in Maine during the year ending June 30th, 1855, and the tonnage owned in the several collection districts, June 10th 1855—copied from annual Reports on commerce and navigation:—

	Built.	Owned.
Bath.....	56,929.45	175,258.65
Waldoboro'.....	49,678.06	148,896.15
Portland.....	25,800.12	137,317.55
Belfast.....	15,343.49	70,762.17
Castine.....	6,644.32	53,955.50
Ellsworth.....	10,398.88	47,977.25
Eastport.....	18,969.30	44,505.06
Bangor.....	7,143.82	40,297.69
Machias.....	6,674.69	34,216.82
Wiscasset.....	10,439.37	26,929.50
Kennebunk.....	7,353.66	17,120.42
Saco.....	1,579.35	7,167.67
York.....		1,891.69
	215,904.73	806,605.22

The State of Maine, with a population of about 625,000 inhabitants, has a larger commercial marine than any nation in Europe, with the exception of Great Britain.

Texas.

The report of the Commissioner of the General Land Office, submitted to the present Legislature of Texas, makes the following exhibit of the land of Texas:

Total area of the whole State.....	175,594,560
Titled by Mexico & Spain.....	22,584,484
Confirmed by act of 1852.....	3,741,241
Claims under the Republic and State of Texas.....	44,834,686

Total acres granted.....71,160,411

Leaving a total public domain after satisfying all known claims.....104,734,149

This report shows the amount of old titles under Spain and Mexico to be 2,932,907 acres less than shown by previous reports, that amount having been set aside by the courts.

Of the land between the Nueces and the Rio Grande, confirmed by the act of 1853, 1,376,629 acres have been surveyed and returned to the Land Office, leaving 2,364,612 acres of the same outstanding.

Worcester and Nashua Railroad.

The year's business of this road has been as follows:

Earnings for the year ending November, 1855.....	\$204,780 28
Expenses during the same time, including interest on the debt.....	129,020 87
Net profits.....	\$75,759 91
Deduct dividends paid in July last, and to be paid January 10th, of \$4 per share.....	60,888 00
Surplus undivided.....	\$14,871 91

January Dividends.

The following are some of our leading railroads which pay semi-annual dividends this month.

Hartford and New Haven.....	5 per ct. in cash
Western (Mass.).....	3 " "
Boston and Lowell.....	3 " "
Worcester and Nashua.....	4 " "
Petersboro' and Shirley.....	3 " "
Michigan Central.....	6 " "
Mich. South. & North. Ind.....	5 " "
Cleve'd., Col., & Cin.....	5 " "
Cleveland and Pittsburg.....	5 in 7 p. ct. b'ds.
Little Miami.....	5 " "
Milwaukee and Mississippi.....	6 per ct. in cash
" ".....	5 per ct. in stock.
Galena and Chicago.....	5 per ct. in cash.
" ".....	12 per ct. in stock.

By reference to our advertising columns it will be seen that in consequence of some changes among the parties owning the Pascal Iron Works, Philadelphia, the name of the firm is changed from Morris, Tasker, & Morris, to Morris, Tasker, & Co. The above Works have a well established reputation for the manufacture of Iron Tubes of all sizes and descriptions, besides general Foundry business. They are situated on South 5th and Franklin streets. Office, 85 South 3d st., Philadelphia.

Coal Burning Locomotive.

Messrs. DANFORTH, COOKE, & Co. of Paterson have just completed for the Delaware, Lackawanna, and Western railroad an Anthracite Coal Burning Locomotive, named the "Delaware," of the following dimensions:

Boiler 46 inches diameter at the smoke box end, and 51 at the furnace end. Contains 115 two and a-half inch tubes, 12 feet 6 inches long. Furnace grate 5 ft. long by 6 ft. 3 in. wide, giving an area of 31¼ feet of grate surface. Furnace extends into the cylindrical part of the boiler about 34 inches, forming a combustion chamber; and has about 180 sq. feet of fire surface in all. It completely overhangs the back drivers.

One large steam dome, 32 in. diameter by 46 inches high, placed midway between the furnace and smoke box, and covered by a neat house for the engineer.

Cylinders 18 by 24, placed longitudinally just forward of the front drivers, with perpendicular valve faces inside the frames. Valves worked directly from the links, without a rocker.

Drivers are six in number, 48 inches diameter, with Bush & Lobdell cast iron chilled tyres. Distance from centre of front to that of back wheels, about 13 feet. Equalizing levers between each pair of wheels.

The overhanging weight of the cylinder, steam chests, smoke pipe, &c., is sufficient to counter-balance that of the fire-box and fuel at the other.

Weight of engine about 32 tons. Tank holds

nearly 2,400 gallons. Forward part of tender is brought down near the track, forming a platform for the fireman, and covered with a roof.

The first coal burner ever made in Paterson was built at these works. The "Delaware" will be the third of this class for the D. L. & W. Co. They are also building some engines for the Missouri & Mississippi railroad. Present number of hands employed about 200.

To Engine Drivers and Mechanics.

FIFTEEN to twenty Locomotive Drivers and Mechanics of good character, experience, and steady habits, will find permanent places and liberal compensation on the Mobile and Ohio Railroad at Whistler, five miles from Mobile City.

JOHN CHILDE,
Engineer and Supt.

8t2

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.
REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By M. E. LYONS, Associate Engineer, Lebanon Valley R. R. The Tables are 24 in number, printed in clear, bold type on sheets of tinted paper, 25x18 inches. Sold in separate sheets, at 25c. each, or the whole handsomely bound in cloth in one volume for \$7.50, by JOSEPH HYATT, 139 Chestnut st., Phila.; WM. MINIFIX, Baltimore, Md.; ESTWISLE & SON, Alexandria, Va.; McCLEAN & Co., Toronto, C. W., and by all book-sellers.

Testimonials may be seen at the office of this paper. 38

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a. m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p. m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

On Sundays One Express Train—at 5 p. m.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

I. H. D. C. McCALLUM, General Supt.

Lawrence Scientific School, HARVARD UNIVERSITY.

The next Term of this Institution will open on the first day of March, 1856, and continue twenty weeks.

Instruction by Recitations, Lectures, and Practical Exercises, according to the nature of the Study, will be given in:

Botany.....	by Prof. Gray.
Chemistry, Analytical and Practical.....	" " Horsford.
Comparative Anatomy and Physiology.....	" " Wyman.
Engineering.....	" " Eastis.
Mathematics.....	" " Pierce.
Mineralogy.....	" " Cooke.
Physics.....	" " Lovering.
Zoology and Geology.....	" " Agassiz.

For further information concerning the School, application may be made to Prof. E. N. Horsford, Dean of the Faculty, 4

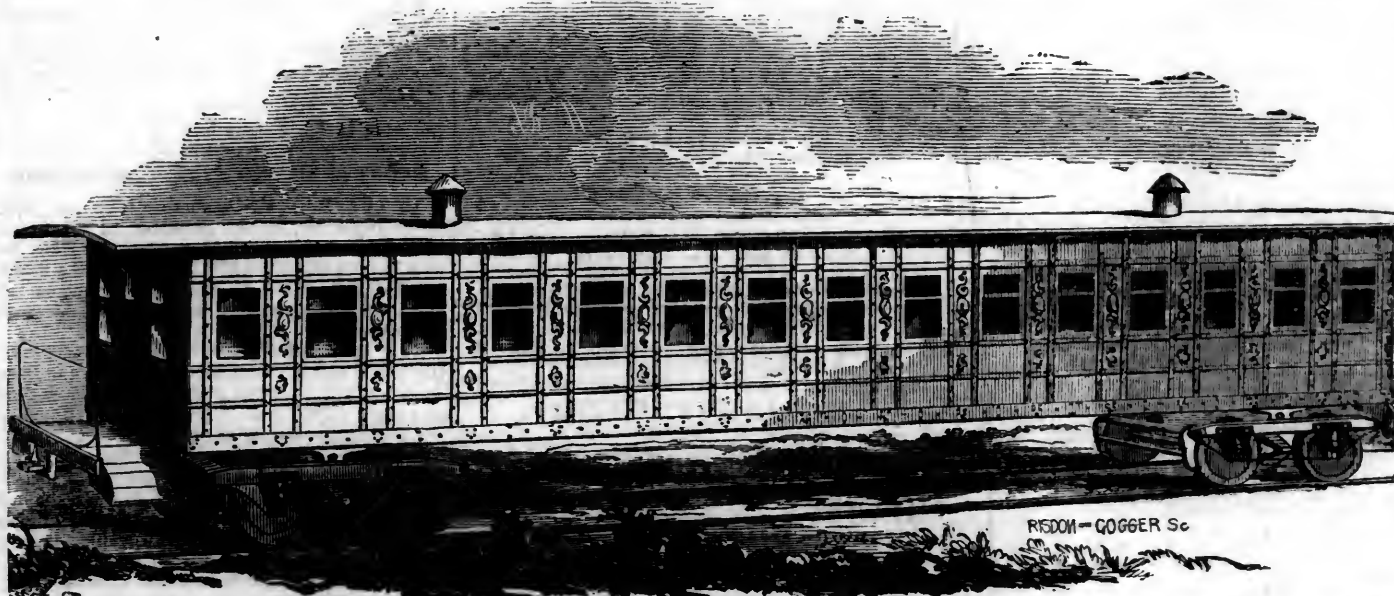
CAMBRIDGE, MASS., Jan'y, 1856. 6t52

Four First Class Locomotive Engines for Sale.

1, Cylinders 15½x22, Drivers 5½ feet,
2, Do. 15 x20, Do. 5 feet,
1, Do. 15½x22, Do. 4½ feet,
all of which have 4 wheels connected with centre bearing trucks; wrought in frames and pedestals; copper flues; lifting link valve motion.
H. & F. BLANDY.

ZANESVILLE, OHIO, August 11th, 1855. 39

LA MOTHE'S PATENT IRON RAILROAD CAR.



REDON-COGGER & Co

WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 80 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dudgeon's Hydraulic Jack, Sowall's Salinometers, etc., etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1y17

Railroad Iron.

1,000 TONS Welsh Rail, 60 lbs. to the yard, now in bond and for sale by
CLARK & JESUP, 70 Beaver st., N. Y.

EDDY'S

Patent Car Locomotive and Tender Wheels.

GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies through out the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they undergo no annealing process which gives them a deeper and harder chill than those of any other manufacture.

W. F. SHATTUCK, G^l Agent, 229 Broadway, N. Y.

Railroad Iron.

225 TONS Welsh Iron, 66 lbs. to the yard, in store and to arrive. For sale by
CLARK & JESUP, 70 Beaver st., N. Y.

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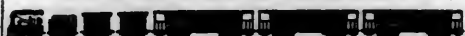
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Trains will leave the Southern and Western Station, corner of Broad and Pine streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

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From New York to Wilmington.....	\$15 50
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do do Norfolk.....	6 50
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do do Louisville.....	12 00
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By O. S. CROSS, Civil Engineer.

THIS work is designed as a pocket companion, and embraces all the necessary tables for prosecuting railroad surveys, in the most compact form.

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- 1st. The method of staking out railroad curves and keeping field notes.
 - 2d. Railroad curve tables for expeditiously determining the points at which commences the curving.
 - 3d. Application of the Prismoidal formula in determining the quantities of excavation and embankment of canals and railroads from transverse sections.
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THEODOLITES, TRANSIT COMPASSES AND LEVELS on a new principle, with Fraunhofer's Munich Glasses, Surveyors' Compasses, Barometers, Chains, Drawing Instruments, etc., all of the best quality and workmanship, for sale at unusually low prices by
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CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first
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TORONTO & OSWEGO

STEAMBOAT LINE.
Alteration of Hours.

THE trains on the OSWEGO & SYRACUSE RAILROAD having changed their hours of departure, in connection with the Railroads to New York, these steamers will, in future leave Toronto as follows:

"CHAMPION" Sunday, Tuesday, and Thursday, at 5 P. M. punctually.

"MAYFLOWER" Monday, Wednesday, and Friday, at 6 P. M. punctually.

Passengers by these boats may depend on making connection with the Train arriving in New York on the ensuing evening, thus making the most agreeable and expeditious route to that city, and avoiding all night travel on railroads.
TORONTO, Sept. 21st, 1861.

415

ENGINEERS.

Atkinson, T. C.,
Mining and Civil Engineer,
Alexandria, Va.

Barnes, Oliver W.,
Chief Eng. Pittsburg and Connellville R.R. Co., Pittsburg, Pa.

Edward Boyle,
Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York
Office 123 Chambers st.

Clement, Wm. H.,
Little Miami Railroad, Cincinnati, Ohio.

James Converse,
Chief Engineer Galveston, Houston & Henderson Railroad,
Galveston, Texas.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
64 Broadway, New York.

Davidson, M. O.,
Civil and Mining Engineer. Office Swanton Coal and Iron Co.,
51 Exchange Place, BALTIMORE, Md.

C. Floyd-Jones,
Division Engineer 3d and 12th Divisions.
ILLINOIS CENTRAL RAILROAD.
Vandalia, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Gilbert, Wm. B.,
Syracuse and Binghamton Railroad, Syracuse, N. Y.

Gzowski, Mr.,
St. Lawrence and Atlantic Railroad, Toronto, Canada.

Grant, James H.,
Nashville and Chattanooga R. R., Nashville, Tenn.

Theodore D. Judah,
Chief Engineer, Sacramento Valley Railroad,
Sacramento, Cal. 1723

Robert B. Gorsuch,
Civil and Mechanical, Steam and Hydraulic Engineer,
Tabernacle Building, 340 Broadway, N. York. 1847

S. W. Hill,
Mining Engineer and Surveyor, Eagle River,
Lake Superior.

D. Mitchell, Jr.,
Chief Engineer Pittsburgh and Steubenville, and Chartiers Valley
Railroads, Pittsburg, Pa.

Samuel McElroy,
Assistant Engineer, New York Navy Yard.

Mills, John B., Civil Engineer,
Sackets Harbor and Saratoga R. R., 24 William St., N. Y.

Septimus Norris,
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Saml. & G. H. Nott,
Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,
Civil Engineer, Office 73 South 4th st., Philadelphia.

Prichard, M. B.,
East Tenn. and Georgia Railroad, Knoxville, Tenn.

W. Milnor Roberts,
Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

Sanford, C. O.,
South Side Railroad, Virginia.

Charles L. Schlatter,
Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.

Straughan, J. R.,
Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,
Chief Engineer Bytown and Prescott Railway,
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Steele, J. Dutton,
Pottstown, Pa.

Charles B. Stuart,
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Edward W. Serrell,
Civil Engineer, 23 William st. New York.

Trautwine, John C.,
Civil Engineer and Architect, Philadelphia.

Troost, Lewis,
Alabama and Tennessee Railroad, Selma, Ala.

A. B. Warford,
Chief Engineer, Susquehanna Railroad, Harrisburg, Pa.

Wm. J. Young
HAS removed his Engineering and Surveying Instrument Man-
ufactory to No. 33. North Seventh Street, Philadelphia.

Knox & Shain,
Manufacturers of Engineering Instruments, 46 1/2 Walnut st.,
Philadelphia. (Two premiums awarded.)

BUSINESS CARDS.**Railroad Suspension Bridge.
NOTICE.**

BENJAMIN WATKINS, at Port Gibson, Mississippi, Archi-
tect and Engineer, will erect Suspension Wire Cable
Bridges for railroad crossings from two hundred to three
thousand feet span, and wooden bridges of three hundred feet
span for any purpose of crossing, and he will also erect foot
bridges for man and horse crossing with short or long spans in
any part of the United States upon fair terms. Please address
as above.
November 12th, 1855.

The Troy Iron Bridge Co.

ARE prepared to erect Iron Bridges or Roofs, or any kind
of bearing trusses, girders, or beams, to span one thou-
sand feet or under, of any required strength, in any part of the
country. Their bridges will be subjected to severe tests, and
can be built for about the price of good wooden ones. Address
D. & G. L. BLANCHARD, Troy, N. Y.
April 1st, 1855.

W. G. ATKINSON,
CIVIL ENGINEER, SURVEYOR and DRAFTSMAN,
CUMBERLAND, Maryland.

RAILROAD routes located, planned and estimated. Maps
and Reports furnished. Researches made for Coal, Iron,
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in Tunnels and heavy Graduation measured and reported in
detail. Topographical Drawings executed and Lithographs
supplied by skillful artists. Mines explored, new Works laid
out, and Geological Plans prepared. 817

H. SAWYER

(of the late firm of SAWYER & HOBBS),
Manufacturer of Transits and Levels.

HAS removed to Union Place near Warburton Av., Yonkers,
N. Y.

Lord & Wright,
Counsellors at Law Cincinnati, Ohio. 181

J. S. Sewall,
CIVIL ENGINEER,
ST. PAUL MINNESOTA.

Rollins & Haviland,
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OF BOILERS.**

WEISSENBORN'S PATENT

Incrustation Preventor

effectually obviates incrustation by separating the incrusting
matter from the water before it enters the boiler, while at the
same time it is of great value as a HEATER and CONDENSER.
The apparatus occupies but little space, is simple in construction
and management, and applicable alike to stationary, loco-
motive and marine engines.

Testimony can be furnished of its successful operation for
several months during which it has been in use here, and for
two years in Europe, with water containing an unusual propor-
tion of lime.

Drawings and full descriptions will be furnished to parties
desiring them. For right to use this invention, apply to
E. W. SARGENT, Delmonico's Hotel,
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No. 10 WALL ST.,

**BANKERS, DEALERS in DOMESTIC and FOREIGN
EXCHANGE, &c.,** are prepared to negotiate Stocks,
Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't O'n B'k, **CORNELIUS W. LAWRENCE**,
N. Y. Esq., N. Y.
SILAS K. EVERETT, of Everett **DREXEL & Co.**, Bank'rs, Philad.
& Brown, N. Y. **SAMUEL WILLETS**, Pres't of
WELLS, FARGO & Co. 1817 Am. Exchange Bank, N. Y.

By S. J. McCORMICK, Auctioneer.

AUCTION SALE,**Extensive Manufacturing Establishment.**

ON TUESDAY, the 15th day of January, 1856,
at 10, A. M., on the premises, at the foot of
Wolfe-st., in the city of Alexandria, Virginia, will
be sold the valuable **MANUFACTURING ESTAB-
LISHMENT**, owned by the Virginia Locomotive
and Car Manufacturing Company, (formerly Smith
& Perkins).

The **REAL ESTATE** comprises a LOT OF
GROUND and WHARVES fronting on the River
Potomac, and bounded as follows: Commencing
at a point on Wolfe-st. 108 feet east of Union-st.,
the line runs south, binding on a 20 feet alley, 176
feet 7 inches; thence east to the channel of the
River Potomac; thence north 176 feet 7 inches;
thence west binding on Wolfe-st., to the beginning,
and contains about 48,350 square feet of ground,
exclusive of water front. There is sufficient depth
of water to float the largest class of vessels. This
property is connected by a switch with the Orange
and Alexandria Railroad, and is improved by the
following **BUILDINGS**, all built of brick, and with
a view to security against fire: 1st Machine shop,
which has a ground floor 131 by 102 feet, second
story 131 by 32 feet, third story 81 by 32 feet; 2d
Blacksmith shop 74 by 35 feet; 3d Boiler shop
166 feet by 40 feet, and 4th Car Building shop 117
by 40 feet. The **TOOLS** comprise a complete as-
sortment of modern Machinery, suitable for man-
ufacturing Locomotive, Marine, and Stationary
Engines, and all classes of Iron Machinery, and also
Passenger and Freight Cars and Railroad work of
all kinds. The Machinery is sufficient to work
about 300 men to advantage, and there is ample
Shop room to work 500 men, if required. The
FOUNDRY PROPERTY consists of the entire
square of ground, bounded by Wilkes, Pitt, Gib-
bon, and St. Asaph-sts., (with the exception of a
lot 22 by 118 feet deep,) and contains (exclusive
of the lot 22 by 118 feet,) about 84,600 square ft.
of ground. A ground rent of \$22 per annum on
the above lot, 22 by 118 feet, will be included in
the sale. This property fronts immediately on the
Orange and Alexandria Railroad, and is improved
by a substantial brick fire-proof **FOUNDRY**, 100
by 60 feet, with all the requisite Cupolas, Cranes,
Ovens, Flasks, Sheds, &c., for a first class Foundry
business. The entire property above-named, both
real and personal, will be sold together, and pre-
sents a favorable opportunity for parties having
sufficient capital to engage in a profitable business
in a desirable location.

TERMS OF SALE.—\$12,000 in cash, \$9,037 59 to
be paid on the 1st Feb'y, 1861, with interest pay-
able semi-annually; \$32,448 '46, to be paid on the
1st of May, 1864, with interest payable quarterly,
and the residue in 1, 2 and 8 years, with interest
payable semi-annually. The deferred payments
to be made on the 1st of February, 1861, and the
1st of May, 1864, to be secured by deed of trust
on real and personal estate described above, and
the other payments specified above, to be secured
by deed of trust on the same property and nego-
tiable notes with approved endorsers.

Immediately after the above sale, will be sold
the entire stock of materials on hand, comprising
Lumber, Coal, Pig Iron, Scrap Iron, Bar and Boil-
er Iron, &c., &c.

TERMS.—All sums under \$100, cash, over \$100,
four months with approved endorsement.

Parties desiring to examine the property, or
wishing further information, will please apply to

RICHARDS C. SMITH,
Alexandria, Va.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII, No 3.]

SATURDAY, JANUARY 19, 1856.

[WHOLE No. 1,031, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, January 19, 1856.

Illinois Central Railroad.

We publish in another column a statement of the operations of the Land Department of this company up to December 31st, 1855, from which it will be seen that the total quantity of land sold has been 528,863 acres, producing in notes and cash, \$5,598,577,—or something over ten dollars per acre. The company have still unsold 2,066,136 acres, which, at the prices obtained, will produce \$20,100,000. With the rapid increase of population in Illinois, it is probable that the above prices will be realized. From the rapidity with which the sales for the past few months have been made, we believe the company will be able to dispose of their entire domain within a period not much exceeding two years.

The active demand for the company's lands is in part owing to the extraordinary flow of emigration into the State, which now probably exceeds 100,000 souls annually. The ratio of increase from 1850 to 1855 has been fifty-three per cent. The same ratio, which, we think, will be maintained, will carry the population of the State in

1860 to 2,000,000. With such a population, the value of good farming lands in any portion of the State, now that it is so completely intersected by railroads, would exceed \$20 per acre. The lands of the Central company are, consequently, likely to realize the full estimate of their value.

The earnings of the road for the past year have been for—

Passengers	\$698,049
Freight	630,934
Rent of road to other companies	105,068
Mails and Express	46,243
Miscellaneous	56,823
Total	\$1,532,118

The total number of miles of road in operation is 627. The average mileage in operation for the year has been about 596 miles. The receipts for the year have averaged \$2,572 per mile, which is a fair average for new Western railroads for the first year of their operations. The earnings for 1856 will probably exceed those of 1855 by 60 per cent. The aggregate, we think, will be \$2,500,000. The road during the year has derived but little advantage from connecting lines. It has had but little of the business travel going up and down the Mississippi river, for the want of suitable steamboat arrangements. These, we understand, have been effected, so that for the coming year there is to be a daily mail line of boats between Cairo and New Orleans. It is only a few weeks since that the Great Western railroad was completed to its junction with the Central. The Terre Haute and Alton will be opened in a few weeks for its entire length, forming, with the Central, a new and direct line between Chicago and St. Louis. The connections last named will give the Chicago branch the command of the trade of a very large portion of the State.

While the company have an encouraging prospect before them both with respect to the value of their lands and the business of the road, they have taken the best means to ensure success by placing the several departments of service in the best state of efficiency. We believe all of them to be admirably organized and in entirely competent and trustworthy hands. Those interested in the stocks and bonds of the company may, we think, rest assured that the arrangements the company have now completed, have left little

to be wished for on the score of management, either in the road, or in the affairs of the Land office. With such management, there would seem to be but little doubt that the scheme will realize all the reasonable expectations formed of it.

Illinois Central Railroad Co.

TRANSACTIONS OF THE LAND DEPARTMENT TO DECEMBER, 31, 1855.

The original grant to the State of Illinois, to aid in the construction of the Illinois Central Railroad, was made by the act of Congress, approved 20th September, 1850. The vacant lands in the alternate Sections, within six miles of the Road, were conveyed, by direct terms, in the Grant; and in lieu of such portions of those Section as had been previously sold, &c., selections were authorized to be made and approved, between six and fifteen miles on each side of the Road. The selections are complete, and the lists of all the lands granted, are now in possession of the Company, duly certified in conformity with the law of Congress, of 3d August, 1854, "to vest in the several States and Territories, the title and fee of the lands which have been, or may be certified to them."

The State of Illinois, by the act of 10th February, 1851, incorporated the Illinois Central Railroad Company, and conferred upon it the right of way, and all the lands which may be selected along the lines of said Road and Branches, within the State, under the grant made by the Government of the United States, above mentioned.

By the Fifth Section of the Act of the Legislature of Illinois, entitled, "An Act, to amend the Act, incorporating the Illinois Central Railroad Company," approved, February 28th, 1854, it is enacted, that "In any action at law for any trespass upon any of the land granted by the State to the said Company, or for any other cause, wherein it may become necessary to prove the interest of said Company, or the Trustees in said land, the Certificate of the Commissioner of the General Land Office of the United States, or other proper certifying Officer, that the lands in question have been selected and confirmed to the State, or said Company, or said Trustees, as the case may be, shall be sufficient and *prima facie* evidence of title in all the Courts of this State, for the maintenance of said actions."

A complete Record, describing said tracts of land, has been deposited in the office of the Auditor of the State of Illinois, and also the lists of the lands in each County, have been duly recorded in the office of each County.

By the Act of Congress of 20th Sept., 1850, above mentioned there were granted to aid in the construction of this road. 2,595,000 acres. Of which there have been appropriated, to secure the payment of \$17,000,000 Construction

bonds.....2,000,000 acres.
To secure the payment of the Interest on said Bonds..... 250,000 "
To secure the payment of \$3,000,000, "Free Land Bonds"..... 345,000 "
2,595,000 acres.

Of the amount appropriated, as above, to secure the payment of \$17,000,000 Construction Bonds issued for the purpose of constructing the road, to wit:..... 2,000,000 acres.

Contracts for sales have been made under stipulations to improve fifty per cent. of the land in five years, and that a conveyance of the land shall be made upon payment therefor, to the amount of.... 319,500.97 "

Leaving on hand.....1,680,499.03 acres.
Of the am't appropriated, as above, to secure the payment of the Interest on those Construction bonds, to wit: 250,000 l. claims of those entitled to land under pre-emption have been allowed, amounting to.....106,591.16
And there have been sold..... 25,994.44
182,585 60

Leaving on hand.....117,414.40 ac's.
Of the above am't appropriated, as above, to secure the payment of \$3,000,000 "Free Land Bonds," to wit:.....345,000
There have been sold... 76,776.54

Leaving on hand..... 268,223.46 ac's.
Total of Lands remaining on hand2,066,136.89 ac's.

The Contracts for Sales above mentioned of 319,500.97 Acres of the Lands appropriated to secure the payment of the Construction Bonds were made at an average of \$11.73 3-6th per acre and amounted to\$3,740,351 15
Interest added at two per cent. per annum 290,936 38

Total.....\$4,031,287 53
Of which the Company hold in notes. \$3,894,235 23
Amount received for advance Interest in Cash..... 137,052 30

Total.....\$4,031,287 53
The sales of lands appropriated to the creation of an Interest Fund, above mentioned, to wit:
To pre-emptors 106,591.16 Acres, for. \$267,337 46
To others..... 25,994.44 Acres, at average of \$10.90 3/4 per acre, for 283,428 82

132,585.50 Acres, for.....\$550,766 28
Interest added..... 11,630 52

Total.....\$562,396 80
The Company transferred to Interest Fund, per Report of Jan'y 1st, 1855\$242,372 23
The Company have received since, in Cash and to be appropriated to that Fund from pre-emption sales..... 24,965 59
Cash being on account sales of 25,994.44 Acres 153,892 87
Notes receivable on hand..... 141,166 11

Total.....\$562,396 89
Sales of Town Lots, applicable to Interest Fund.....\$21,542 50
Interest added..... 919 85

Total.....\$22,461 86

Of which the Company have received
in cash.....\$10,182 17
In Notes..... 12,279 68
Total.....\$22,461 85

The sales of the lands as above, to secure the payment of \$3,000,000 "Free Land Bonds," to wit:
76,776 54 Acres, at an average of \$11 54 per Acre, for.....\$886,054 98
Interest added..... 96,377 67

Total.....\$982,431 65
Of which the Company hold in notes. \$959,509 92
Cash Interest..... 22,921 73

Total.....\$982,431 65

RECAPITULATION.

Lands.	Acres.	Acres.
Construction Bonds.....	2,000,000	Sold... 319,500.97
Interest Fund.....	250,000	"... 132,585.60
Free Land Bonds.....	345,000	"... 76,776.54

Total.....	2,595,000	Sold... 528,863.11
On hand.....		1,680,499.03
".....		117,414.40
".....		268,223.46

On hand.....	2,066,136.89
Sold.....	528,863.11

Aggregate of Lands.....2,595,000.00

RECEIVED FOR LANDS.

Notes rec'd for Construction Lands.....	\$3,894,235.23
" for Interest Fund Lands.....	141,166.11
" for Free Lands.....	959,509.92
" for Town Lots to Interest Fund.....	12,279.68

Total of notes.....\$5,007,190.94

Cash received for Pre-emption Land prior to 1st January, 1855, and credited in Interest Fund account of that date.....\$242,372 23

Cash received for balance of Lands subject to Pre-emption..... 24,965 59

Cash received, advance Interest on Construction Lands..... 137,052 30

Cash received, advance Int. on Free Lands.. 22,921 73

Cash received, advance Interest and per cent. payment, Inter't Fund Lands 153,892 87

Cash received, advance Interest and per cent. payments Town Lots. 10,182 17

Total of Cash..... 591,386.89

Aggregate of Notes and Cash...\$5,598,577.83

By the Charter of this Company, and the transactions under it, the two millions of acres appropriated to secure the payment of the Construction Bonds were required to be carefully valued and appraised and divided into four classes.

Lists of the first and second classes have been prepared and deposited as required, and the Company restricted from selling any of the Land included in those lists at less than the minimum valuation therein fixed, to wit:

First Class, 50,000 Acres, at \$20 per Acre.
Second " 250,000 Acres, at \$15 per Acre.

	Acres.
Of the first class.....	50,000
There have been sold.....	7,388.03

Leaving on hand.....42,611.97

Of the Second Class.....	350,000
There have been sold.....	84,860.09

Leaving on hand.....265,139.91

The total sales of Lands appropriated to secure the Construction Bonds, as above stated, at an average of \$11 70 per acre was..... 319,500.97

Deduct sales above at \$20 per Acre..... 7,388.03
Deduct sales above at \$15 per Acre..... 84,860.09
92,248.12

Leaves..... 227,252.86

Of the Third Class or valuation which have been sold at an average of \$10 20 per Acre, exceeding by \$2 20 per Acre, the valuation of \$8 per Acre fixed on the 1,300,000 Acres that constitute that Class.

Of the notes on hand, \$4,700,000 will mature before the 1st day of January, 1862; but at the commencement of the Land Sales, certain contracts were made upon special conditions, under a policy deemed necessary, by which the payment of certain classes of notes may be postponed some what longer, on the payment of six per cent. interest.

Seaboard and Roanoke Railroad.

This work is one of the oldest in the United States, having been chartered as early as 1832, under the name of the Portsmouth and Roanoke railroad. This extended from Portsmouth to the North Carolina State line, whence it was continued to Weldon under a charter granted by the Legislature of that State. According to the original charter, the amount of authorized capital was \$400,000, divided into shares of \$50 each. Company to organize on a subscription of three thousand shares. Board of Directors to consist of five shareholders beside the President. Usual powers and privileges granted. Rates of fare not to exceed six cents per mile for each passenger, and eight cents per mile for each ton of merchandise. Road to be commenced in three, and finished within ten years. Town of Portsmouth authorized to make a stock subscription to the amount of \$50,000.

At subsequent dates, the State subscribed two-fifths to the company's stock and loaned them \$150,000. The amount of authorized capital was also increased to \$1,000,000. The road and all its fixtures were forever exempted from taxation. No restriction as to rate of dividends. Corporation perpetual.

The charter granted the Roanoke company, in North Carolina was on the main similar to the above. Duration of company 90 years; exempted from taxation 15 years, and until the road should pay six per cent. annual dividends, after which a tax of one-fourth per cent. might be imposed.

The road extends, by a very direct course, from Portsmouth, Virginia, to Weldon in N'th Carolina, a distance of 80 miles. Owing to the nature of the country, its route is remarkably level and free from curves, enabling it to be operated at a very moderate cost. The highest grades are but 25 ft. per mile, occurring at only a few points and for short distances. At Franklin, 87 1/2 miles from Portsmouth, it crosses the Blackwater river. The Nottoway and Meherrin are the principal streams met till the road reaches its southern terminus at Weldon, where it crosses the Roanoke. These form the principal physical obstructions to the work.

The company were organized, the road put under contract, and completed in the early part of 1835, with a light flat bar rail and a small equipment. Towards its construction the State gave a two-fifths subscription, or \$256,650. A loan of \$150,000 at six per cent. was also obtained

from the same source. At its completion, the cost had risen to nearly \$750,000, or, including Weldon bridge, machinery, stock on hand, &c., nearly \$1,000,000. We have not space to give a full detail of this company's history. Various causes operated steadily against their success; although the receipts of the road continued regularly to increase for a number of years, having reached the sum of \$72,897 in 1839-'40. Prominent among the trials with which they had to contend, was a close and foolish competition for through business between this and the Petersburg and Roanoke companies. From 1840, their affairs continued steadily to decline. No dividend had been declared, nor interest paid on the State debt. In 1843, that part of the road in North Carolina was seized on a claim of debt. Finally, in September, 1846, that part of the work in Virginia, 66 miles, was sold, in accordance with a legislative enactment to that effect, and purchased by the Board of Public Works for \$60,000.

The financial condition of the company, at the 30th September, 1845, stood thus:

Individual subscriptions.....	\$385,000
State do.....	256,650

Total.....	\$641,650
Debts due for money borrowed, with interest.....	279,668
Other debts.....	29,830
Receipts for tolls since commencement.....	569,188
Expended in the work from commencement to date.....	1,436,033

The gross earnings for the several years since opening to date of sale were—

To October, 1835.....	\$13,060
" 1836.....	35,830
" 1837.....	49,791
" 1838.....	51,216
To Sept'r, 1839.....	59,140
" 1840.....	72,987
" 1841.....	57,831
" 1842.....	59,969
" 1843.....	43,834
" 1844.....	43,329
" 1845.....	40,892
From all other sources.....	60,600

By an act of the Legislature of Virginia, passed in 1847, the Board of Public Works were authorized to lease the road, now called the Seaboard & Roanoke railroad, to the town of Portsmouth and the city of Norfolk, with all the property, rights, &c., thereto belonging, for the period of five years; the lessees having the privilege of purchasing the same within that period. The town of Portsmouth accordingly, became the lessee of the work, and subsequently purchased it. From this corporation it was afterwards sold and transferred to the present company.

In 1848 and '49, acts were passed by the Legislatures of Virginia and North Carolina, authorizing the Roanoke company in North Carolina to unite with the Seaboard and Roanoke Company of Virginia. In accordance with these, the two interests united in March, 1849, and formed a new organization of which Wm. Ward, Esq. of Boston was chosen the first President. Efforts were immediately made to re-lay and equip the road; a rail of the T pattern of 50 lbs. per yard being chosen for that purpose. This was carried on, during the years 1850 and 1851, and completed by the close of the latter. In the same year, an issue of \$400,000 of seven per cent. mortgage bonds, payable in 1860, was negotiated. Operations in building a branch line from Weldon to Gaston, in order to ob-

tain a direct connection with the Raleigh and Gaston road, were commenced. The latter work, when completed, will become a most important tributary to the company.

The earnings and expenses of the company, with cost of road, &c., will be given in an early issue.

Receipts and Expenditures of the Public Works of Pennsylvania.

The receipts and expenditures of the Public Works of this State, for the past year, were as follows:

RECEIPTS.	
Columbia railway.....	\$857,059 84
Portage ".....	18,150 09
Main Line.....	243,007 77
Delaware Division.....	388,914 03
West and North Branch, and Susquehanna Division.....	406,989 27
Total receipts.....	\$1,912,121 00
EXPENDITURES.	
Columbia railway.....	\$442,138 50
Portage ".....	256,457 75
Main Line.....	217,236 60
Delaware Division.....	60,097 86
Susquehanna, North and West Branches.....	114,496 87
Total expenditures.....	\$1,090,427 58

Add to the above the tonnage tax on roads competing with the Public Works, amounting to \$196,935 76, making an aggregate profit of the works over expenditures, for the past year, of \$1,019,620 78. The tonnage tax is made up as follows:

Central railway.....	\$165,041 07
Harrisburg and Lancaster railway.....	26,250 28
York and Cumberland railway.....	4,640 01
Northern Central railway.....	1,004 40

Total..... \$196,935 76

The gross receipts, exclusive of tonnage tax, for 1855, is \$37,042 72 over that of 1854; and the net revenue \$48,185 68. Including the tonnage tax, the actual profits of the two years will appear from the following comparison:

1854.....	\$916,443 58
1855.....	1,019,620 78

Increase in 1855 over 1854.... \$103,186 20

Pennsylvania taxes the commerce passing over the Central railroad to the amount of \$200,000 annually, by reason of which she undoubtedly drives a large amount of traffic upon the New York railroads, which are free from taxation. We think it about time that such folly were ended. The idea of taxing those who wish to bring business to the doors of her merchants, is an absurdity which none but Pennsylvanians would think of entertaining.

Missouri.

The Governor of this State has declined to issue the bonds, under the recent law of the State granting aid to railroad companies, on the ground of irregularity in the proceedings of the Legislature.—He has consented, however, to regulate his action by the decision of the Supreme Court of the State, by which the questions at issue are to be speedily settled.

Lowell and Lawrence Railroad.

At a late meeting of the Lowell and Lawrence Railroad Co., Horace Howard, Sidney Spaulding, A. W. Buttrick, Otis Allen, Isaac Farrington, Frederick Parker, and Wm. M. Kimball were chosen Directors for the current year. The increase of earnings in 1855 over 1854, amount to \$5,900 88. The road pays a dividend of 4 per cent.

Western Railroad of Massachusetts.

The receipts of the Western Railroad, [Mass.] for the year to December 1, were \$1,869,673—passengers, \$763,037; freight, \$1,007,992; mails and miscellaneous, \$87,831; Hudson and Boston road, \$10,811. The expenditures for the same time were as follows:—repairs of roadway, \$380,931; repairs of engines, \$92,503; repairs of passenger and freight cars, \$122,949; repairs of buildings, ferries, &c., \$36,448; new cars and engines to cover depreciation, \$35,377; transportation expenses, \$541,251; general expenses, \$27,197—total expenses, \$1,236,659. Profits of the year \$633,014; interest on State loans, \$397,860; 1 per cent to sinking funds \$50,00; 7 per cent dividend to stockholders, \$360,600; loss on lease of Pittsfield and North Adams road, \$1,338—in all \$709,749, leaving a deficiency in the year's accounts of \$76,735. There was a surplus or contingent fund at the beginning of the year of \$184,923, from which this excess is taken, and still leaves a contingent fund of \$108,187. The gross receipts of the year on the main line, as compared with the receipts of 1854, stands thus:

	Pas'grs.	Freight.	Other sources.	Total.
1854..	\$756,503	\$924,973	\$82,468	\$1,763,944
1855..	763,037	1,007,993	87,831	1,858,861

Inc.....	\$6,534	\$83,020	\$5,363	\$94,917
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The great increase of the expense of 1854 and 1855 is mainly attributable to the necessity of large renewals of the superstructure and heavy additions to the equipments of the road, the latter made necessary by a contract with the Worcester to furnish all the cars for the joint business of the two roads.

Boston and Providence Railroad.

The annual meeting of this corporation was held on the 9th inst. From the report presented to the meeting, we learn that the past year's business, ending Nov. 30th,

Amounted to.....	\$558,671
Running expenses.....	357,093

Interest and balance, profit and loss....	\$201,578
Depreciation acc't.....	25,775

Depreciation acc't.....	\$175,803
Depreciation acc't.....	6,093

\$169,710

Of the income, \$257,385 03 was from passengers on main road and Dedham Branch, and from passengers to and from Taunton Branch, \$43,952 31; Stoughton Branch, \$10,623 64; Norfolk Co. Railroad, \$4,473 02. Making a total for passengers of \$316,434.

From freight on Main road and Dedham Branch \$188,867 92; Taunton Branch, to and from, \$23,416 10; Stoughton Branch, \$8,214 98; Norfolk County Railroad, \$5,324 85; making a total from freight of \$225,828 35.

From July, 1854, since which time no dividend has been made to the present time, the net earnings of the road have been \$284,404 75, of which sum \$17,390 91 has been carried to the credit of the depreciation account, which makes the net profits \$267,013 84, which, after keeping the road, bridges, houses, &c., in complete repair, makes the earnings amount to almost precisely six per cent. per annum.

During this period there has been paid for the purchase and filling in of land at the Boston Station, the sum of \$25,941 04; and for the construction of a new track from Fox Point to India Point in Providence, the sum of \$13,190 28. There has also been expended for the purchase of additional cars and engines, \$40,227 40.

The cash and wood and material on hand, Nov. 30, 1855, exceeded that on hand May 31, 1854, by \$58,871 41; and the indebtedness of the Corporation has been reduced during the eighteen months, by the sum of \$148,067 37, (including the dividend paid in July, 1854.)

The indebtedness of the Corporation on the 30th Nov. last, was as follows:

Bonds falling due in 1861 and 1862.....	\$183,000 00
Notes payable, and all balances due from the Corporation, less balances due them.....	167,705 25

The corporation owns real estate not purchased or needed for the purposes of the road, of the value, at least, of \$50,000, and has on hand wood and iron of the value of \$88,876 50.

The equipment of the road is believed to be now complete, and no further purchases of cars or engines are contemplated.

No dividend was declared; as the net earnings have been applied to increasing the company's stock, and reducing their floating debt. Should their business be equally successful, during the current year, a dividend can be declared.

Lowell and Lawrence Railroad.

At the annual meeting of this company, held on the 7th inst., the Directors submitted their annual report of the receipts and expenditures for the year ending Nov. 30th, 1855, from which we learn that the gross earnings of the road for the year were \$50,234 71, and the expenses of operating the road, taxes, damages and gratuities, salaries of Superintendent and Treasurer, and other incidental expenses, including interest on debt, were \$36,185 58, showing a net profit of \$14,049-13.

Out of this it is proposed to pay a dividend of 4 per cent. on and after the 1st Monday in February next, leaving a surplus to be added to the reserve fund, after deducting amount paid for building, depreciation, &c., of \$4,842 76. The earnings of this year fall short of last year by \$5,900 88, which is probably owing, say the directors, to the general depression of all kinds of business during the greater portion of the year. Average gross receipts for the last six years, \$45,762 72. By this it will be seen that the gross earnings for this year are about \$5,000 more than the average for the last six years.

The expenses for operating the road this year are more than last. This is owing to the high price of labor, wood, and nearly all the materials used by railroads. The freshets last February caused a good deal of damage to the road, which is another cause for increase of expense.

The following gentlemen were elected Directors for the ensuing year:—Horace Howard, Sidney Spalding, A. W. Buttrick, Otis Allen, Isaac Farrington, and Frederick Parker of Lowell; Wm. M. Kimball, of Lawrence.

Racine and Mississippi Railroad.

The *Advocate*, of Racine, gives the following information concerning the present condition of things on this railroad. The Directors are entitled to a great deal of credit for the energy and perseverance with which they have carried on the important enterprise:

For the satisfaction of the friends of the enterprise, we may say that the road is now in operation from Racine to Springfield, [34 miles] and two daily trains each way, run regularly. The track is laid to a point within four miles of Elkhorn. The grading is completed to Delevan [46 miles] and the track is being laid down at the rate of half a mile per day. The road will be opened for business to Elkhorn next week, and to Delevan within two weeks thereafter, with favorable weather. Commodious depots are erected at Racine, Union Grove, Doyers, Burlington, Lyons and Springfield, with side tracks, engine houses, turn-tables, water tanks, &c., complete. Large and convenient depots are also going up at Elkhorn and Delevan, and every part of the work is pushed right forward without regard to the season or weather.

The Company have an equipment of between eighty and ninety freight cars, four elegant passenger cars, four way cars, nine locomotives and five hand cars. The freight cars are of their own construction, and they have 100 more in pro-

cess of construction at their shops, with all the necessary materials on hand.

Since the opening of the road to Fox River, it has been doing a fair business, notwithstanding it has been through the dullest season of the year. Without going into details at this time, we may say that the earnings of this road for the first two months of its existence while running twenty-five miles, were more than four times as much as the Milwaukee and Mississippi Railroad averaged during the first ten months of its history, when running the same and even a greater distance. The business of the road is now rapidly increasing, and its passenger business astonishes its most sanguine friends. We have no motive for discussing the question of its being a good paying road, for no sensible man in this section has ever doubted it.—The benefits of the road have been already realized in this city by the improvement in the value of real estate of full one hundred per cent., and a vast increase of all kinds of business. The same may be said of the property on its line, and we believe we are safe in saying that real estate in the city of Racine has been enhanced in value by this road already over one million of dollars, and real estate on the line more than three millions of dollars, and active demand and sales at the improvement in rates.

Inventor of Gas Lights.

The inventor of gas lights was a Frenchman, Phillippe Le Bon, an engineer of roads and bridges, who in 1785 adopted the idea of using, for the purpose of illumination, the gas distilled from the combustion of wood. He labored for a long time in the attempt to perfect his crude invention, and it was not until 1799 that he confided his discovery to the Institute. In September, 1800, he took out a patent, and, in 1801, he published a memoir, containing the result of his researches. Le Bon commenced by distilling wood, in order to obtain from it gas, oil, pitch, and pyroligneous acid, but his work indicated the possibility of obtaining gas by distillation from fatty or oily substances. From 1799 to 1802, Le Bon made numerous experiments. He established at Havre his first thermolamps, but the gas which he obtained, being a mixture of carburetted hydrogen and oxyde of carbon, and but imperfectly freed from its impurities, gave only a feeble light and evolved an insupportable odor, and the result was that but little favor was shown to the new discovery; the inventor eventually died, ruined by his experiments. The English soon put in practice the crude ideas of Le Bon. In 1804, Windsor patented and claimed the credit of inventing the process of lighting by gas; in 1805, several shops in Birmingham were illuminated by gas manufactured by the process of Windsor and Murdock; among those who used this new light was Watt, the inventor of the steam-engine. In 1816, the use was made of gas in London, it was not until 1818 that this invention, really of French origin was applied in France.

The Suez Canal.

The surveys and plans of the projected canal across the Isthmus of Suez have been so far completed that the Viceroy of Egypt has adopted the route deemed most feasible by his engineers.—This canal, which is to traverse the Isthmus from north to south in a straight line from Pelusium to Suez, will be sixty-one miles in length. As compared with the Erie Canal, this does not appear to be a very great work; but in view of the fact that it is intended to float ships of the largest class, it becomes a gigantic undertaking. Its breadth is to be 320 feet, with 30 feet depth. There is, besides, to be a branch canal to connect it with the Nile, to serve as an aqueduct to lead off the surplus waters of the Nile at the time of its overflow.—Another great outlay connected with it is a stone-breakwater to protect its entrance from the Mediterranean. This would be 7,000 yards in extent. The whole cost of this great work is estimated at thirty-five millions of dollars. There has heretofore existed a doubt as to the respective levels of the Mediterranean and Red Seas, which involved a difficulty that, it was feared, would seriously in-

terfere with the undertaking. This doubt has been cleared up, and all apprehensions with regard to the practicability of the scheme removed. All the latest measurements have proved that the level of both seas is the same at ebb-tide, but at the flood the Red Sea increases considerably, while the flow of the Mediterranean at Pelusium is scarcely perceptible. The first canal across the Isthmus of Suez was constructed centuries before the Christian era, and was several times, during succeeding ages renewed. Scarce a vestige now exists of these works. The most distinguished European engineers have been consulted in deciding upon the plans of the canal now contemplated, and a commission composed of such men will be employed to secure its speedy and successful completion.

New York Central Railroad.

The following is a comparative statement of receipts from passengers and freight, including mail and miscellaneous, for three months, commencing Oct. 1st 1855.

	Passrs.	Freight.	Mail.	Misc.	Total.
Oct. '55.	\$354,815	\$372,543	\$6,807	\$2,145	\$736,311
do. 54.	395,022	264,397	do.	do.	649,420
Nov. '55.	274,966	894,160	do.	946	676,881
do. 54.	281,025	286,201	do.	do.	567,227
Dec. '55.	221,965	435,250	do.	4,935	668,958
do. 54.	260,530	232,408	do.	do.	432,939

Total amt. of earnings for the above three months in 1855..... \$2,082,151
Total amt. of earnings for the above three months in 1854..... 1,649,586

Increase..... \$432,565

In 1854 the mail was included in freight and miscellaneous receipts at the end of the year.

Milwaukee and Mississippi Railroad.

The dividend declared by the Milwaukee and Mississippi road for the past six months is 12 per cent, instead of 10 per cent as anticipated. The dividend is payable 5 per cent in cash and 7 per cent in stock. The stock dividend, we presume, is made in whole or in part from the accumulations of the sinking fund. The comparisons with the earnings of the preceding year shows a very large gain.

Gross receipts for 1855..... \$687,940
" 1854..... 469,051

Increase (about 48 per cent.)..... \$222,889

The amount of freight moved over the road for two years compares as follows:

	1854.	1855.
Tonnage going East.....	63,826	81,721
" West.....	48,227	81,934
Aggregate [inc. 51,901 tons].....	112,053	163,654

Georgia Central Railroad.

The following Board of Directors of this company were elected recently: R. R. Cayler, John W. Anderson, Thomas Purse, Andrew Low, William Crabtree, John R. Wilder, John B. Gallie, Joseph W. Webster, *C. A. L. Lamar.

* New Director in place of L. O. Reynolds, Esq., deceased.

Macon and Western Railroad.

The gross earnings of the Macon and Western Railroad, for the fiscal year ending Nov. 30, 1855, were \$37,823 17 above those of the preceding year. The earnings and expenses foot up as follows:

Earnings..... \$350,802 96
Expenses..... 254,698 46

Net profits..... \$96,104 51

Brooklyn City Railroad.

The following is a list of Directors for 1855.

At the annual election of officers of this company recently, the following were chosen: President—A. P. Stanton. Secretary—Chas. C. Betts.

Treasurer—John Schenck. Directors—A. P. Stanton, Seymour L. Husted, Wm. H. Carey, Henry C. Murphy, George S. Howland, John Kellum, Thos. Brooks, Geo. L. Bennett, Alex. Stndwell, John Schenck, Fisher Howe, Purcell Cooke, Lowell Holbrook.

Augusta and Waynesboro' Railroad.

At an election held the 7th inst., for Directors of the Augusta and Waynesboro' railroad for the ensuing year, the following gentlemen were duly elected:

Francis T. Willis, John Stoddard, James P. Screven, A. R. Lawton, R. A. Allen, R. S. Gardiner, Jr., John C. Poythress.

At a subsequent meeting of the Board, Francis T. Willis was unanimously re-elected President.

Census of New Haven and Hartford.

The census of New Haven is completed, and the total population is stated to be 31,249, being a gain of 9,016 in five years. The population in 1850 was 22,533, and the increase (9,016) is forty per cent.

The population of Hartford is 24,024, and the increase in the same time is 8,446. This is a much larger per centage of increase than in Boston for the same period.

Sixth Avenue Railroad.

The following gentlemen have been elected Directors of the Sixth-avenue railroad: Messrs. Sidney Mason, Frederick De Peyster, John P. Yelverton, George R. Howell, John H. Swift, Samuel S. Bowman, Daniel Van Dusen, Tennis W. Quick, Waldo Hutchins, Gideon De Angelis, John B. Hall, Alexander M. C. Smith, and Hamilton H. Salmon.

Delaware, Lackawanna, and Western Railroad.

The track is now laid on the eastern extension of the Delaware, Lackawanna, and Western Railroad to the crossing of the Delaware river, below Water Gap. The tunnel on the Warren Railroad is so far advanced that it is expected the broad gauge trains of the Delaware, Lackawanna, and Western Railroad will be able to pass through, from Scranton to Elizabethport, on or before the first day of March.

Boston and Lowell Railroad.

The annual meeting of the stockholders in this road, was held on the 2nd inst. According to the President's report, the receipts for the year ending 30th September last, were:

Passengers.....	\$194,785 21
Freight, mails, &c.....	295,019 64
Total	\$489,754 85
Running expenses.....	349,377 15

Net earnings.....\$140,377 70

The total expenses, ordinary and extraordinary, for the year, were \$366,120 07, against \$364,478-82 for 1854. The receipts show an increase of \$47,263 20. Of the gross income, \$323,771, or two-thirds, have been derived from business confined to their own road, and \$165,983 from that done in connection with other lines. The passenger receipts have increased \$28,427; and the freight, \$18,835 over those of the previous year. The net profits of the company for the year have been \$123,634 78, or 63¼ per cent. All the expenses, except for the extension into Boston have been placed to debit of transportation account.

No material progress has been made in the extension of the road into Boston, and the project will probably be abandoned. The amount expended so far in the purchase of lands at East Cambridge, and on the new bridge over Charles river, is \$109,706, besides \$70,000 advanced on account

of lands purchased within the city. A committee was appointed by the stockholders to dispose of the extension property, if able to do it satisfactorily.

Of the six per cent. bonds to the amount of half a million authorized to extend the road into the city, only \$145,500 have been disposed of, the directors not being prepared to place any of them below par.

The whole debt of the corporation is as follows:	
Notes payable.....	\$178,500
Six per cent. bonds, payable 1873.....	145,500
Upland dividends.....	1,635
	\$325,635

The surplus to credit of profit and loss account, after deducting the dividend payable January 1st, is \$138,689 98. The total cost of the road so far has been \$2,188,595 25, and the gross receipts for the year 1855 are about \$28,000 larger than for any year since the road was built.

The office of Superintendent has been created, in consequence of the increase of business. Only one change was made in the Board of Directors chosen for the ensuing year.

Cleveland, Medina, and Tuscarawas Railroad.

We are glad to learn that this important enterprise has taken a new impetus. The energetic gentlemen having it in charge have gone to work in earnest, and are resolved to urge it forward to completion at the earliest possible day. The enterprise commends itself with great force to the attention of the business men of Cleveland; and we have no doubt that they will be quick to see the advantages which they must derive from a connection with that portion of Ohio which this road will traverse.

The Cleveland, Medina and Tuscarawas railroad connects with the Cleveland, Columbus and Cincinnati railroad at Grafton station, distant twenty-five miles from Cleveland. From Grafton it passes through Medina and Seville to Fairview, a distance of thirty-eight and a quarter miles, where it connects with the Pennsylvania and Ohio railroad. An arrangement has been made with this road for the use of its track from Fairview to Massillon, a distance of eleven miles. This will give us a connection with Massillon, which has been for years an important business centre, by a route ten miles shorter than by the way of Alliance.

It is the intention of the company to push forward the road, ultimately, down the Tuscarawas valley, making Wheeling the Southern terminus. There is scarcely a district of country of equal area in Ohio so interesting in its mineral, agricultural and commercial advantages as that through which this road passes. The coal banks of that part of Ohio are already yielding bounteously a quality of coal which rules with the best in market; and the choicest banks are located on the line of this road.

When the means of communication between Cleveland and the "back-bone counties" were limited to the Ohio canal, nearly all the products of that wealthy region found their way to this point; but since the construction of the Pennsylvania & Ohio railroad this tide of business has been diverted towards Pittsburg and Philadelphia. This important diversion would have been much more seriously felt by our business men, had not their energies opened to us the many other channels which now connect us with different, but more wealthy and productive sections.

We learn that \$150,000 have been expended in the graduation of the road between Grafton and Fairview, and that there is needed to complete the road between those points, with the single exception of the cost of the iron, the sum of \$96,000. This includes the ties and the cost of laying the rails. Half of the necessary amount of the bonds of the company have been conditionally negotiated for the purchase of the iron.

The report of the Board of Directors will be pub-

lished about the 15th of the present month, which will present to the public the affairs of the road in detail. In the meanwhile, we trust that our citizens will not permit this enterprise, which promises to be so advantageous to our city, to flag for want of aid.—*Cleveland Herald.*

Railroad Earnings.

ERIE RAILROAD.

The receipts of the New York and Erie Railroad for December, 1855,—

were.....	\$589,969
Dec., 1854.....	451,971

Increase (30 per ct.).....\$134,998

For the past three months the receipts have amounted to \$1,728,724, against \$1,480,781, for the corresponding period in 1854.

WATERTOWN AND ROME RAILROAD.

The earnings of the Watertown and Rome Railroad for Dec. were:

	1854.	1855.
Passengers.....	\$13,168	\$13,689
Freight.....	25,874	46,166
From other sources.....	1,471	1,018

Total.....\$40,514 \$50,874

Increase.....\$10,360

MICHIGAN CENTRAL RAILROAD.

The earnings of the Michigan Central Railroad for the month of Dec. were:

	Pas'grs.	Freight.	Miscel.	Total.
1855.....	\$91,142	\$123,581	\$6,925	\$221,649
1854.....	68,768	62,528	4,029	135,329

Inc.....\$22,374 \$61,053 \$2,895 \$86,322

CHICAGO AND ROCK ISLAND RAILROAD.

The December receipts of the Chicago and Rock Island road were:

Passengers.....	\$49,815 67
Freight.....	44,300 13
Mails, &c.....	1,800 00

Total.....\$95,915 80
Dec. 1854.....81,341 10

Increase.....\$14,574 70

NORWICH AND WORCESTER RAILROAD.

The earnings of the Norwich and Worcester road show an encouraging gain over the same month of the previous year, being:

Dec. 1855.....	\$24,187 38
Dec., 1854.....	20,943 84

Increase.....\$3,243 54

The increase was mainly upon freight.

CLEVELAND AND TOLEDO RAILROAD.

The receipts of the Cleveland and Toledo Road were:

Dec., 1855.....	\$91,166
Dec., 1854.....	73,268

Increase.....\$17,898

The receipts for the year are \$689,156 against \$685,737 last year, showing an increase of \$203,400, or about 30 per cent.

PENNSYLVANIA RAILROAD.

The Pennsylvania Railroad Company's receipts for the month were:

Dec. 31.....	\$434,559 69
Same month last year.....	216,110 40

Increase.....\$218,449 20
Receipts from Jan'y 1, 1855, to Jan.

1, 1856.....	\$1,815,334 69
Same period last year.....	3,552,297 59

Increase.....\$763,037 10

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	71	Tennessee and Alabama	30	246,486	679,906	In progr.				
Androsog. & Kennebec	55	642,343	1,473,080	2,245,020	190,605	12,807	none	18	Memphis and Charles'v.	288	2,103,177	958,275	3,563,362	178,434	102,016		
Androsoggin	20	91,192	232,193	343,317	29,396	12,807	none	20	Mobile and Ohio	527	2,300,000	1,310,666	3,666,991	In progr.			
Kennebec & Portland	72	1,211,398	1,607,229	2,470,593	228,747	114,642	none	18	Miss. Central	188	642,534	none	628,303	In progr.			
Portl. & Saco & Portsmouth	51	1,367,000	119,237	1,486,237	259,330	124,038	6	90	N.O., Jackson, and G. N.	100	1,309,428	476,143	1,825,512	In progr.			
Portl., Concord & Montreal	93	1,808,093	1,059,512	2,771,310	233,234	120,834	2		N.O., Opelousas & G.W.	350	1,117,760	none	1,077,895	In progr.			
Cheshire	53	2,083,825	946,919	3,181,997	372,802	181,016	none	18	North, N. H.	111	1,000,000	1,500,000	2,500,000	In progr.			
Concord	35	1,485,000	none	1,412,576	329,744	158,632	8	86%	East Tennessee and Ga.	131	624,825	536,593	1,016,201	In progr.			
Con't & Passumps. Riv.	32	2,768,400	none	3,016,633	370,529	138,299	2%	39%	East Tennessee and Va.	151	2,319,330	1,407,081	3,843,694	316,090	112,177	none	
Railroad & Burlington	120	61,048,145	787,608	1,780,062	162,687	55,173	none		Covington & Lexington	93	431,091	150,299	635,363	90,930	34,864		23
Vermont Central	117	2,332,376	2,662,396	5,378,428	394,971	140,377	6	61	Lexington & Big Sandy	29	431,091	150,299	635,363	90,930	34,864		
Boston and Lowell	27	1,830,000	3,550,236	8,463,366	820,119	214,793	none	82%	Lexington & Danville	65	540,117	61,525	601,642	1,589,668	244,014	96,902	6
Boston and Maine	33	4,076,974	150,000	4,179,535	906,790	421,561	8		Louisville and Frankfort	254	866,939	77,294	613,231	238,010	114,592	none	
Berkshire	21	600,000	none	600,000	42,000	7	none	2%	Atlantic & Gt. Western	118	1,381,598	1,260,612	2,606,821	238,010	114,592	none	
Boston and N.Y. Central	74	2,234,600	1,200,000	3,310,948	102,352	42,335	none	2%	Cleveland and Erie	96	4,473,721	374,127	4,847,848	1,102,601	567,906	9	100%
Boston and Worcester	56	3,611,821	421,700	3,611,821	272,347	100,073	3	64	Cleveland and Toledo	200	2,675,425	2,689,301	5,124,629	736,272	306,986	10	71%
Connecticut River	68	4,500,000	587,553	4,856,370	952,804	342,139	6%	85%	Clev. and Mahoning	103	2,686,770	2,516,162	4,818,153	450,215	255,868		64
Eastern, Mass.	60	2,583,400	2,850,325	4,447,459	730,269	346,425	7	46%	Cin. Hamilt'n & Dayton	60	2,100,000	1,464,364	2,961,978	483,620			25
Essex	20	299,107	469,311	747,008	51,246	none	none		Cin. Wilm. & Zanesv'e	131	1,120,450	1,181,265	2,326,459	In progr.			
Fitchburg	14	238,140	74,090	333,884	42,647	19,274	6		Coi. Piqua, and I dian	72	1,418,350	311,032	1,440,447	340,781	168,949		82
Fitchburg and Worcester	12	200,000	140,000	368,658	56,135	23,823	6		Columbus and Xenia	63	437,838	422,668	860,496	In progr.			
Lowell and Lawrence	14	800,000	16,000	654,603	191,867	55,877	8	80	Dayton and Xenia	140	1,076,602	398,011	1,185,226	In progr.			
N. Bedford and Taunton	21	500,000	none	533,953	198,491	56,533	6%		Dayton and Michigan	42	448,411	835,994	1,345,573	113,589	53,256		30
Newburyport	14	137,260	154,554	287,413	32,677	4,666	none		Eaton and Hamilton	65	2,963,921	1,171,785	3,648,172	681,562	336,708		
Old City and Fall River	87	3,015,100	314,334	3,434,164	649,656	142,900	6	84%	Mad River and L. Erie	205	2,451,650	2,672,932	4,446,661	Recently opened.	none	20	
Pittsfield & N. Adams	18	450,000	none	448,677	50,805	25,519	6	89%	Ohio Central	138	1,520,927	3,485,076	4,283,443	662,117	9		
Vermont and Mass.	77	2,232,540	1,046,626	3,207,867	275,523	56,383	none	8%	Ohio and Penn.	187	2,451,700	3,219,000	6,670,700	1,111,626	662,117	9	
Western, Mass.	155	5,160,000	5,689,520	9,953,258	1,763,944	718,703	7	89%	Pittsbg. Mayv's & Cin.	50	1,350,000	2,206,367	3,562,357	328,958	164,479	none	
Providence and Worcester	46	1,141,000	218,244	1,304,703	209,118	82,959	2%	43	Sand'y, Mann's & Newk'	127	1,350,000	2,206,367	3,562,357	328,958	164,479	none	
Hartford and N. Haven	72	2,359,000	989,000	3,313,032	730,012	352,799	10	22%	Scioto & Hocking Valley	135	403,975	509,050	888,858	In progr.			
Hart'g, Prov. and Fishkill	123	1,845,610	2,090,124	4,060,869	258,685	119,011	none		Spring, Mt. Vernon & P.	113	1,000,000	950,000	In progr.				
Housatonic	110	2,000,000	474,177	2,429,060	330,792	18,351	none		Tol. Wabash & St. Louis	242	2,500,000	4,530,000	In progr.				
Nagansack	57	1,031,800	573,995	1,577,167	906,018	336,611	none		Cin. Log. and Chicago	255	4,196,679	1,006,125	2,080,433	In progr.			
N.Y. and N. Haven	62	2,992,000	2,252,647	4,980,407	103,986	217	none		Evansv'e & Crawfordsv.	109	706,945	1,177,596	1,844,641	127,400	64,552		10
N. York and N. London	50	738,258	135,165	1,450,318	103,986	217	none		Ind. and Cincinnati	88	1,213,723	1,442,869	2,178,461	356,012	193,142	7	65
N. London, W. & Palmer	66	608,600	1,007,826	1,627,827	137,060	50,792	none		Indiana Central	66	608,829	1,251,387	1,660,090	321,400	186,224	46%	
Norwich and Worcester	66	1,222,300	796,686	2,506,488	304,651	95,456	6	25	Ind., Clev. & Pittsburg	83	834,167	1,101,971	1,971,544	206,544	94,318	none	
Buffalo, Conn. and N. Y.	100	1,482,766	1,402,244	2,597,963	123,147	50,792	none		Jeffersonville	66	1,014,252	604,000	In progr.				
Buffalo and N. Y. City	92	798,439	2,537,849	3,401,868	254,770	145,733	none	4%	Lafayette and Indianapolis	64	1,647,500	1,589,881	3,237,381	645,827	371,402	none	
Buffalo and St. Line	81	1,300,000	1,030,000	2,343,649	507,818	264,855	10		Madison and Indianapolis	87	1,647,500	1,589,881	3,237,381	645,827	371,402	none	
Cayuga & Susquehanna	35	687,000	531,518	1,093,624	120,849	58,589	none		New Albany and Salem	258	2,635,121	5,281,948	6,643,189	150,000	90,000	none	25
Hudson River	144	3,757,891	8,983,804	12,391,363	1,753,986	812,126	8	91%	Peru and Indianapolis	73	868,314	466,000	1,465,321	239,992	159,323	10	85%
Long Island	6	1,875,148	626,958	2,618,261	739,520	102,657	none		Terre Haute and Ind.	182	3,141,500	2,367,155	5,214,152	In progr.			
New York Central	534	24,154,860	14,462,742	23,523,913	5,583,581	2,827,118	none	51%	Chicago and St. Louis	220	2,300,000	1,325,000	3,625,000	In progr.			
New York and Erie	464	10,023,958	25,128,660	33,430,431	5,488,903	2,827,118	none	51%	Chic. St. Paul & P'd du Lac	178	3,300,000	1,899,304	5,666,283	5,068,710	942,231	17	124%
New York and Harlem	133	5,716,050	3,527,595	8,127,388	942,394	154,854	none	16%	Gelena and Chicago	208	4,324,800	1,899,304	5,666,283	5,068,710	942,231	17	124%
Northern, N. Y.	119	1,811,527	4,522,413	5,435,565	158,527	145,733	none	4%	Illinois Central	707	1,419,440	18,001,426	17,038,099	In progr.			
Oswego and Syracuse	37	374,920	210,594	677,754	106,764	53,390	none		Peoria and Okawaha	93	569,899	818,454	1,388,342	In progr.			
Rensselaer & Saratoga	25	610,000	140,000	888,182	231,348	76,327	5		Ohio & Miss. (Wst. Div.)	147	1,750,295	3,292,403	4,870,586	Recently opened.			
Saratoga and Washington	54	899,900	1,063,234	1,891,993	183,959	37,606	none		Terre Haute and Alton	173	2,811,420	1,256,000	3,537,424	In progr.			
Syracuse & Bingham'n	71	731,614	1,118,761	1,636,117	Recently opened.				Detroit and Milwaukee	185	838,000	1,128,984	1,966,969	In progr.			
Troy and Boston	27	439,492	493,500	1,107,373	152,648	66,407	none		Mich. Central	282	6,021,916	6,142,023	10,305,147	2,215,283	879,656		90
Watertown and Rome	97	1,370,428	584,768	2,040,543	393,954	152,752	5	65	Mich. South'n & N. Ind.	476	6,023,900	6,199,224	10,340,208	2,410,000	875,000	10	86%
Belvidere and Delaware	50	1,000,000	1,177,376	2,177,376	124,301	44,826	none		Green Bay, M.L. & Ch.	155	764,075	442,726	1,193,763	In progr.			
Camden and Amboy	94	1,500,000	none	4,763,184	1,682,486	552,456	12		Milwaukee and Miss.	200	988,665	1,827,584	2,704,698	465,051	307,632		79%
Camden and Atlantic	60	240,125	1,269,223	1,499,185	69,673	61,760	none		Milwaukee & Water'n	72	354,861	132,000	514,238	In progr.			
New Jersey	31	3,263,925	798,596	4,063,928	824,032	440,447	10	123	Milwaukee and Horicon	92	31,000	In progr.					
New Jersey Central	75	2,000,000	1,632,083	3,636,226	378,145	180,796	7		Milwaukee & La Crosse	69	In progr.						
Morris and Essex	62	1,158,715	351,500	1,549,622	233,506	90,377	6		Racine and Miss.	68	In progr.						
Cum'gland Valley	56	1,184,500	28,411	1,212,911	In progr.				Hannibal & St. Joseph	13	292,351	580,000	823,310	In progr.			
Del. Lack. & Western	109	2,865,175	1,965,897	4,140,365	In progr.				North Missouri	13	1,138,208	684,294	1,093,336	In progr.			
Erie and North East	20	600,000	150,000	750,000	In progr.				Pacific	130	2,803,692	3,908,174	6,463,726	160,000	In progr.		
Harris'g & Lancaster	39	In progr.							St. Louis and Iron Mt.	118	445,170	186,115	In progr.				
Little Schuylkill	28	In progr.							Panama	49	3,743,000	6,564,852	628,850	416,756	9%	99%	
Northern Penn.	67	2,000,000	In progr.														
Pennsylvania	250	12,104,382	6,065,884	17,158,495	3,400,192	1,977,533	87%										
Phil. and Reading	96	8,219,672	10,244,442	18,464,114	3,781,639	2,140,429	10	91%									
Phil. Wilm. & Baltimore	98	5,000,000	3,069,723	7,452,062	1,006,638	353,573	3	48									
Phil. Germ. & Norrist'n	38	899,350	376,800	1,274,150	206,981	113,443	9										

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	----	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October.	"	1866	----	----
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	95	95
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1855	90	92 1/2
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859	----	----
Central Ohio	1,250,000	1st mort. conv. cast. sec.	7	Divers	"	1861-64	50	55
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1895	----	75
Cincinnati, Hamilton, and Dayton ..	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	80	83
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville ..	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	87 1/2
Cleveland, Painesville, and Ashtabula ..	567,000	Do. inconvertible	7	Feb'y, August.	"	1861	----	92 1/2
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	----	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	----	85
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.	"	1863	----	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October.	"	1862-72	85	85
Do. do.	1,200,000	Do. inconvertible	7	April, October.	"	1862-72	85	85
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	----	65
Delaware, Lackawanna, and Western ..	1,500,000	1st mortgage, do.	7	April, October.	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1868.	7	Jan'y, July	"	1873	75	80
Galeana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.	"	1863	96 1/2	97 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	87	88
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, 10 Oct.	"	1868	90	92
Green Bay, Milwaukee, and Chicago ..	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1873	----	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	90	92
Indianap. & Cin'tl (for Lawb. & U. M.) ..	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	----	----
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864 ..	8	May, Novemb.	"	1874	----	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859 ..	7	Feb'y, August.	"	1865	76	76
Little Miami	1,500,000	Do. inconv.	6 1/2	May, 2 Nov.	"	1863	78 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	East.	1860	99	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857 ..	8	Jan'y, July	N. Y.	1862	97 1/2	98
Do. do.	650,000	Do. 2d do.	8	April, October.	"	1863	92	94
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1858-62	----	101
Do. do.	2,325,000	Do. oth. sec. con. till 1858 ..	8	May, Novemb.	"	1864-75	80	80
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	----	100
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	90	94
Do. do.	2,000,000	Income, convertible	7	April, October.	"	1872	----	84
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860 ..	6	Jan'y, July	Phila.	1880	94	96
Scioto and Hocking Valley	300,000	Do. 1st sec. conv	7	May, Novemb.	N. Y.	1861	----	85
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	----	78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	----	----
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	77 1/2	77 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	71	74

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	85	85%
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	84	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10, Jan. 10, July	N.Y.	1870	90	92
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108	110
Do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	96
Do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	91	92
Do.	4,000,000	Not conv. Slnk Fund, \$420,000	7	Feb'y, August.	"	1875	88%	89
Do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	80	81
Do.	3,500,000	Convertible	7	Jan'y, July	"	1862	82	82
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	99%	100
Do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	84%	85
Do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	68%	84
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1875	81%	81%
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 share	7	March, Sept.	"	1860	85%	87
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	90	90
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	79	80%
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	79	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	90	94
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	84	85
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	86	86%
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	100%	101
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1868	99%	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	99%	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	82	82
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	82	83
Do. do. 1849	3,468,000	Do. inconvertible	6	April, October.	"	1870	83%	84%

CITY SECURITIES.		Int'l payable.	Off'd p. ct.	Aaskd p. ct.	CITY SECURITIES.		Int'l payable.	Off'd p. ct.	Aaskd p. ct.
New York, 7 per ct.	1857	Feb'y, May,	100		Milwaukee, 7 per ct. coup.	X	Divers	52	83
Do. 5 do.	1858-60	August and	98	100	New Orleans, 6 per ct. cp. R.R. X		Divs	78	
Do. 5 do.	1870-75	November	99		Philadelphia, 6 per ct.	1876-98	Jan'y, July	90	90%
Albany, 6 per ct. comp. 1871-81	X	Feb'y, August.	96	98	Pittsburgh, 6 per ct. coup.	X	Divers	77	78
Alleghany, 6 per ct. coup.	X	Jan'y, July	64	69	Quincy, 6 per ct. coup.	1868	Jan'y, July	97	95
Baltimore, 6 per ct.	1879-90	Quarterly	98	98%	Racine, 7 per ct. coup.	1873	10, Feb'y, Aug.	80	84
Boston, 5 per ct. coup.	X	April October.	98	100	St. Louis, 6 per ct. coup. Long X		Divers	78	79
Brooklyn, 6 per ct. coup. Long X		Jan'y, July	99		Do. do. Municipal.	X	Do.	78	79
Clev'Pd, 7 per ct. cp. W.W. 1879	X	Do. do.	101	102	Sacramento, 10 p. ct. cp. 1862	74	Do.	76	78
Cincinnati, 6 per ct. coup.	X	Divers	87	88%	S. F. Cisco, 7 p. c. cp. 1865, pay. N.Y.	X	May, Novemb.	86	
Chicago, 6 per ct. coup. 1873-77	X	Jan'y, July	87	88	Do. 10 p. ct. cp.	1871	Do. do.	90	92
Detroit, 7 per ct. cp. W.W. 1873-78	X	Feb'y, August.	101	102	Do. 10 do. pay. N.Y.	X	Jan'y, July	70	
Louisville, 6 per ct. cp. 1880-83	X	Divers	78	79%	Wheeling, 6 per ct. coup.	X	Divers	70	
Memphis, 6 per ct. coup.	1882	Jan'y, July	72		Zanesville, 7 do.	X	April, October	97	98%

For the week ending January 8 h, 1856.

BONDS.

Per ct.

Indiansp. & Cin., 2nd Mort. 7 per ct.	77 1/2
Cin., Wil. & Zanes 2d Mort 7 per ct.	63
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	45
Covington & Lexington, 10 per ct Income	62
Little Miami, 6 per ct. Mort.	80
Indiansp. & Cin., 7 per ct. Dividend.	67 1/2
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	87

Cin., Wilm. and Zanesv., 25.—Cin., Ham. and Dayton, 68.—
Col. & Xenia, 82½.—Cincinnati, & Chic., 10½.—Central Ohio, 15.
—Covington and Lexington, 23.—Dayton and Western, 20.—
Eaton and Hamil on, 30.—Fort Wayne and Southern, 10.—
Indiana Central, 45.—Indianapolis and Cincinnati, 75.—Little
Miami, 87.—Mad River and Lake Erie, 23.—Marietta and Cin.,
18.—Ohio and Mississippi, 2½.—Peru and Indianapolis, 24.—
Hillsboro' and Cincinnati, 18.

BY HEWSON & HOLMES

For the week ending January 9th, 1856.

BONDS.

\$2,500 Coving. & Lex., 8 per ct. Income.....	45	(& Int.)
5,000 " " 7 per ct. 2nd Mortgage.....	65	"
3,000 Cin., Ham. and Dayton, 7 per ct. due in 1880.....	55	"
2,000 Hillsbor. & Cin., 7 per ct. 1st Mort.....	60	"
6,000 Mad River & Lake Erie, 7 per ct. due in 1876.....	66	"
2,000 Little Miami, 6 per ct., due in 1883.....	78	½ "
3,000 Cin. & Chicago, 8 per ct. Real Estate.....	45	"

200	Shares Cincinnati & Chicago	10	66
36	"	10 1/2	66
100	"	10 3/4	66
48	" Indiana Central	45	
100	" Marietta and Cincinnati	17	
50	" Columbus & Xenia	81	
92	" Covington & Lexington	21	66
20	" Cincinnati, Hamilton, & Dayton	6 1/2	
100	" New Albany and Salem	6	
200	" Ohio & Mississippi	2 1/2	66
100	"	2 3/4	66
150	"	2 1/2	66

Extract from the Circular of Robt. Benson & Co., per Canada.

LONDON, Dec. 21th, 1855.

During the past week our Money Market has manifested few features of interest. The payment on the 18th inst., of the final instalment of the English Loan, caused, temporarily, some pressure—and $5\frac{1}{2}\%$ per cent. was paid for loans for short periods on Government securities. The current rate is now about $5\frac{1}{2}\%$ per cent. On other securities, however, a higher rate is still demanded.—Consols, which we last quoted at $83\frac{1}{2}\%$ —have not fluctuated during the week more than about $\frac{1}{4}$ per cent. They opened this morning at the same price, and are now $83\frac{1}{2}\%$.

The last published returns of the Bank of England showed a decrease in the Bullion of £147,529. The next return is expected to be more favorable. Opinions are, however, expressed in some quarters, that we must look for a further drain of specie, and that the Bank of England may have again to raise their rate of discount.

This opinion, coupled with the fact of there being often at this season of the year an increased demand for money, has had the effect of checking that tendency to improvement, showing from time to time in consequence of the continued belief in the soundness of trade generally—of the vitality of which there are unmistakable signs, notwithstanding the dearth of money and the high prices of food.

There has been no animation in the market for American securities. We have not heard of any transactions in State Stocks. For Railroad Bond the prices have generally rather a downward tendency, with, however, very little business doing. New York Central 6 per cent. bonds, have changed hands at 80. Illinois Central Freeland's (which were one day offered at 76) at 76½; the 7 per ct. Construction bonds we quote at about 74, and for the 6 per cent. bonds of the same class 71 is offered. New York and Erie 3d mort. bonds are freely offered at 85. Illinois Central shares have been dealt in at 4 discount. Other quotations, although in some cases lower than last week, are quite nominal.

The Manchester market continues in a healthy state, with an absence of stock, a steady demand, and an advance in some articles of manufacture.

Railroad Bars maintain their price. The only change to mention in the Metal market generally, is a decline of about 2s. 6s. per ton in the price of Pig Iron.

ROBT. BENSON & CO.

R. BENSON & CO'S CIRCULAR PER "ATLANTIC."

London, Dec. 28, 1855.

The Money Market during the past week has become more stringent, and high rates of interest for loans on foreign securities have in certain cases been paid. On the deposit of our own Government securities $5\frac{1}{2}$ per cent. has been demanded. Consols, which we last quoted at $88\frac{3}{4}$, have not varied much in price during the week, until yesterday, when they became weaker, in consequence of extensive sales of stock reported to be on acc't of the Savings Banks, and we now quote them at $88\frac{3}{4}$. Last week prices were supported by the favorable returns of the Bank of England last published, which showed an increase of £226,760, in the stock of Bullion. The next published return will probably show a diminution. Some anxiety is being felt as to what course may be pursued by the Bank of England, and whether a return of specie, early next year, consequent upon the late large and unlooked-for drain, can be so certainly calculated upon, as at one time appeared probable.

The market for American securities has been flat, with a limited business. As holders, however, are not generally pressing sales, prices have not been much affected; and anticipations of more cheerful accounts by the next steamer have tended to check their downward tendency. In State stocks there have been some few sales of U. S. 6 per cent. (1868) bonds, at $107\frac{1}{4}$ to $107\frac{3}{4}$ with interest, and at $105\frac{1}{2}$ ex-interest. In Maryland Sterling bonds at 90, and in Massachusetts 5 per ct. Sterling bonds at $98\frac{1}{2}$. Some few transactions in Railroad bonds have taken place. New York and Erie 3d mort. at 84. Pennsylvania Central 2d mort. Sterling at $89\frac{1}{2}$. Illinois Central 7 per ct. Construction bonds at 75, and Freeland at $76\frac{1}{2}$.

Marie & Kanz' Money Circular for the European Steamer of the 16th inst.

[TRANSLATED EXTRACT.]

New York, Monday, Jan'y 14, 1856.

Since our last advices of the 4th, exchanges on Europe have been very heavy, and the exportation of specie has entirely ceased. Meanwhile the money market has not experienced the relief which was generally expected. The importations of merchandise for the last fortnight have been very considerable, and quite a large amount of specie has been paid into the Sub-Treasury for duties. For a week too, the communication with the interior has been interrupted by the heavy snows, and remittances expected from the South and West have been retarded several days, which circumstance partly explains why money has not been more abundant. The arrival of the back mails from the West has made money easier on call for the last day or two.

During the first three days of the week, the Stock Market experienced an upward movement, with lively transactions, but the continued scarcity of money, combined with the rather discouraging news brought by the *Canada*, (from Liverpool, the 22nd December, received here the 8th inst.,) checked the rise, and since then, speculation having nearly ceased, the market has gradually drooped. Of the large amount due here on the 1st inst. for interest and dividends, only a portion of that which was for foreign account has been re-invested here. The payments were promptly made. The Coupons of the Bonds of the Peru and Indianapolis and Ohio and Mississippi Eastern Section, as was expected, were not paid. The interest on the 7 per cent. Bonds of the City of San Francisco, which had been due since 1st November, was paid at the same time with the Coupons of the 10 per cent. loan, payable at New York, the 1st inst.

State Stocks are generally lower; there have been large transactions in Missouri and Indianas at a fall of $2\frac{1}{4}$ per cent. on the former and 1 per cent. on the latter. Louisianas have fallen 1, Tennessees 3, and Virginias 1 per cent. United States Stocks have been returned from Europe in small amounts and have sold at a fraction above Government prices. Kentucky Sixes are quoted con-

pon off since the 7th inst. In City and County Bonds there have been a few transactions in Cincinnati, Chicago, Milwaukee, Pittsburgh, Rochester, St. Louis and San Francisco (10 per cent.) City Bonds; with a rise of 1 per cent. on Pittsburgh and Cincinnati. In Railroad Bonds, considerable business without market change. Erie First Mortgage and Convertibles of 1862, are in demand at 1 per cent. advance, without sellers. Illinois Central Bonds have been very active without important variation. Of Bonds not quoted at the Stock Exchange, we note some transactions in Bellefontaine and Indiana, Galena and Chicago First Mortgage, Milwaukee and Mississippi Second and Third Sections, at one per cent. rise on the two last mentioned.

Railroad shares irregular—generally a little lower. Erie from $50\frac{1}{4}$, advanced to $53\frac{3}{4}$, falling back to $50\frac{1}{4}$. Hudson River has declined 4 per cent., owing to two accidents of recent occurrence. Reading, after advancing in $94\frac{1}{4}$, receded $2\frac{1}{4}$ per cent. Milwaukee and Mississippi (ex-div.) has risen 5 per cent.; Harlem, Michigan Southern, and New York Central, each 1 per cent. Money continues in active demand, but since two days, loans on call are easier. Loans on demand, 7 per cent.; first class paper 10 to 12. In Exchanges business has been moderate, rates dull all the week, closing a little firmer; chief sales on London $108\frac{1}{4}$; on Paris, $5.21\frac{1}{4}$ to $5.23\frac{1}{4}$.

MARIE & KANZ.

American Railroad Journal.

Saturday, January 19, 1856.

The Locomotive Telegraph.

In this period of railroad accidents, we think the following account of the further application of the magnetic telegraph to the facilitation and safety of traveling by railroad, will be read with great interest. If possible, it should be at once introduced upon all our leading railroads.

AGENCY OF THE HAIGH FOUNDRY CO. }
10 Ferry st., Jan'y 16th, 1856. }

SIR,—
Finding in the "*Courrier des États Unis*" of the 10th instant, a transcript from a French paper of a matter which I deem of much interest to our railway interest—viz "Locomotive Telegraph"—I have caused the article to be translated and herewith hand it to you that you may place it in your Journal for the benefit of whomsoever it may concern.

Sir,

Respectfully Yours,

The Editor of the }
AM. R. R. JOURNAL. }

GEO. WOODWARD,
Agent.

THE LOCOMOTIVE TELEGRAPH.

We find in the *Journal des Debats* the following description of some curious trials which have been made recently on the *Locomotive Telegraph* of Mr. Bonelli.

"Mr. Bonelli proceeded on Wednesday on the Western Railroad, between Paris and St. Cloud, in company with Mr. Rouher, Minister of Public Works, and Count Cavour, President of the Cabinet of Turin, to make a trial of the Locomotive Telegraph of which he is the inventor.

There were also present at this trial, Messrs. Vuillefroy, President of the Committee of Inquiry on Railroad Accidents; Avril, Schwilgue, General Inspectors of Bridges and Roads; Guillebot de Nerville, Engineer of Mines, members of that committee; Viscount de Nougny, Director General of Telegraphic Lines; Prosper Tourneux, Chief of the Land Clearing Division to the Minister of Public Works; Flachat, Chief Engineer of the Western

Railroad; Lapeyriere; Breguet; Chabrie; as well as a number of directors and engineers of different companies.

Messrs. Rouen and Regnaut, *Chiefs de traction*, directed the two convoys which were used at the trial.

Before going further it is well to say something of Mr. Bonelli's invention.

The system in question is composed, (like all other electric telegraphs), of an isolated metallic conductor joining the two extremities of the line, and a telegraphic apparatus.

In Mr. Bonelli's system the ordinary line wire is replaced by a bar or band of plate iron of some millimetres in thickness, and two centimetres in width, fixed on the ground in the middle of the road, by means of *isolators* in dry ground, which hold it ten centimetres above the earth.

An assemblage of machinery which they can raise or lower at pleasure allows the telegraphic apparatus (which is placed in a car), to be placed in communication with the bar or band. This machinery slides on the bar during the progress of the train, in such a manner, that the employee placed in the car can send or receive telegraphic signals at any moment.

The communication of that same apparatus with the ground is effected through the axle-tree of the car, the wheels, and the rails.

Such in all its simplicity is the Locomotive Telegraph. In case of shifting of the track and the level, Mr. Bonelli has placed at different points along the road apparatus which are connected by a subterranean wire terminating at the two ends of the main bar.

These apparatus, which are isolated from the soil, are always in contact with a bar of iron placed under the car, so that telegraphic communications can never be interrupted.

Now follows a description of the trial.—

The first train in which were the Minister of Public Works, Messrs. Cavour, Bonelli, and several others, left the St. Lazare station at mid-day, and were followed, several minutes after, by a second train, in which were the other members of the Committee of Inquiry.

This second convoy stopped at the Height of Clichy-la-Garonne, where the telegraphic bar made by Mr. Bonelli commences. The first train continued its route, whilst the second train represented a fixed point.

In this position the two trains exchanged a certain number of telegraphic signals. The exchange was effected, with the same facility and regularity as between two ordinary telegraph stations.

Arriving at Courbevoie, the first train sent the order for the second to follow, which was immediately complied with. In this new phase of the trial, the two trains (going at great speed,) established between themselves a permanent exchange of despatches, which took place with as much precision and success as in the preceding case.

Between Battignolles and Suresnes, that is to say in less than twenty minutes forty questions, and as many answers had been sent between the trains without the least uncertainty as to the sense of a word, and without it being necessary to make a repetition.

It is useless to enter into a detail of the questions and answers; it is by the practical importance of Mr. Bonelli's invention, that the orders

sent are executed immediately, that the respective speed of the two trains, their position in respect to a kilometrical post, their passage at such and such a minute, and such and such a point of the road, were time after time indicated with an instantaneous precision. This communication can be carried on between 10 or 12 trains on the same road.

The two trains came together at St. Cloud. There the persons who made the journey got out, and the two secretaries of the committee compared the questions and answers, which were found to be in perfect concordance.

In ten minutes the trains set out for Surennes, where a new station had been erected, and then the Minister and Committee closely examined the telegraphic bar and the apparatus.

The return took place at 2 o'clock. Thus was terminated this brilliant trial which has given such complete and remarkable results, and which it seems ought to assure security to railroad travellers for the future."

Cincinnati, Union & Fort Wayne Railroad.

This is one of the unfinished roads of the West, which in itself is a meritorious project, and, when completed will form connections of great value and importance to the traveling and business public. Cincinnati is the commercial centre of large portions of Ohio and Indiana, between which and the above cities the most intimate business relations exist. In the present case, the route of the road is through a section dependent upon it for a market, and one that would afford a large traffic. Fort Wayne is one of the most important towns in Indiana and would trade largely with Cincinnati with a railroad between them.

The line of the above road is about sixty-five miles. Union is already connected with Cincinnati by a railroad of about 107 miles. Of the former, about 20 miles, extending from Union to Portland, is nearly ready for the rails. To purchase these, we presume the company will have to resort to the proceeds of mortgage bonds. As the road will be of very great value to the connecting lines, the owners of these cannot do better than to lend a helping hand, and take a quantity of the above lands sufficient for the purchase of the rails.

The affairs of the road appear to have been managed with prudence and foresight. What has been accomplished has been done in an economical manner and at a minimum cost. The company has not involved itself in debt, nor wasted its means in ruinous shaves, nor extravagant contracts.

The Report is followed by statistical tables, illustrating the value of the productions of the country through which the road runs, for the year 1854. It is well known that the products of that year were far below the general average. These show a production of 1,041,136 bushels of wheat, 4,262,176 bushels of corn, 23,054 bushels of rye, 620,066 bushels of oats and barley, 286,268 bushels of potatoes, and 54,482 tons of hay, raised in those counties in that year, and that 20,538 horses, 53,078 cattle, 48,436 sheep, and 123,160 hogs were in them. The total valuation of taxables for that year, was \$12,113,878. There is a table giving the comparative total assessments for taxation in those counties for the years 1852, 1853, and 1854, from which it appears that the increase of taxables of 1854 over those of 1853 was \$1,280,413, and of

1854 over 1852, was \$2,814,748. On these facts the Report says:

"Our road commences at Union in Randolph county on the State line, between the States of Ohio and Indiana. It runs through Randolph, Jay, Adams, and Allen counties in the State of Indiana, and will be the outlet for the produce and business of a great portion of Wells county in Indiana, as well as of Mercer and Van Wert counties in the State of Ohio. The appended tables give the statistics of the Indiana counties. They are made from the official report of 1854, that of 1855 not having been published in time. The crop of 1854, was much below an average one. Table 5 shows the comparative progress for three years; and the progress of at least twenty years to come, will be in an accelerated ratio. The construction of our road will greatly accelerate the increase of wealth of those counties. The country along the line of our road will increase in wealth each year, for the next twenty years, to the amount of the whole cost of our road.

GENERAL FACE OF THE COUNTRY ALONG THE LINE.

The soil is alluvial. The face of the country along the line is gently undulating, and between the Wabash and St. Mary's, a great portion of it is level. The whole country traversed by the line, and which will furnish it business, is susceptible of cultivation. There is no waste land from Union to Fort Wayne, nor within twenty miles of the line of the road on either side. Not more than one-tenth of it is yet reduced to cultivation, if that much. Improvements, however, are progressing, and will progress more rapidly as our road progresses. In a few years it will be as densely populated, and have as much productive wealth as the Miami valley from Dayton to Cincinnati now has. The road is six miles longer than the Cincinnati, Hamilton, and Dayton railroad, but owing to the present cheapness of land and materials along its line, in comparison with those along the line of that road when made, and the lightness of the grades along our line in comparison with the grades of that line, our whole line can be made at one-half the cost of that road. In ten years its business, it is estimated, will equal the business of the Cincinnati, Hamilton, and Dayton Railroad, if not exceed it; because it will drain a wider scope of country, which will then be nearly as well improved. It will do the business of the country for twenty miles on each side, while the C. H. & D. R. R. has an average of less than 10 miles on each side.

The timber is oak, ash, walnut, poplar, beach, hickory, cherry, sugar tree, maple, hackberry, buckeye, &c. The line passes immediately through some of the finest oak timber to be found anywhere. Walnut and poplar are not so plenty. But there will be a good timber trade furnished for the road immediately, as mills have been built and are being built in anticipation of the finishing of the road. This timber trade will continue for many years before it will be exhausted.

The line crosses the valleys of the Mississinewa the Salamie, and the Wabash rivers, and enters the valley of the St. Mary's river at Decatur, and following that valley down to Fort Wayne. Each of these rivers has a valley of rich land, and the midlands between them are not arid and waste ridges and mountains, as in the East, but are excellent for corn, wheat and grass. The business of the whole of the Salamie valley, and of the Wabash valley from the State line to Bluffton in Wells county, will be done by the road when finished to Portland."

CONNECTIONS AND THROUGH BUSINESS.

"In addition to the large amount of local business which our road will have, and which is the most reliable and profitable business for a railroad, our road will have so many and such valuable connections as to give it a good through business. It will be the direct line from Fort Wayne, and all the roads centering there, to Dayton & Cincinnati. By the Fort Wayne and Chicago road, now in a forward state of construction, it will form the most direct line from Dayton to Chicago, and thus have

all the travel from Chicago to Dayton, and points east and south of that city. It will form a part of the great Cincinnati and Mackinaw line; as the great railroads entering at Fort Wayne will render it proper to make Fort Wayne a point on the Cincinnati and Mackinaw railroad. At Fort Wayne our road will also connect with the Wabash Valley and the Western Air Line railroads. At Union, the southern terminus of our road, in addition to our connection through the Greenville and Miami, and the Cincinnati, Hamilton and Dayton railroads, to Dayton and Cincinnati, we will connect with the Indianapolis, Pittsburg, and Cleveland railroad, and thus carry all the travel from Adams, Wells, and Jay counties, to Indianapolis, the capital of the State. We will also connect with the Bellefontaine and Indiana, and the Columbus, Piqua and Indiana railroads, and thus form direct connections with the East and South East, to Cleveland, Pittsburg, Columbus and Wheeling."

North Pennsylvania Railroad.

The annual meeting of this company was held in Philadelphia on the 14th inst. The following is the list of Directors for the current year—

President—EDWARD MILLER.

Directors—John Brock, J. Gillingham Fell, John O. James, J. Livingston Erringer, S. Morris Waln, John Welsh, Algernon S. Roberts, D. B. Hinman, John Jordan, jr., I. P. Hutchinson.

The following is an abstract of the Report of the Treasurer.

DEBITS.	
Graduation of bridges and masonry.....	\$1,714,197 62
Right of way and fencing.....	137,382 25
Superstructure, rails, &c.....	323,679 93
Engineers' expenses.....	102,667 80
Cars, locomotives, stations, &c.....	131,727 01
Superintendent's department (expenses).....	33,787 71
Real estate.....	383,329 88
Office expenses.....	30,752 70
Incidentals.....	17,494 14
Interest on stock.....	144,598 46
Interest and discounts, loans.....	268,060 63
Cash.....	8,723 67
	<hr/>
	\$3,296,401 36
CREDITS.	
Instalments on stock.....	\$2,530,855 00
Coupon bonds sold.....	265,500 00
Bills payable.....	360,653 72
Ground rents and mortgages.....	105,338 22
Receipts from passengers.....	\$25,420 97
Do. do. freights.....	4,446 09
	<hr/>
	29,867 06
Sundry unsettled accounts.....	4,187 36
	<hr/>
	\$3,296,401 36

The report of the Chief Engineer, Mr. Miller, stated that there had been vexatious delays in the construction of the road, and the cost had exceeded the estimates. But these had arisen from causes that could not be foreseen, among which are the increased rates of labor, the high prices of provisions, power, and almost every other article which go to swell the aggregate cost of building a road.

The Report then gave the cost of constructing the road as differently estimated, as follows:

The First Estimate.....	\$2,980,000 00
The Second do.....	3,100,000 00
The Third do.....	3,464,969 27

The Report of the Directors states that the road was finally opened to Gwynedd, in Montgomery county, on the 2nd of July last, a distance of nineteen miles. The receipts for passenger travel and the transportation of freight over the road have equalled the most sanguine expectations of the Board, and given evidence of a substantial basis for a regular annual increase.

The Report also states that, in order to raise money for the uninterrupted prosecution of the work on the road, it became necessary, on the 4th of April, 1855, to execute a mortgage for two million five hundred thousand dollars, only two hundred and sixty-five thousand dollars of which had been negotiated. The total net proceeds of subscriptions to the stock of the company, at the end of the fiscal year, amounted to two million seven hundred and eighty-five thousand two hundred dollars. The work on the road had been prosecuted with vigor, and was going forward regularly.

Reading Railroad.

The annual meeting of the Reading Railroad Company was held on the 14th inst., at the office, South Fourth street, Philadelphia. The annual report was read. From it we present the following transportation and income account for twelve months, ending November 30th, 1855:—

RECEIPTS.

Travel, 277,617, equal to 111,822	
through passengers.....	\$301,951 79
Freight on merchandize, 13,384 tons.	325,851 28
Freight on coal, 2,213,292 tons.....	3,664,094 80
Miscellaneous receipts.....	29,895 99
Total.....	\$4,321,793 86

EXPENSES.

Transportation Department.....	\$1,225,238 79
Roadway Department.....	285,642 89
	1,510,881 68

Gross Earnings.....	\$2,810,912 18
Drawbacks, dumpage, &c.....	216,996 94

Net profit for the year.....	\$2,593,915 24
Interest on Bonds and	
Mortgages.....	\$504,027 00
Renewal Fund.....	149,482 48
	653,509 48

Dividend Fund for the year.....	\$1,940,405 76
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Out of which has been paid:	
Balance of interest account.....	\$164,276 82
Balance of renewal fund.....	95,576 52
	\$259,853 34

Sinking fund for bonds payable 1870.....	\$25,000 00—100,000 00
July, 1855; dividend 4 per cent.....	10,368,016 00
Preferred and common stock.....	414,760 61
State tax, 1855.....	49,943 48—824,557 46
	\$1,115,848 80

Out of which 4 per cent. has been declared.....	424,242 64
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	\$691,605 66
To which add the surplus of 1854...	59,637 18

Total surplus, out of which 2 per cent. has been issued in stock, leaving the balance as a contingent fund.....	\$751,242 82
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The floating debt of the Company is about \$1,000,000, having been reduced \$700,000 during the year. The Stock dividend, just made, should the whole of it be issued in stock, will add about 8,000 shares to the present capital of the Company. At the election all the officers of the Company were re-elected, as follows: President, John Tucker; Vice President, R. D. Cullen; Managers—R. D. Cullen, Samuel Morris, C. S. Boker, Geo. W. Richards, John Ashhurst, Isaac R. Davis; Secretary and Treasurer, Samuel Bradford.

Mr. Bright on the War in the East.

It is well known that, although the war in which England is at present engaged, is generally popular in that country, it has numerous influential opponents who resist it on the plain and obvious grounds that it is wasting the strength of the nation, and entailing upon posterity an enormous burden, without the possibility of its resulting in any adequate compensation. The most able of these opponents is Mr. John Bright, M.P. Mr. B. belongs, we believe, to the denomination of *Friends*. His characteristic is good common sense, which he clothes in language as plain as the garb he wears. Below we give an extract from a speech recently delivered by him in one of the manufacturing districts in England. The United States and Great Britain are rivals for the commercial supremacy of the world. Mr. Bright says, that the latter must be distanced, if she continues to add to her present enormous burdens, the support of which must eat up her wealth and the proceeds of industry. The subject upon which Mr. Bright treats, is attracting great attention with his countrymen, and should in our estimation create well grounded apprehension. It appears to us that the difference in taxes upon property in the two countries must soon be equal to a fair return upon invested capital. When this point is reached, the scale must turn in our favor. But for the speech—

"There were two or three facts which were so important, that if they could be fixed in the minds of the people, he believed there would soon be more interest taken in matters of foreign policy. Look at the United States. Their inhabitants were the same people as ourselves; the population was about equal to ours—at the next census it would probably be a little more. They had large manufactories, although not so large as ours—they had a greater tonnage of merchant ships, he believed, than we had—twice, or perhaps, three times, as many newspapers—and representative institutions more complete. They had vastly more miles of railway—their rivers were traversed by gigantic steamboats—and the country presented altogether a picture of life, activity, and energy, such as had never before had been witnessed on the face of the earth. America had certainly not more than one, if any, line-of-battle ship afloat; she had two or three frigates; and there were not over 10,000 or 12,000 soldiers in the country as the nucleus of an army. These were her materials for offence and defence. Yet nobody thought of insulting the United States. An American was as free from violence anywhere abroad as an Englishman; and it was by no means certain that he was not much the more sure of redress, if insult or violence was used. There was no people to whom greater attention was paid anywhere in Europe than was paid to Americans.—But the policy of the United States was one of never meddling with any of the wars or quarrels of Europe. It was a legacy of their great and illustrious chief, that they should keep themselves free from all the entanglements of foreign policy in that respect; and almost entirely they had done so. We had taken exactly the opposite course. Look at the situation of the two countries. America had no national debt whatever; we had an enormous one. People could not count it; and if anybody pronounced the amount, nobody could understand it. It was called eight hundred millions sterling, and no one could tell or conceive what those words represented. But, at any rate, we knew this: it would take nearly 100 years' rental of all the land, houses, and buildings of every description of valuable property, in Lancashire and Yorkshire, to make that sum. If everything paid as rent, or valuable as rent, in these two counties with three and a quarter millions of population, were absorbed for 100 years, it would about pay

off the national debt. In the United States they had so much money this year from their revenue, that they did not know what to do with it, and were likely to quarrel because they could not agree what tax should be taken off next. Their national debt was only half paid off—it was never large; ours was not only not being paid off, but was rapidly increasing. Each State had its own taxation for its own government expenses; and then there was the general taxation for the expenses of the general government. Taking all these together, he supposed they would not amount to more than twelve millions a year; but say fifteen millions. This year, in this country, with no more population than theirs—their not being nearly so well off, and they not having a tenth part of our pauperism, ignorance and crime; they had not raised more than twelve or fifteen millions sterling, and this country would expend, in all probability, nearly one hundred millions. There would be the fifty or fifty-four millions for the ordinary expenditure, and adding the expenditure of the war, he had not the smallest doubt that this country would actually expend this year eighty millions sterling over the sum which the people of the United States would expend. They knew the process of waiting before a race, and what chance a man had in running with another, if he had to take a sack of flour upon his back. A very little difference in the weight made a wonderful difference in the endurance of the man or the horse.—He would ask any rational man, let his sentiments be what they might about the Russian and the Turk. "Is it possible that these two countries can go on—one burdened with this enormous and incredible expenditure, and the other almost entirely free from it—and this country should keep equal in the race?" If we could conceive it going on for ten years, it would exhaust a sum that would appear equal to reducing this country to a great extent, to actual beggary; while America was continually ascending to a scale of prosperity. And yet people told us that the interests of England were concerned in the East! Why, our interests, as far as regarded supremacy, whether on the sea, or in manufactures and commerce, were a thousand fold more engaged in what was now taking place in the West, to which our statesmen and people did not seem to turn their attention. There was no writing it out or taking it away. Bombastic articles in newspapers, the speeches of men anxious to curry favor with constituents, or who thought it would please the farmers, because corn was high, nor the shouting of men who never thought about the matter—all could never wipe off this great and destroying fact, that eighty million pounds sterling were paid by the people of this country—either from their own pockets or from capital lent to the Government which was never got back—over and above what was paid by their rivals in the United States; and no power, and no witchery of statecraft could give our people a chance with the United States while that state of things lasted. It was said to be a very low consideration to talk about pounds, shillings and pence; but they were the foundation of everything. What could a man do without food, home and clothing? Was there not seen a great increase of pauperism and beggary all over the country? Look at the assizes—the brutality, the crime, the severity of the punishments. Look at the efforts made to get up reformatory institutions in different parts. All this only showed that there was a world of work for our benevolent men, our Government and our statesmen to do in this country, which never could be done so long as from fifty to eighty millions a year should be abstracted from the industry of the country more than would be necessary, if we pursued a different policy. He was certainly of opinion that every £100 taken from the people in taxes more than was necessary for the honest and faithful good management of the affairs of the country, provided for the country a pauper or a criminal; and until we could keep more within ourselves the vast products of our industry, and apply them to our own advantage, he saw no sort of result that could come—or at least no considerable result—from all this ef-

Journal of Railroad Law.

(*Thorpe vs. The Rutland Railroad Company.*
Vermont Supreme Court. Livingston's Law Mag.
p. 63.)

In this case, which is of considerable importance we give an abstract of the opinion of the court.—The principles involved and the facts sufficiently appear in the opinion which was delivered by

REDFIELD CH., J.—

"But it has sometimes been supposed that corporations possess a kind of immunity and exemption from legislative control, extending to every thing materially affecting their interest, and where there is no express reservation in their charters. It was upon this ground that a perpetual exemption from taxation was claimed in *Providence Bank vs. Billings*, 4 Peters Sup. Ct. R. 514, their charter being general, and no power of taxation reserved to the State. The argument was, that the right to tax either their property or stock was not only an abridgement of the beneficial use of the franchise, but if it existed, was capable of being so exercised as virtually to destroy it. This was certainly plausible, and the Court do not deny the liability to so exercise the power of taxation as to absorb the entire profits of the institution. But still they deny the exemption demand. Chief Justice Marshall there says: 'The great object of an incorporation is, to bestow the character and properties of individuality on a collected and changing body of men. Any privileges which may exempt it from the burdens common to individuals, do not flow necessarily from the charter, but must be expressed in it, or they do not exist.'"

This is sufficiently explicit, and upon examination will be found, I think, to have placed the matter upon its true basis. In reason it would seem no fault could be found with the rule here laid down by the great expounder of American constitutional law. As to the general liability to legislative control, it places natural persons and corporations precisely upon the same ground. And it is the true ground, and the only one upon which equal rights and just liabilities and duties can be fairly based.

1. The present case involves the question of the right of the Legislature to require existing railways to respond in damages for all cattle killed or injured by their trains, until they erect suitable cattle-guards at farm-crossings. No question could be made where such a requisition was contained in the charter of the corporation, or in the general laws of the State at the date of the charter.—But where neither is the case, it is claimed that it is incompetent for the Legislature to impose such an obligation by statute, subsequent to the date of the charter.

It has never been questioned, so far as I know, that the American Legislatures have the same unlimited power in regard to legislation which resides in the British Parliament, except where they are restrained by written constitutions. That must be conceded, I think, to be a fundamental principle in the political organizations of the American States. We cannot well comprehend how, upon principle, it should be otherwise. The people must, of course, possess all legislative power originally. They have committed this in the most general and unlimited manner to the several State Legislatures, saving only such restrictions as are imposed by the Constitution of the United States, or of the particular State in question. I am not aware that the Constitution of this State contains any restriction upon the Legislature in regard to corporations, unless it be that where "any person's property is taken for the use of the public, the owner ought to receive an equivalent in money; or that there is any such restriction in the United States Constitution, except that prohibiting the States from "passing any law impairing the obligation of contracts."

It is a conceded point, upon all hands, that the Parliament of Great Britain is competent to make any law binding upon corporations, however much it may increase their burdens or restrict their

powers, whether general or organic, even to the repeal of their charters.

"In the present case the question arises upon the statute of 1850, requiring all railways in the State to make and maintain cattle-guards at farm-crossings, and until they do so, making them liable for damage done to cattle by their engines, by reason of defect of fences or cattle-guards. The defendant's charter required them to fence their road, but no express provision is made in regard to cattle-guards. There is no pretense of any express exemption in the charter upon this subject, or that such an implied exemption can fairly be said to form a condition of the act of incorporation, unless every thing is implied by grant, which is not expressly inhibited, whereas the true rule of construction in regard to the powers of corporations is, that they are to take nothing by intendment, but what is necessary to the enjoyment of that which is expressly granted."

This case, therefore, resolves itself into the narrow question of the right of the Legislature, by general statute, to require all railways, whether now in operation or hereafter to be chartered, or built, to fence their roads upon both sides, and provide sufficient cattle-guards at all farm and road crossings, under penalty of paying all damages caused by their neglect to comply with such requirements. It might be contended that cattle-guards are a necessary part of the fence at all crossings, but that has been questioned, and we think the matter should be decided upon the general ground. It was supposed that the question was determined by this court, in the case of *Nelson vs. Vermont and Canada Railway*, 26 Vt. R., and January number of Livingston's Law Magazine. The general views of the court are there stated as clearly as it could now be done, but as the general question is of vast importance, both to the roads and the public, each has been again urged upon our consideration, we have examined it very much in detail."

And when the regulation of the police of a city or town, by general ordinances, is given to such towns or cities, and the regulation of their own internal police is given to railroads to be carried into effect by their by-laws and other regulations, it is of course always, in all such cases, subject to the superior control of the Legislature. That is a responsibility which Legislatures cannot divest themselves of if they would.

This police power of the State extends to the protection of the lives, limbs, health, comfort, and quiet of all persons, and the protection of all property within the State. According to the maxim, *Sic utere tuo ut alienum non leadas*, which being of universal application, it must, of course, be within the range of legislative action to define the mode and manner in which every one may so use his own as not to injure others. So far as railways are concerned, this police power which resides primarily and ultimately in the Legislature, is two-fold: 1. The police of the roads, which, in the absence of legislative control, the corporations themselves exercise over their operatives, and to some extent over all who do business with them, or come upon their grounds, through their general statutes and by their officers. We apprehend there can be no manner of doubt that the Legislature may, if they deem the public good requires it, of which they are to judge, and in all doubtful cases their judgment is final, require the several railroads in the State to establish and maintain the same kind of police which is now observed upon some of the more important roads in the country for their own security, or even such a police as is found on the English railways, and those upon the continent of Europe. No one ever questioned the right of the Connecticut Legislature to require trains upon all their railways to come to a stand before passing draws, in bridges; or of the Massachusetts Legislature to require the same thing before passing another railway. And by parity of reason may all railways be required so to conduct themselves, as to other persons, natural or corporate, as not unreasonably to injure them or their property. And if the business of railways is specially dangerous, they may be re-

ports made to improve the condition of the country. We sometimes spoke harshly of our forefathers, and thought that if we had lived in their days we should have been wiser than they were—that we should never have stoned the prophets—and that we should have at least avoided burdening our posterity to a degree from which they never could extricate themselves. But we appear to be following the same course: burdening our posterity, looking after every vague and visionary advantage, and actually protesting, almost becoming violent with anybody who thought it his duty to call in question this policy and asked the people to be moderate. At this very moment there was not the smallest doubt that every Power in Europe, except England, would wish now, after two years of war, to restore tranquillity to Europe. It was a fact that he stated, he was sure, from information that could not be mistaken, that if there should now be a great probability of the war being carried on for another campaign or longer, it was owing to the zealous and almost violent advocacy of further war by the press and by a portion of the people. Every nation concerned, but England, would be in favor of making peace; but somehow or other we were so very pugnacious.—We were like a horse that "can't stand corn"—we had had too much corn for some years, but there was little enough now—we had grown fat—we had kicked—we had thrown all the lessons of prudence to the winds; and while at this moment he supposed that in France there was hardly to be found a man who would lift up his hand in favor of a continuance of the war, yet in this country he would not say the majority, but a very large number, no doubt, would be very much disgusted if it should cease. He thought that one of the objects of a mechanics' institution should be, not only to teach men, women and children all that which was very useful to them in their own homes, however beautiful and excellent that might be, but to enable all those who had stronger heads and some leisure to go further into the examination of questions which affected their interests. For all the follies of statesmen came home to the hearths of the laboring classes; and every man, let him talk as he would of glory and reputation and empire, if he abstracted the money of those classes and spent it on objects which were not moral in themselves, and which were not essential to the safety of the country, whatever he called himself, it might be depended upon that he was a much greater enemy to the comforts of the laboring classes and to the prosperity of their children, than the Russian, the French, the American, or any other foreigner whatsoever. Those who lived twenty years longer would probably find the young fellows of that day pushing them in the ribs and saying, "Why, you were excessively foolish twenty years ago. You went into a war quite as bad as that French war; and you added two hundred millions to the national debt. we should not have done that." [Hear.] Let us, at any rate, bring up our children so that they should read and think; and that, if they ever got into a war they should know its definite object, cost, probable result, and whether the things to be obtained would at all pay for the charges of blood and treasure that would have to be incurred. [Applause.] Many present might say that he had no business to go into this question at all; [hear, hear,] but if you had to talk to people, it was no use talking about what they thought they understood as well as yourself, or about things in which they felt no interest. [Hear, hear.] He was a politician, unfortunately, and was obliged to pay attention to this subject as much as the surgeon to anatomy, or the physician to medicine, and that which he had examined and thought he understood, and in which his audience had a deep interest, could hardly be a question that he could be blamed for touching upon at some length. [Applause.] If they did not consider the facts he had stated as to America, it would be found in a generation or two that a prolongation of this kind of thing might leave the country in a state of anarchy and chaos such as he should not like his children or grandchildren to be partakers of. [Applause.]

the number upon which representation is based.

The arrangement of the statistics of agriculture, manufactures, &c., are being prepared for publication as rapidly as circumstances will admit. The present population of the State, as appears from the Report before us, is 3,470,059—being an increase of 372,666 since 1850, and of 865,564 since 1845. This population is distributed among 910 towns and 13 cities—the latter being subdivided into 116 wards. Below we present the—

POPULATION BY COUNTIES.

COUNTIES.	Total Population.	Increase since 1845.	VOTERS		
			Native.	Naturalized.	Aliens.
Albany....	103,681	26,413	12,434	6,182	2,234
Alleghany....	42,910	11,508	9,271	613	2,032
Broome....	36,650	10,842	7,760	522	2,066
Cattaraugus....	41,463	11,294	8,012	516	2,645
Cayuga....	53,571	3,908	10,556	970	4,863
Chautauque....	53,380	6,832	11,138	774	4,795
Chemung....	27,288	9,546	5,432	427	1,991
Chenango....	39,915	15	9,322	378	977
Clinton....	42,482	11,204	4,464	1,910	8,404
Columbia....	44,391	2,415	8,647	765	3,800
Cortland....	24,575	*506	5,615	287	704
Delaware....	39,749	2,759	8,077	987	1,532
Dutchess....	60,635	5,511	11,094	1,404	6,861
Erie....	132,407	53,696	12,494	9,249	37,274
Essex....	28,539	3,437	4,857	795	2,994
Franklin....	25,897	6,785	3,385	1,077	3,746
Fulton....	23,284	4,705	4,601	465	1,559
Genesee....	31,532	2,189	5,835	642	4,107
Greene....	31,137	*820	6,461	491	1,522
Hamilton....	2,543	661	522	77	168
Herkimer....	38,566	1,152	7,711	867	3,955
Jefferson....	65,420	421	12,770	1,356	5,377
Kings....	216,355	137,664	18,277	14,350	65,536
Lewis....	25,229	5,011	4,059	1,225	2,751
Livingston....	37,943	5,849	7,175	981	4,329
Madison....	43,788	2,701	9,316	658	3,232
Monroe....	96,224	25,425	12,576	4,696	22,837
Montgom'y....	30,808	1,165	6,111	675	2,688
New York....	629,810	258,587	46,113	42,704	232,678
Niagara....	48,626	13,732	6,554	1,708	10,327
Oneida....	107,309	22,973	15,272	5,674	18,472
Ontonaga....	86,924	16,400	13,915	3,018	13,549
Ontario....	42,672	80	8,323	824	4,757
Orange....	60,868	8,641	9,994	1,367	7,955
Orleans....	28,435	2,590	5,105	599	3,818
Oswego....	69,398	20,952	12,766	2,038	7,372
Otsego....	49,735	*774	11,603	574	1,640
Putnam....	18,934	676	2,806	231	1,215
Queens....	46,266	14,417	6,814	1,578	8,618
Rensselaer....	79,234	16,895	11,622	3,311	14,921
Richmond....	21,389	7,716	2,441	1,354	5,078
Rockland....	19,511	5,770	3,093	487	3,547
St. Lawrence....	76,977	12,623	11,615	2,369	9,915
Saratoga....	49,379	7,902	9,346	1,031	5,748
Schenectady....	19,572	2,942	3,133	657	2,943
Schoharie....	33,519	1,081	7,153	223	874
Schuyler....	18,777	1,450	4,190	187	587
Seneca....	25,358	386	4,945	450	2,153
Steuben....	62,965	11,286	13,119	1,032	3,605
Suffolk....	41,066	6,327	7,472	467	3,083
Sullivan....	29,487	10,760	4,681	1,046	3,606
Tioga....	26,962	4,506	5,886	295	979
Tompkins....	31,616	*6,652	7,144	312	1,160
Ulster....	67,396	19,029	11,234	1,465	9,487
Warren....	19,669	4,761	3,787	378	1,643
Washington....	44,405	3,851	8,348	1,007	4,822
Wayne....	46,760	4,245	9,083	1,122	4,767
Westchest'r....	80,678	33,234	11,178	3,067	16,741
Wyoming....	32,148	1,456	6,136	928	2,827
Yates....	19,812	*965	4,285	189	942

Total population, 3,470,059; Increase since 1845, 865,564; Native and Naturalized Voters, 516,745; Aliens, 632,753; Colored persons not taxed, 36,123; Total number, deducting Aliens and colored persons, 2,797,416.

* Decrease.

Census of Illinois.

The returns of the State Census are all in except from one county (Jackson), and the result will be so little varied that we may say that the Census is now complete. Leaving out the population of Jackson County in 1850 (5,862), the entire population of the State at the time of taking the Census was 1,292,917; adding that, 1,298,779—so that if the increase in Jackson County since 1850 has been only 1,221, the round number of 1,300,000—our first estimate of the population of the State—is made out. Since the Census was taken, however, from 20,000 to 30,000 have been added to our population, supposing the rate of increase to have been equal to that of the last five years.

We subjoin a table of all the counties in the State:

Counties.	1855.	1850.
Adams.....	34,311	26,598
Alexander.....	2,927	2,484
Bond.....	7,511	6,144
Boone.....	10,994	7,624
Brown.....	7,946	7,198
Bureau.....	19,518	8,841
Calhoun.....	3,768	3,231
Carroll.....	7,610	4,586
Cass.....	8,946	7,253
Champaign.....	6,565	2,649
Christian.....	7,041	3,203
Clark.....	13,863	9,582
Clay.....	7,076	4,289
Clinton.....	6,823	5,139
Coles.....	14,937	9,335
Cook.....	103,960	43,385
Crawford.....	10,152	7,135
Cumberland.....	6,099	3,718
De Kalb.....	13,636	7,540
De Witt.....	8,508	5,102
Du Page.....	12,807	9,280
Edgar.....	13,920	10,692
Edwards.....	4,598	3,524
Effingham.....	6,226	3,799
Fayette.....	9,592	8,075
Franklin.....	7,182	5,631
Fulton.....	27,968	22,508
Gallatin.....	6,723	5,442
Greene.....	13,092	12,420
Grundy.....	7,021	3,023
Hamilton.....	7,212	6,362
Hancock.....	22,158	14,652
Hardin.....	3,920	2,887
Henderson.....	7,128	4,612
Henry.....	9,218	3,807
Iroquois.....	6,788	4,140
Jackson.....	5,862	5,862
Jasper.....	6,842	3,220
Jefferson.....	10,258	3,107
Jersey.....	8,771	7,304
Jo Daviess.....	24,104	18,604
Johnson.....	6,346	4,114
Kane.....	26,665	16,703
*Kankakee.....	10,110	.....
Kendall.....	10,145	7,730
Knox.....	22,347	13,279
Lake.....	17,630	14,226
La Salle.....	35,563	7,815
Lawrence.....	8,160	6,121
Lee.....	11,618	5,292
Livingston.....	4,606	1,552
Logan.....	8,324	5,128
McDonough.....	12,866	7,616
McHenry.....	19,295	14,973
McLean.....	19,573	10,163
Macon.....	8,365	3,998
Macoupin.....	17,409	12,355
Madison.....	31,556	20,441
Marion.....	10,139	6,720
Marshall.....	9,900	5,580
Mason.....	7,775	6,921
Massac.....	5,692	4,002
Menard.....	8,029	6,349
Mercer.....	9,660	5,246
Monroe.....	10,285	7,629

* This county was formed since 1850 from parts of Will and Iroquois.

Montgomery.....	9,941	6,277
Morgan.....	17,735	16,064
Montrie.....	4,435	3,234
Ogle.....	10,456	10,020
Peoria.....	30,134	17,547
Perry.....	6,858	5,278
Platt.....	3,052	1,605
Pike.....	22,351	18,819
Pope.....	6,835	3,975
Pulaski.....	2,462	2,265
Putnam.....	5,100	3,924
Randolph.....	12,601	11,019
Richland.....	7,049	4,012
Rock Island.....	16,217	6,937
St. Clair.....	28,554	20,180
Saline.....	6,776	5,588
Sangamon.....	25,604	19,228
Schuyler.....	12,296	10,572
Scott.....	7,937	7,915
Shelby.....	11,270	7,807
Stark.....	6,293	3,710
Stephenson.....	13,315	11,666
Tazewell.....	17,371	12,052
Union.....	10,106	7,615
Vermillion.....	15,893	11,492
Wabash.....	6,233	4,692
Warren.....	12,209	8,176
Washington.....	10,059	6,063
Wayne.....	9,902	6,825
White.....	10,059	6,053
Whiteside.....	13,416	5,361
Will.....	24,468	16,703
Williamson.....	9,430	7,216
Winnebago.....	20,826	11,775
Woodford.....	8,400	4,415

Total.....1,292,917 851,470

Finances of Maine.

We have received the report of the Commissioner of the Treasury of Maine, on the state of the Treasury, Dec. 31, 1855, presented by J. A. Sandborn. It presents a complete view of the expenditures and receipts of the State, and the condition of the Treasury for the year 1855.

Balance in the Treasury, Jan. 1, 1855....\$108,107
Receipts to Dec. 31, 1855, inclusive..... 523,201

Total.....\$636,308
Expenditures to Dec. 31, 1855.....\$597,178
Balance in Treasury..... 39,130

Total.....\$636,308
The estimated receipts for the year 1856, are \$339,515.71—and the estimated expenditures, \$527,620.05. The resources of the State are as follows:

Cash on hand.....\$39,130
Balance due on State taxes..... 201,585

SECURITIES IN LAND OFFICE.

Bills receivable.....\$283,553
Bonds..... 33,544
.....\$317,098
Notes receivable..... 9,220
100 shares in Augusta Bank..... 8,000

Total.....\$575,038

The liabilities of the State are \$1,038,194.86, of which \$657,500 are due on the Public Funded Debt, at different periods, between now and 1872, and \$380,430.81 is in Trust Funds.

The debt of the State at the commencement of 1855 was \$581,500, of which \$240,000 fell due in March. To enable the State to meet this, a loan of \$218,000 was negotiated. Applications for more than four times the amount were made, and the scrip readily sold at an aggregate premium of \$2,282.50, notwithstanding the severe pressure in the money market. One hundred and seventy-three thousand dollars of this loan was taken by citizens of Maine.

A portion of the public debt, amounting to \$130,500, will fall due on the 7th of March, 1856, requiring a new loan. By report of the Treasurer for 1854, it was estimated that \$50,000 would be received from the Land Office; but only \$13,069.

69 were received, owing to a combination of causes. In view of all the circumstances, the Commissioner comes to the conclusion that a reduction of expenditures is inevitable, in order to enable the State to meet the demands upon the Treasury Department. And he recommends that the payment of the School Fund, some \$75,000, be postponed from June to the January following.

Where the Coal Goes to.

The *Miner's Journal* publishes the following table, showing where the coal from Schnylkill county goes to. By this statement it will be observed that the five New England manufacturing States took more than half the coal shipped from Richmond in the year 1855.

Massachusetts.....	553,074
Rhode Island.....	98,090
Connecticut.....	69,796
Maine.....	33,528
New Hampshire.....	15,518

	770,006
New York.....	523,312
New Jersey.....	52,850
Virginia.....	22,721
South Carolina, Charleston.....	20,558
Distr. of Columbia, Washington and Georgetown.....	16,754
Baltimore.....	10,645
Delaware.....	7,759
Georgia.....	4,023
California.....	3,517
North Carolina.....	5,112
Florida.....	2,312
New Orleans.....	3,294
Alabama.....	2,125
Exported to Cuba, Nicaragua, Jamaica, Montevideo, Rio, San Juan, St. Johns, St. Michaels, and Thomaston.....	17,232
	1,505,984

Baltimore and Ohio Railroad.

The regular monthly meeting of the Board of Directors of this company was held yesterday.—The official report of the business of the road shows the revenue for the month of Dec. to have been as follows:

	Main Stem.	Wash. Branch.	Total.
Passengers.....	\$47,499	\$25,615	\$73,114
Freight.....	360,422	8,278	368,700

Total.....\$407,921 \$33,893 \$441,815

Compared with the revenue of Dec., 1854, the following result is shown:

Dec., 1855.....	\$407,921	\$33,892
Dec., 1854.....	263,119	29,894

Increase.....\$144,802 \$3,999

Total increase.....\$148,801

Of this increase \$4,864 has been derived from the passenger traffic on the main stem, and \$3,491 67 from the Washington Branch; showing an increase from this source of revenue of \$8,479.37, and affording continued evidence of the steady growth of the passenger travel over our roads.

The present fiscal year of the company, commencing with October, shows the following increase of revenue as compared with the first quarter of last year:

October.....	\$423,436	\$359,610
November.....	399,119	347,677
December.....	441,815	293,014

\$1,264,371 \$1,000,802
1,000,302

Total increase.....\$264,069

The earnings for December are the largest ever earned by the road, and is the first instance in which the receipts from the main stem have reached \$400,000.

Public Debt of the United States.

In the annual statement of the Secretary of the Treasury the total of the public debt on the 17th of November, 1855, was stated at \$39,969,731; besides which there are payable, on time, under treaties with Indian tribes, the sum of \$19,253,522.

The subjoined statement by the Register of the Treasury will show the amount of the public debt paid off, by the redemption of stocks, since the 3d of March, 1853, to the 31st December, 1855, inclusive.

Statement showing the amount of United States stock of the loans of 1842, 1843, 1846, 1847, and 1848; Texan indemnity and debt of the corporate cities of the District of Columbia, purchased from March 3, 1853 to December 31, 1855, inclusive; the interest that would have been paid if payment had not been anticipated, and the saving to the Government by the present mode of purchase.

Loans.	When redeemable.	Amt. redeemed.	Int. to maturity.
1842.....	Dec. 31, 1862	\$3,940,890	\$2,277,033
1843.....	July 2, 1853	3,977,931	99,448
1846.....	Nov. 12, 1856	3,988,626	717,919
1847.....	Jan. 1, 1868	12,350,500	10,778,494
1848.....	July 1, 1868	3,905,853	3,514,012
Texan indemnity.....	Jan. 1, 1865	1,050,000	553,750
D't of corporate cities.....	Jan. 1, 1865	720,000	215,660

Total premium.....\$4,173,405
Total interest paid.....885,182

Amount saved.....\$13,097,641

Pittsburg and Steubenville Railroad.

ITS HISTORY, POSITION, AND PROSPECTS.

This road, originally estimated to cost about \$1,500,000, was commenced four years ago, with a subscription by individuals of about \$250,000, much of which remains yet unpaid. The city of Pittsburg, having been authorized by law, first subscribed \$250,000 to its stock, and paid that same in bonds which were disposed of and the proceeds, together with what was collected on individual subscription, served to carry on the work on the first year.

Legislative authority was then asked and obtained for the city to subscribe \$300,000 more, and the county \$500,000, and after some delay, \$250,000 of the latter was obtained and paid in county bonds, which could not then be sold without a heavy discount, and were hypothecated for loans to carry on the work another year. The resources of the company being again exhausted in 1854, the balance of the subscriptions authorized by the city and county were made and paid in the bonds, the company engaging to pay the interest on all the city and county bonds issued.—Before these last subscriptions were made by the city and county, their credit had become so much impaired by large issues of bonds to other companies who were pressing them on the market, the bonds thus paid and received and at par for stock, could not be sold for over 75 cents on the dollar.

The city and county therefore own \$1,050,000 of the stock in the road, paid for in these bonds, which has produced, when the discount and interest paid thereon is deducted, in actual cash applicable to the work, not over \$750,000, and the individual stockholders own about \$100,000 of the stock, which they paid for in full. This will make about \$850,000 actually realized in cash from the capital stock, assuming it to be \$1,150,000 paid up.

About the beginning of 1855, the road, property, and franchise of the company were mortgaged to secure the payment of \$800,000, first mortgage seven per cent. bonds of the Company to mature

in ten years, and with the means raised by hypothecation of these bonds, and the credit of the company, the work has been carried on the past year.

Chester Valley Railroad.

The Chester Valley Railroad Company held their annual meeting at Philadelphia on the 14th inst., at which the following officers were chosen.

President—Benj. Rush.

Directors—Geo. W. Carpenter, Thos. S. Taylor, W. B. Roberts, Richard Henry Rush, W. A. Porter, and Theo. C. Heyl.

At a meeting of the Board, held subsequently, J. L. Gossler was elected Secretary and Treasurer and W. A. Porter, Esq., Solicitor.

The annual report gives a flattering account of the affairs of the company—sets forth that the road is in good condition—that all the claims for land damage, [with the exception of two small ones,] have been adjusted, and that the difficulties with the Trustees have been satisfactorily settled. The business of the road for the year past ended, shows a steady increase over the preceding year, and the Directors are confident that the large increase of business that must result from the repeal of the tonnage tax, will enable them to present a much more favorable state of affairs at the end of the present year. The net receipts for the year 1855 are double those of the last or any preceding year.

Railroad Accidents.

The following table of the railroad accidents in the United States of the past year, is nearly complete as possible. It includes all the principal casualties to trains, but not the individual cases of persons run over, killed, or wounded in jumping on or off moving trains, &c.:

	Acc'dts. Killed.	Woun'd.
January.....	19	10 44
February.....	10	2 20
March.....	12	3 36
April.....	7	2 19
May.....	7	5 30
June.....	8	4 20
July.....	13	9 48
August.....	10	28 106
September.....	15	10 67
October.....	21	13 39
November.....	13	26 81
December.....	7	4 12
	142	116 539

Of the above 116 killed, 61 were engineers, conductors, brakemen, and employees of the roads, and 55 were passengers. As compared with previous years, the number of accidents, as well as the number of persons killed or injured, is less than either in 1853 or 1854, notwithstanding the increased number of railroads.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

Railroad Iron Wanted.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

31st

A. WILKINS.

RAILROAD IRON.

Winterhoff, Piper & Co.,
82 BROAD STREET,

OFFER FOR SALE, VIZ:
1,000 TONS Guest & Co., 50 lbs., to arrive from London in New York.
500 TONS Guest & Co., 56 lbs., Erie pattern, per ship *Euxine* now on the voyage from Bristol to New Orleans. 1m3

Second Hand Locomotive

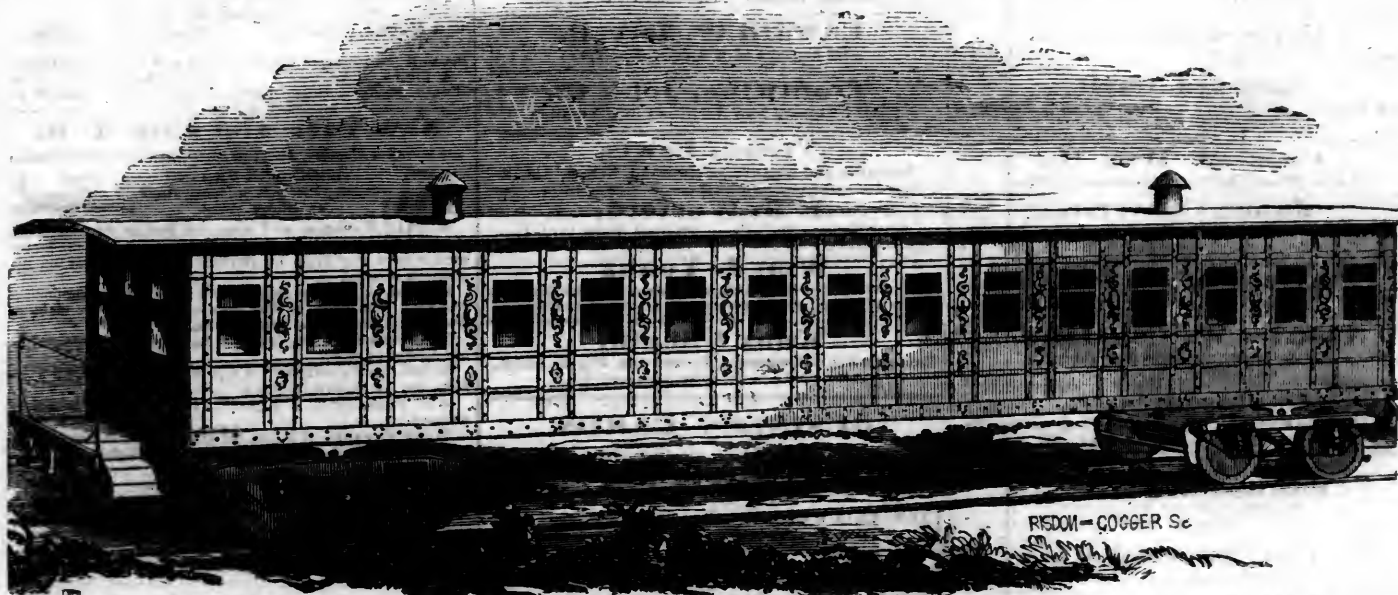
FOR SALE VERY LOW.

Weight 13½ tons.—4 ft. 8½ in. Gauge.—11½ in. Cylinder.—16 in. Stroke.—4 ft. Drivers.—New Tender on 6 wheels.—Engine in perfect repair.

The above will be found a very serviceable engine for graveling, switching, lumber and coal trains, and contractors' use, and can be had on excellent terms on application to

ELLIOTT & CO.,
4 William st., N.Y.

LA MOTHE'S PATENT IRON RAILROAD CAR.



RISDOM—GOGGER Se

WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dudgeon's Hydraulic Jack, Sewall's Salinometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

OHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1y17

Railroad Iron.

1,000 TONS Welsh Rails, 60 lbs. to the yard, now in bond and for sale by
CLARK & JESUP, 70 Beaver st., N. Y.

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Patent Car Locomotive and Tender Wheels.

GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies through out the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they enter go no annealing process which gives them a deeper and harder chill than those of any other manufacture.

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Railroad Iron.—Locomotives.

6,000 Tons Rails, 56 to 61 lbs. per yard.

1,000 " " 55 " " "

200 " " 49 " " "

Several LOCOMOTIVES of best manufacture, adapted to a variety of gauges, on hand and for sale by
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New York.

2m1

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington	\$15 50
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From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	8 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati	\$13 50
do do Louisville	14 50
From Philadelphia to Cincinnati	11 00
do do Louisville	12 00
From New York to Indianapolis	16 00

An extra charge will be made for meals and state rooms on board the boat.

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ENGINEER'S FIELD BOOK

By C. S. CROSS, Civil Engineer.

THIS work is designed as a pocket companion, and embraces all the necessary tables for prosecuting railroad surveys, in the most compact form.

It is subdivided as follows:

- 1st. The method of staking out railroad curves and keeping field notes.
- 2d. Railroad curve tables for expeditiously determining the points at which commences the curving.
- 3d. Application of the Prismoidal formula in determining the quantities of excavation and embankment of canals and railroads from transverse sections.
- 4th. Excavation and embankment tables for expeditiously determining the cubic yards from mean area.

It is a plain, clear and most valuable book for practical Railroad Engineers.

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THEODOLITES, TRANSIT COMPASSES AND LEVELS on a new principle, with Fraunhofer Munich Glasses, Surveyors' Compasses, Barometers, Chains, Drawing Instruments, etc., all of the best quality and workmanship, for sale at unusually low prices by
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Alteration of Hours.

THE trains on the OSWEGO & SYRACUSE RAILROAD having changed their hours of departure, in connection with the Railroads to New York, these steamers will, in future leave Toronto as follows:

"CHAMPION" Sunday, Tuesday, and Thursday, at 6 P. M. punctually.

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Toronto, Sept. 21st, 1865.

41f

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Atkinson, T. C.,
Mining and Civil Engineer,
Alexandria, Va.

Barnes, Oliver W.,
Chief Eng. Pittsburg and Connellsville R.R. Co., Pittsburg, Pa.

Edward Boyle,
Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York
Office 123 Chambers st.

Clement, Wm. H.,
Little Miami Railroad, Cincinnati, Ohio.

James Converse,
Chief Engineer Galveston, Houston & Henderson Railroad,
Galveston, Texas.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
64 Broadway, New York.

Davidson, M. O.,
Civil and Mining Engineer. Office Swanton Coal and Iron Co.,
51 Exchange Place, BALTIMORE, Md.

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Division Engineer 3d and 12th Divisions,
ILLINOIS CENTRAL RAILROAD,
Vandalia, Ill.

Gay, Edward F.,
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Gilbert, Wm. B.,
Syracuse and Binghamton Railroad, Syracuse, N. Y.

Gzowski, Mr.,
St. Lawrence and Atlantic Railroad, Toronto, Canada.

Grant, James H.,
Nashville and Chattanooga R. R., Nashville, Tenn.

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Civil and Mechanical, Steam and Hydraulic Engineer,
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Lake Superior.

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Mills, John B., Civil Engineer,
Sackets Harbor and Saratoga R. R., 24 William St., N. Y.

Septimus Norris,
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Saml. & G. H. Nott,
Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,
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Prichard, M. B.,
East Tenn. and Georgia Railroad, Knoxville, Tenn.

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Roberts, Solomon W.,
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

Sanford, C. O.,
South Side Railroad, Virginia.

Charles L. Schlatter,
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Brunswick, Georgia.

Straughan, J. R.,
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Shanly, Walter,
Chief Engineer Bytown and Prescott Railway,
Prescott, Canada.

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Charles B. Stuart,
Consulting Engineer, 23 William str., New York.

Edward W. Serrell,
Civil Engineer, 23 William st. New York.

Trautwine, John C.,
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Troost, Lewis,
Alabama and Tennessee Railroad, Selma, Ala.

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NOTICE.**

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tect and Engineer, will erect Suspension Wire Cable
Bridges for railroad crossings from two hundred to three
thousand feet span, and wooden bridges of three hundred feet
span for any purpose of crossing, and he will also erect foot
bridges for man and horse crossing with short or long spans in
any part of the United States upon fair terms. Please address
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ARE prepared to erect Iron Bridges or Roofs, or any kind
of bearing trusses, girders, or beams, to span one thou-
sand feet or under, of any required strength, in any part of the
country. Their bridges will be subjected to severe tests, and
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OF BOILERS.**

WEISSENBORN'S PATENT

Incrustation Preventor

effectually obviates incrustation by separating the incrusting
matter from the water before it enters the boiler, while at the
same time it is of great value as a **HEATER and CONDENSOR.**
The apparatus occupies but little space, is simple in construction
and management, and applicable alike to stationary, loco-
motive and marine engines.

Testimony can be furnished of its successful operation for
several months during which it has been in use here, and for
two years in Europe, with water containing an unusual propor-
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Drawings and full descriptions will be furnished to parties
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SILAS K. EVERETT, of Everett
& Brown, N. Y. **SAMUEL WILLIAMS,** Pres't of
Wells, Fargo & Co. 18tr **Am. Exchange Bank, N. Y.**

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street,
as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without
change of baggage or cars. At Hornellsville this Train con-
nects with a Way Train for Dunkirk and all stations on the
Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, with-
out change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Pier-
mont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate
stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and inter-
mediate stations.

On Sundays One Express Train—at 5 a.m.

These Express Trains connect at Elmira, with the Elmira &
Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dun-
kirk with the Lake Shore Railroad for Cleveland, Cincinnati,
Toledo, Detroit, Chicago, etc.

Lt. **D. C. MCCALLUM, General Sup't.**

**Lawrence Scientific School,
HARVARD UNIVERSITY.**

THE next Term of this Institution will open on the first day
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Instruction by Recitations, Lectures, and Practical Exer-
cises, according to the nature of the Study, will be given in:

Botany.....	by Prof. Gray.	
Chemistry, Analytical and Prac- tical.....	" "	Horsford.
Comparative Anatomy and Physi- ology.....	" "	Wyman.
Engineering.....	" "	Enstia.
Mathematics.....	" "	Pierce.
Mineralogy.....	" "	Osake.
Physics.....	" "	Lovering.
Zoology and Geology.....	" "	Agassiz.

For further information concerning the School, application
may be made to Prof. E. N. HORSFORD, Dean of the Faculty,
CAMBRIDGE, MASS., Jan'y, 1856. 6152

**To Engine Drivers and Me-
chanics.**

FIFTEEN to twenty Locomotive Drivers and Mechanics of
good character, experience, and steady habits, will find
permanent places and liberal compensation on the Mobile and
Ohio Railroad at Whistler, five miles from Mobile City.

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Engineer and Sup't.

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Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of
STOCKS, BONDS, &c., strictly on commission. Orders
respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.
REFERENCES: American Exchange Bank, Bank of the Re-
public, Metropolitan Bank, Merchants' Bank. 1y18

**To Civil Engineers and Con-
tractors.**

JUST PUBLISHED—A set of Tables for finding, at a glance,
the true cubical content of Excavation and Embankments
for all Bases, and for every variety of Ground and Side Slopes.
By **M. E. LYONS,** Associate Engineer, Lebanon Valley R. R.
The Tables are 24 in number, printed in clear, bold type on
sheets of tinted paper, 25x16 inches. Sold in separate sheets,
at 25c. each, or the whole handsomely bound in cloth in one
volume for \$7.50, by **JOSEPH HUNT,** 139 Chestnut st., Phila.;
WM. MINNIN, Baltimore, Md.; **ENTWISTLE & SON,** Alexan-
dria, Va.; **MCOLLEAN & Co.,** Toronto, O. W., and by all book-
sellers.

Testimonials may be seen at the office of this paper. 88

**Four First Class Locomotive
Engines for Sale.**

1, Cylinders 15½x22, Drivers 5½ feet,
2, Do. 15 x20, Do. 5 feet,
1, Do. 15½x22, Do. 4½ feet,

all of which have 4 wheels connected with centre bearing
trucks; wrought in frames and pedestals; copper flues; lifting
link valve motion. **H. & F. BLANDY.**

ZANESVILLE, Ohio, August 11th, 1855. 33

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No 4.]

SATURDAY, JANUARY 26, 1856.

[WHOLE No. 1,032, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, January 26, 1856.

How Far Are We Enriched by Importations of California Gold ?

The desire to possess gold and silver being more constant and universal than for any other kind of property, led to their adoption as mediums of exchange. At all periods in history it is seen that men have been ever ready to part with whatever they had to sell for the precious metals, as their possession gave the power, by a simple exchange, of obtaining any object of desire. All contracts, consequently, by mutual consent became payable in them.

This double use of gold and silver, both in the arts, and as a medium of exchange, led to very erroneous ideas in the science of political economy, which prevail to a considerable extent at the present day. The more important of these is the "balance of trade" doctrine, which measures the extent of national wealth, and decides trade to be profitable or unprofitable, just in proportion to the amount of gold possessed, or received in exchange. Hence, only comparatively a few years since, every commercial community sought by positive enact-

ments to encourage their importation, and discouraged their exportation, with a view to the promotion of individual and national wealth.

Now it is essential to the prosperity of every people that it possesses an amount of gold and silver sufficient for all purposes of exchange, just as it is essential that it possesses beasts of burden and improved highways sufficient for the economical and expeditious movement of merchandize and produce. But the use of gold and silver as a circulating medium, does not render it, as property, *different* from any other kinds of property. All kinds have their appropriate use, but this does not render one kind any more valuable than another. National prosperity is at its highest point, when the abundance of the different kinds of property are into exact ratio to their uses, or the demand for them. The *excess* so long as it remains a surplus, is so much *unproductive* property, whether it be in gold and silver, ships, railroads, warehouses, or manufacturing establishments. Whenever a superfluity exists, the sooner it is got rid of, either by sale or by ceasing to produce till the supply overtakes the demand, the better.

Now it is a proper question for consideration, whether we have made too large an investment in California gold,—in other words, whether the amount of labor and capital consumed in its production would not have produced greater values employed in the ordinary channels of industry; and whether we have not on hand a very large surplus of the precious metals over and above any use for them, and which it is our interest to export to foreign markets and convert into *productive* property.

The increased demand for gold to be used in the shape of *money* is not only very slight, but the am't actually used in comparison to the number and extent of business transactions, is exceedingly small. The ratio of one to the other is constantly decreasing instead of increasing. Just in proportion to the intelligence of a community, and the means engaged for familiar intercourse, does paper currency, in one form or another, take the place of gold and silver. The reason is a very obvious one. The one kind of currency is *cheap*; the other *costly*. The cheapest is the most convenient; and where a good degree of mutual con-

fidence—the result of intelligence and social intercourse—prevails, it will be always used in preference to the more expensive and inconvenient one. The amount of gold and silver introduced into a country has no considerable tendency to change the proportion of paper to gold. This is exactly our experience in reference to California gold. Take the case of Massachusetts. The total discounts of the banks in this State at the commencement of the year were \$97,222,876, while the whole amount of specie, upon which these discounts were based, was only \$4,497,731. These discounts measure very nearly the paper currency of this State, for it must be remembered that the greater part of the commercial transactions of such a community as Massachusetts are consummated by the use of *checks*, which represent, as do bills, a mere credit only. Now, is it not plain to see that it would have been much more to the advantage of the people of Massachusetts, had the labor and capital expended in the production of California gold, been employed in the development of the resources of that portion of our territory this side of the Rocky Mountains. The result in the latter case would have been *productive* capital, equalling, and perhaps excelling in amount the nominal value of the gold product,—the greater part of which, as we have seen, is *unproductive*.

These facts will serve to explain why the large receipts from California serve to exert so feeble an influence upon the money market. This is already abundantly supplied by the banks, which have all the specie they desire, and all that is necessary to form the basis of a stable *paper* currency. The greater part of the gold import at the present time, consequently, is just so much of a tax upon our capital and industry, unless we *export* it and receive, in exchange, property that can be made the basis of further production—such as iron for our roads, materials necessary for our commercial marine, manufacturing establishments, &c., &c. It is the easiest thing in the world for a nation to be made poor by a *plethora* of gold. We have plenty of such instances in history. Spain, which for centuries almost monopolized the gold produce of the world, was never a rich country during the whole period of her fancied greatness. To render us rich, we need what we have the present

year, abundant crops, which we are hastening to export to the last sack of corn and the last bale of cotton,—but not gold merely, unless we treat it in the same manner that we do the products of our commerce and manufactures. Every importation of California gold adds to the burdens resting upon us. Unless immediately exported, we have to give in exchange productive, for an equal amount of unproductive capital.

Of course, we need a reserve fund of gold and silver sufficient to meet any extraordinary calls made upon us, such as may arise from a general failure of our crops as in 1854,—or from other causes. Commercial balances between nations must be liquidated in coin. Only a moderate amount is needed for such objects. There can be no doubt that there is in the United States an amount far exceeding any present or prospective demand either for domestic purpose, or our foreign commerce. The exportation of any surplus, could not fail, therefore, to have a favorable effect upon the money market. It would either discharge our foreign indebtedness, and so place our people at ease, or would, by an exchange of unproductive for productive property, increase in an equal degree our available means. Hence, as a general rule, the quickest method by which to relieve us from any kind of embarrassment is to ship gold,—because it is only the use of our reserve strength, and turning to account capital lying idle. We should constantly ship gold, as this is the only return that California can make us for the outlay on her account. By immediately parting with it, we so far make ourselves whole. The retaining of it is locking up just so much capital.

Cleveland, Columbus and Cincinnati Railroad.

At the late annual meeting of the stockholders of this company, the following persons were chosen as Directors for the ensuing year:

A. Kelly, Columbus; Leonard Case, R. Hilliard, L. M. Hubby, A. Stone, Jr., S. Witt, M. B. Scott, S. Williamson, Cleveland; E. S. Prosser, Albany; John Miller, Columbus; Hosea Williams, Delaware.

At a subsequent meeting of the Directors, L. M. Hubby was chosen President.

The officers of the road the same as last year.

The company declared an extra dividend of 5 per cent. in stock, fractions payable in cash; for money earned by the road and expended in construction and equipment during the last year.

The annual statement of the business of the above road, made up to the 1st of December last, exhibits the following condition of affairs: Passenger receipts, \$463,005 91; freight do., \$651,807 21; express and mail do., \$44,527 61.—Other receipts, such as rents, dividends, &c., \$7,252 57. Total earnings for the 12 months, (including the estimate for Dec., \$115,000,) \$1,281,593. 80. Expenses of operating the road, (including \$50,000, the estimated cost for Dec.) \$520,036 65. The net earnings for the 12 months, is, therefore, \$761,556 65. The indebtedness of the company, outside of capital stock, was, for mortgage bonds, \$45,000—non convertible bonds, \$3,400. Franklin county bonds, payment assumed, \$50,000—other items, \$35,092 54—total, \$133,492 54. The amount of contingent fund was \$268,240 69. The assets, composed of balances due from other

companies and individuals, bills receivable, and other items, were \$448,503 81.

The War and its Effects upon the English Money Market.

We copy from the money article in the London *Times* of the 1st inst., the following argument in reference to the effect of the war in which Great Britain is at present engaged, upon the financial condition and prospects of that country. It will be read with great interest, whatever may be thought as to the correctness of the propositions attempted to be established. They are strongly supported by the apparently healthy condition of the commercial and manufacturing interests of England, under the enormous burdens that the war imposes. If the confidence expressed be well founded, we certainly have no great cause for immediate apprehension for our own country, all of whose interests are certainly quite as prosperous as those of Great Britain, while the profits of our industry are not wasted to the tune of hundreds of millions upon distant and enormously expensive wars.

The financial experience of the past year, like that of its predecessor, has justified the reliance expressed at its commencement. The chief question then was, whether the Government would resort to loans instead of prejudicing the war by adding too heavily to its burdens. Sound policy prevailed, and the country has not only been able to meet satisfactorily all other sacrifices required of it, but has maintained a course of commercial prosperity fully equal to the average of ordinary times, and far greater than has been witnessed elsewhere, even among those nations that have remained at peace.

This result, moreover, has been arrived at in the face of attempts to create a commercial panic similar to those vainly employed in 1864. Although consols, which were driven down to 85½, have this year, in like manner, touched 86½, the general range of prices has shown remarkable firmness. Confidence, also, has characterized the money market since, while the rate of discount during the concluding three months has stood at a point rarely reached, there has been an almost total absence of any exclusively domestic cause for the alteration, and it has consequently been followed by few signs to indicate that anything unusual has taken place. The demand for gold in France and some parts of Germany to pay for food, and the unexpected and sudden measures taken to obtain it, created a corresponding movement in all quarters. As regards her general position, however, England stood in just the same relation to other countries before it occurred as she occupied afterward. Its effects, therefore, were relatively unimportant, and enough has since been witnessed to demonstrate that in the absence of any abnormal influences there was nothing in the state of English commerce to lead to pressure of any kind. Indeed, so long as the rise is universal, and we are not placed at a comparative disadvantage by it, there will be no national cause for alarm, whatever point may be reached. The experience of America and other countries where the rate has been commonly from 8 to 15 per ct. shows the conditions to which, under certain circumstances, trade can healthily adapt itself.

With respect to the future, this solidity of our commerce is sufficient to dispel all anxiety, and there is no reason to regard the third year of the war with any diminution of the trust rightly entertained at the commencement of the preceding two. Happily, the public are being gradually disabused of the vague terror that war and financial confusion are inseparably connected. A great nation making enormous annual additions to its capital from the profits of an undisturbed trade can carry on hostilities for any number of years without necessarily experiencing a moment of monetary difficulty. Of course, it is deplorable to

sink in this way what might be applied to our material progress, but even in that respect regret is diminished by the fact that instead of so applying it, we usually squander it in foreign loans or schemes which are ultimately repudiated or broken up.

All that is requisite to insure safety is that the Government should resolutely limit its expenditure to a point which will not cause the annual efflux of bullion to exceed the realized surplus at our disposal; and, as the circumstances necessitating that precaution are inexorable, there can be no pardon for inattention to it. Whatever devices may be resorted to—unlimited issues of paper, suspension of specie payments, or even, as in Russia, a prohibition of the export of gold—nothing can do away with the annual requirements for bullion to meet all the excessive imports the war occasions. Hence our power of continuing the war must depend exclusively upon our power of getting gold. As we possess this power, however, to a greater extent than any other country, such a condition ought not to be considered a hard one. We have the certainty that in fighting upon these terms there are none who can hold out so long, and that it is the consciousness of this fact that everywhere inspires awe.

That in the present state of our trade our annual gains are amply sufficient for an expenditure which no other country can rival has been shown by the results of the past year. Notwithstanding the prodigality of our direct outlay, the grant of loans to Sardinia and Turkey, and the continuous disbursements for public works in India, Canada, and elsewhere, to which we had committed ourselves before any peril was apprehended, the specie at the Bank of England is only £1,600,000 below the point at which it stood two months after the declaration of war, while the quantities held by other establishments in the United Kingdom are in excess of their usual aggregate.

Foreign merchants will not take securities in payment for their goods any more than they will take bank notes. To meet that large proportion of the expenses of a war which represents the extraordinary profits of contractors, shipowners, &c., and which, involving merely a transfer of money from the community at large to certain individuals of their body, terminates in no actual loss to the nation, loans are the true resources; but for anybody beyond they are a delusion. Satisfaction, therefore, may be felt that, in the unlikely event of the Government being rash enough to bring this truth to a practical test, there would still be a means of averting the peril that would ensue, and of giving them time to return to a wiser course.

It is true that in case of mismanagement on this point one legitimate palliative is open to us, and it is well that such is the fact, since it is impossible to foresee into what mistakes Government may yet be led, by the frequent repetition of the phrases that, in the conduct of the struggle, money is not to be considered, and that it remains to be seen how far the maintenance of specie payments is compatible with a state of war. These cries, like those of the currency theorists, would beget an impression that, owing to our credit, our means are illimitable, and that, at the worst, all that a minister has to do is to create consols for what he wants, or impose fresh taxes. In the gold question, however, neither a creation of consols nor the heaping on of taxes can help us.

The present constitution of the currency leaves us always with a magnificent expedient for any sudden emergency. An issue of £1 notes might set free at any time probably not less than £20,000,000 of bullion. Like all such aids, however, it would admit of no repetition, and should, therefore, be held up merely for the instruction of our enemies, as showing the extraordinary reserves that must be exhausted before they can hope to see us even approaching the premonitory symptoms of a state of real difficulty.

If, however, our expenditure had been carried greatly beyond these limits, what would have been the result? A Bank Restriction Act and an issue

of irredeemable paper would render the coin now in circulation available for export, but half of it would probably be hoarded, and after the other half, amounting perhaps to £40,000,000, had been sent away, we should find in the succeeding year that the limitation of expenditure by which we might voluntarily have preserved the credit of the country would be forced upon us in the midst of disaster and confusion. When in our prodigality we had parted with all we possessed, and had injured our commerce in the act, we should learn that upon that commerce for the future must our only supplies depend.

The belief is, consequently, warranted that, with ordinary care, our monetary position is impregnable. In fact, assuming a continuance of the war, and of the steady avoidance of speculation which is its consequence, it may be said there has rarely been a time when our prospects have presented fewer elements of uncertainty. The exertions on the continent to obtain gold from us have left us unusually free from claims from foreign countries; the Australian crisis having passed, there is no apprehension, such as commonly prevails even in the best times, that at least some individual market can be pointed out where, from a glut of our goods, a reaction is to be expected; the prevailing rates of interest offer no difficulty, because, being general, they fail to compromise our power of competition with other nations, and our home supplies of food are fully equal to an average, while the favorable Autumn and high prices have stimulated a further increase of agricultural activity. We have also the certainty of benefiting more than any other country by that free expenditure always consequent in America upon a successful harvest and a heavy foreign demand; and, finally, the latest accounts, both from California and Australia, give the assurance, not only of a continuous, but of a large and steady increase of the influence of the gold discoveries.

It is, at the same time to be borne in mind that with every month the prospect becomes stronger of a return of some of the immense supplies of specie already sent to the East. The process of hoarding, even among the most unenlightened populations, never goes beyond a certain point, and there are indications in Turkey and elsewhere of its approaching cessation—a result which must be accelerated by the high value of money. To China the drain continues without a sign of diminution, but a considerable portion of it is on American account; and it is therefore partially met by increased receipts from that country. Within the last 30 years there have been two examples of a similar outflow. In neither case, however, although both lasted a long time, was it so protracted as in the present instance.

From this review we arrive at conclusions calculated to give faith to every one in the full maintenance of our credit and prosperity. It will be seen that, whatever may be the general rates of discount, we are perfectly in a state to accommodate ourselves to them, and that all that is necessary for our continued security is that the Bank should unflinchingly continue to keep their charges up to the general level of those upon the Continent. This of itself will operate as a warning sufficient to restrict the Governments both of France and England within the bounds of legitimate expenditure.

But while the commercial and agricultural classes have thus every cause for confidence and satisfaction, it must be acknowledged that those less extensive sections of the community which include all persons of fixed incomes are subjected to serious hardship. They are forced to sustain, simultaneously, the effect of the gold discoveries upon prices, and the full but far from impartial severity of the Income Tax, and are shut out from all counteracting advantages. This, which is a point for the Government to keep in view in adjusting the popular burdens, since, while they can palliate, they may avoid aggravating it, seems almost the sole exception to the general well-being.

If, on the other hand, contrary to expectation.

the war should suddenly end, although a period of wonderful development would follow, the time for real anxiety would then approach. Whenever a new period of inflation in England shall arrive, it will be fraught with a new and singular danger. The secret discovered by foreign Governments and corporations just before the outbreak of hostilities, that by guaranteeing a certain amount of interest they may attract our capital without limit for the execution of public works, will be made use of to an extent to which it is difficult to see any termination, except the usual one of a grand convulsion.

Previously to the interruption caused by the war, countless schemes of this kind were in preparation, and in the subsequent two years projectors have been busy at all points preparing to add to the number. When Europe is again in repose, they will flock round every Government, and, inasmuch as all proposals for great national undertakings are deservedly popular with the masses, while they flatter the vanity of potentates and the cupidity of courtiers, the success of their endeavors is likely to be limited only by their capacity for invention. In this way the movement will go on until a crisis of unexampled magnitude will reveal that it is in peace, and not in war, our financial position is most assailable, and, probably, that while we have been constructing every great work that could add to the glory of foreign cities and ports, including, of course, those of Russia, we have neglected all similar duties at home, and have impoverished ourselves to a point which must condemn us still to a postponement of them.—*London Times, Jan'y 1st.*

Illinois Central Railroad.

The following is a statement of the monthly earnings of the above road for 1855.

	Jan'y.	Feb'y.	March.	April.	May.	June.
Passage.....	\$28,661 11	\$24,831 77	\$39,912 70	\$58,978 26	\$61,489 09	\$61,391 13
Freight.....	16,637 92	23,994 45	39,826 02	48,729 40	42,687 68	45,061 61
Rent to other companies.....	4,366 96	3,281 66	6,527 24	7,653 92	8,206 90	7,300 12
Mails and Express.....	2,383 19	2,385 10	2,383 19	2,383 15	4,165 77	4,168 64
Rent, &c.....	6,188 92	4,863 23	5,003 40	4,094 38	4,864 94	5,600 76
Total.....	\$57,068 10	\$59,824 20	\$92,632 55	\$113,444 11	\$121,434 16	\$123,421 26
Passage.....	\$62,466 73	\$58,940 98	\$72,066 53	\$95,916 12	\$76,529 37	\$57,920 29
Freight.....	50,617 80	70,066 96	67,179 52	88,813 31	80,019 38	65,414 98
Rent to other companies.....	8,204 08	10,142 14	12,475 64	15,087 24	11,969 46	10,854 66
Mails and Express.....	4,168 64	4,327 73	4,890 66	4,890 66	6,390 66	5,167 81
Rent, &c.....	5,168 57	4,400 75	4,786 78	5,550 88	4,500 06	2,925 24
Total.....	\$139,630 82	\$153,877 51	\$160,918 98	\$209,707 21	\$176,378 93	\$133,270 98
Passage.....	\$69,948 93	\$63,984 91	\$70,066 53	\$95,916 12	\$76,529 37	\$57,920 29
Freight.....	630,834 91	106,065 82	630,834 91	106,065 82	630,834 91	106,065 82
Rent to other companies.....	106,065 82	106,065 82	106,065 82	106,065 82	106,065 82	106,065 82
Rent, &c.....	106,065 82	106,065 82	106,065 82	106,065 82	106,065 82	106,065 82
Aggregate Total.....	\$1,632,118 81	\$1,632,118 81	\$1,632,118 81	\$1,632,118 81	\$1,632,118 81	\$1,632,118 81

Circular of the Michigan Southern R. R.

The earnings of this company for the year ending Jan'y 1st, 1856, amount to \$2,595,630 22.

The monthly receipts as compared with last year are as follows:

	1854.	1855.
January.....	\$88,825 32	\$120,171 37
February.....	93,797 08	107,743 39
March.....	149,586 94	203,614 69
April.....	169,833 65	246,127 15
May.....	227,377 80	270,970 74
June.....	214,534 82	248,370 71
July.....	144,342 63	153,656 52
August.....	167,715 01	196,944 66
September.....	225,401 81	236,889 26
October.....	292,146 86	343,029 63
November.....	233,756 82	260,564 08
December.....	151,493 17	207,547 02

Total.....\$2,158,311 91 \$2,595,630 22

The following is a statement of the Income account since last report, viz:

Dec. 31. To operating expenses, six months.....	\$789,154 02
To interest on bonds and accounts.....	203,261 67
To general expenses, taxes, and agencies.....	79,528 39
To sinking fund for redemption of bonds of 1855.....	40,000 00
To dividend, 5 per cent., payable this day.....	204,130 00
Balance.....	170,344 60

Total.....\$1,486,417 63

July 1. By balance, per report of this date..... 87,785 46

By earnings, six months, to December, 31st, viz:

Passengers.....	\$864,317 20
Freight & miscellaneous.....	513,388 10
Mail.....	20,926 78
Total.....	\$1,398,632 17

Total.....\$1,486,417 63

Jan'y 15. By balance to credit Income account.....\$170,344 65

The company have expended, during the past year, for rails, chairs, spikes, &c., in the re-laying of the track of the road, the sum of \$71,356 79, which has been charged to the operating expenses, a part on the first half and part on the last half of the year.

A dividend of 5 per cent. was paid in July last, and a like dividend is payable Jan'y 15th inst.

From the year's earnings, over the expenses, interest, dividends, and the semi-annual contribution of \$40,000 to the sinking fund, there remained (as appears from the income account above) a surplus of \$170,344 65, estimating the road, appurtenances, and steamers at cost. The road and fixtures have been well maintained, and are now in good order. The steamers have depreciated; and to meet their reduced value, the Board decided to appropriate this surplus, considering it the proper course to maintain the integrity of the property.

The commissioners of the sinking fund hold 45 of the bonds in which the fund is first to be invested, which they have purchased.

The construction stock will hereafter be entitled to the same dividends as the other stock of the company, and it may at any time be exchanged by a surrender of the certificates held therefor.

It has long been deemed a matter of much interest to this company that a railroad should be constructed between Toledo and Detroit, but, until the last session of the Legislature of Michigan, no authority could be obtained from that State to authorize it.

The charter of this company in the State of Ohio authorizes the construction of so much of that road as is in that State. The right of way for fourteen miles further, being from the Ohio

line to Monroe, was obtained nearly two years ago, and has been paid for. At the same time the right of way was procured, a contract was made by our then Northern Indiana Railroad Company for the construction of these fourteen miles of road, by which everything, (except the rails, chairs and spikes), including fencing and ballasting, was to be furnished and performed by the contractor for \$7,000 a mile. By our consolidation, this, with other obligations, was assumed. This fourteen miles is but a fair average of the whole line to Detroit.

It is known that we are constructing what is called the Goshen Air Line, which will, when completed, be the main line of the road from Chicago to Toledo. We shall then have the present road from Elkhart (the point of intersection of the Eastern line) east to Monroe, a distance of 144 miles, in good order, and to be maintained and operated, but having an eastern terminus at Monroe, very limited in its business, and of little promise for the future. By a practical extension of this road about 36 miles from Monroe, we reach Detroit, where there is a very large and increasing business. This extension is the portion of the Toledo and Detroit Railroad beyond that part heretofore assumed by the Northern Indiana Railroad Comp'y. We have now a road from Chicago to Monroe of 242 miles, to which add the distance to Detroit, and we then have the shortest railroad line between Detroit and Chicago. This fact may show the reason why authority to make the road was so long withheld from us.

A company has been formed for the construction of so much of the road as is in the State of Michigan. Several of our directors have subscribed to its stock the sum of \$200,000, for the sole benefit of this company, and they form a majority of the direction of the new company, and they intend to assume the construction of the road.

The length of new road required to be made is about 56 miles. We believe that it will be a profitable road of itself, without considering its value to this company. There is now no railroad connection between the south side of Lake Erie and Detroit. During navigation there are three daily lines of steamers, each way, between Detroit and the cities of Cleveland, Sandusky, and Toledo.

Under the conviction that the value of this extension to the business of our company will be so decided as to leave no question as to the propriety of its construction, and the ease and economy with which it may be operated, we have proposed to lease the road, when completed, and to pay an interest of eight per cent. upon the full paid stock of the company. This has been so long contemplated as a connection of our road, and its importance is so clear, we cannot doubt but that it will receive the approbation of the stockholders of this company.

JOHN WILKINSON, President.

Cumberland Coal Region.

The following is a statement of the shipments of coal from the Cumberland coal fields, for the past fourteen years.

Years.	Jeng's Run	Brad's Run	West'n p't.	Total
	Valley. Tons.	Valley. Tons.		
1842.....	757	951		1,708
1843.....	3,661	6,421		10,082
1844.....	5,156	9,734		14,890
1845.....	13,738	10,915		24,653
1846.....	11,240	18,555		29,795
1847.....	20,615	32,325		52,940
1848.....	36,571	42,000		79,571
1849.....	63,676	78,773		142,449
1850.....	76,950	119,898		196,848
1851.....	122,331	135,848		257,679
1852.....	171,891	159,287		331,178
1853.....	234,441	225,813	73,725	533,979
1854.....	203,343	263,115	181,840	648,299
1855.....	170,685	200,634	292,995	664,304

1,138,004 1,304,810 548,560 2,991,374

Journal of Railroad Law.

COMMON CARRIERS—DISTINGUISHED FROM WAREHOUSE MEN.

We have had occasion in several previous articles to point out what constituted a common carrier—the nature of his liability, and in particular, how he was distinguished from a warehouse man. See vol. xxviii, pp. 87, 88, 537.

The following case, a report of which we find in the *Pittsburg Legal Journal*, is of interest on this point.

Needles vs. Clarke. Supreme Court of Pennsylvania.

This was an action for the loss of goods against Clarke & Thaw, the defendants, in whose possession they were, when destroyed. The following are the material facts in the case.

Messrs. Clarke & Thaw were common carriers from Pittsburg to Philadelphia, and kept a warehouse in the city of Pittsburg. On the 21st June, 1853, they gave the plaintiff the following receipt for wool, which the agent directed them to forward immediately:

Received, Pittsburg, June 21, 1853, of J. G. Campbell, twenty-five sacks of wool, in good order, marked Stitt, M. & Co. CLARKE & THAW, by C. J. Clarke.

It was admitted that the wool remained in the warehouse of the defendants, until Sunday, June 26, 1853, when the warehouse and contents were destroyed by fire. It was also shown that from the 18th to the 27th of June, the water was drawn off the canal on which the wool was to have been transported, from Freeport to Leechburg, to make repairs on the Aqueduct, and that navigation was suspended from Leechburg to Pittsburg. The water was first put on again on Saturday the 25th.—The first boat from the East reached Pittsburg at six o'clock on Saturday evening, the evening before the fire. The jury returned a verdict for the price of the wool, subject to the opinion of the Court, on the right of the plaintiff to recover on the admitted facts. The Court afterwards entered judgment on the verdict, and from this judgment the defendants appealed.

The opinion of the Court was delivered by LEWIS, C. J.—It is admitted that the defendants below were warehousemen and common carriers at the time the goods were delivered to them, with directions to "ship them immediately to Stitt, Martin & Co., Philadelphia." If they had also occupied the character of forwarders, the direction to "ship immediately" must have applied to their duties in the latter capacity. But they were not forwarders. If the case contained any fact from which it might be inferred that the goods were delivered to be placed in the defendants' warehouse to await the orders of the owner, or for any purpose of convenience to him, the ordinary liabilities of warehousemen would be all that could attach to them. But there was no direction to store the goods—no delivery to them for that purpose—no necessity or convenience of the owner requiring the goods to be stored. They were not delivered to be detained to await the orders of the owners. The goods and the order to ship them immediately, were delivered together. The only inference to be drawn from the facts of the case is, that they were delivered to the defendants as common carriers, and the storing of them, in their warehouse, was an act of their own, for their own convenience, and was incident to their business as carriers.

Judge Story, in his work on Bailments, sec. 536, states the law on this subject with precision:—"If a common carrier receives goods into his own warehouse for the accommodation of himself and his customers, so that the deposit there is a mere accessory to the carriage, and for the purpose of facilitating it; his liability as a carrier begins with the receipt of the goods." "So, if an inn-keeper is, at the same time, a carrier, and goods are sent to his inn, and received by him for transportation,

he is liable, as a carrier, for any loss before they are put upon their transit." "On the other hand, if a person is at the same time a common carrier and a forwarding merchant, and he receive goods into his warehouse "to be forwarded, according to the future orders of the owners; if the goods are lost by fire before such future orders are received, or the goods are put in transit, he is not chargeable as a common carrier, but only as a warehouseman." Story on Bailment, sec. 357. The case of Platt, et al. vs. Hibbard & Webb, 7 Cowen, 497, was the case of delivery to a warehouseman to remain there for the purpose of being forwarded, subject to the owner's order. It was there held that the bailee was answerable only to the extent of a warehouseman's liability. The case of Forward vs. Pittard, 1 T. R. 27, was one in which the carrier was held to be liable for goods destroyed in his booth before they were put on the transit.—It may be of some advantage to a carrier to have a warehouse instead of a 'booth,' in which to secure the goods until he is ready to put them on their way to their place of destination. But it is no concern of the owner of the goods. It works no change in the carrier's liability for goods delivered to him for transportation. That the goods were delivered, in this case, for that purpose, is too clear for further argument. The defendants below were therefore liable as carriers and the judgment should be affirmed.

A comparison of this case with that of Thomas vs. Boston and Providence railroad, [Am. R. R. JOURNAL, vol. xxviii, pp. 537,] will show the following principles.

I. A warehouseman is only liable for those injuries to goods entrusted to his charge which result from actual negligence on his part.

II. A common carrier, in the absence of any agreement to the contrary, is liable for all injuries to property entrusted to him for transportation, except such injuries as are caused by the act of God or of a public enemy.

III. And it makes no difference in his liability that the goods are stored in his warehouse at the time of their loss, provided they are stored by him for his own convenience, and as a means of transportation;—as where they are awaiting the arrival of the boat or train in which they are to be transported;—but

IV. Where the goods are stored by him for the convenience of the owner, not as a part of the transportation, as where they have arrived at the place of their destination and are waiting in the carrier's warehouse the direction of the owner or consignee, the carrier is only liable as a warehouseman, that is for losses or injuries resulting from his actual negligence or misconduct.

Charleston and Savannah Railroad.

At the annual meeting of the stockholders held on the 16th instant, in the office of the company, the following named gentlemen were elected to serve as President and Directors for the ensuing year:

President—Thomas F. Drayton.

Directors—Hon. W. Porchen Miles, Mayor; Wm. Kirkwood, W. F. Colcock, Otis Mills, C. G. Memminger, L. T. Potter, J. B. Campbell, W. E. Martin, Edmund Rhett, and Henry Gourdin, of Charleston; William B. Hodgson and R. Bradley of Savannah.

The company have commenced work in this important enterprise in good earnest. On the 1st of February, Messrs. E. & G. B. Lartigue will begin the embankment, clearing, grubbing, and trestle work upon the 18½ mile section, between Rantowle and Edisto river. The location by way of Steinmeyer's farm opposite the city, has been adopted. From Rantowle's to Ashley river, opposite to Charleston, a distance of ten miles, the road will soon be under contract. This will be

about thirty miles. The whole distance from the Ashley to the Savannah is little more than eighty miles.

Nashville and Chattanooga Railroad.

Abstract of the report of the Directors of this road for the year ending Nov. 30, 1855.

The receipts of the past year have been from
Transportation Department.....\$124,720 77
Expenses of conducting transportation.....223,955 68

Net profits for transportation....\$200,765 09
70 bonds sold with State endorsement.....\$70,000 00
From Bills receivable.....3,405 43
" Bills payable, discounted.....34,096 06
" Overcharge on storage of railroad iron refunded by United States Treasury Department.....2,600 00
Collected from individual subscription.....3,070 88
Cash on hand as per last report.....24,002 36

Total.....\$337,939 82
Of this amount there have been paid out for construction, mostly in Raccoon Mountains, and on bridge roofing.....\$23,659 70
Equipment, including six first class locomotives, freight and coal cars, addition to depot grounds buildings, &c.....81,686 10
Interest paid on borrowed money, on bonds, and all other items, chargeable to contingencies...102,902 43
Paid individuals since last report, suspense and st'k account.....3,330 68

Leaving a balance of.....\$126,360 91
The company will have to pay within the next 3 months on outstanding liabilities.....\$67,000 00
Interest on the bonds due 1st Jan'y next in New York.....45,000 00
Making.....\$112,000 00 112,000 00

Showing a balance of.....\$14,360 91
—After paying all liabilities falling due next year.
The receipts of 1854 were, from passengers.....\$136,870 47
Do. freight.....163,426 11
Do. mail service.....15,793 66

Total.....\$316,090 24
Expenses of management.....210,268 30
Leaving net earnings.....\$105,821 94
The receipts of 1855 were:
From passengers.....\$159,834 46
" freight.....235,662 44
" mail.....29,223 87
Expenses of management.....\$223,955 68
Clear profit.....200,765 09

Increase of gross receipts of 1855 over 1854 is \$108,620 58, or 34½ per cent.
Increase of net profits of 1855 over 1854, is \$94,943 15, or 90 per cent.; or in other words it cost in 1854 \$210,268 30 to clear \$105,821 94, while in 1855 it cost \$223,955 68 to clear \$200,765 09. The greater expense of 1854 in proportion to the income, was much of it owing to the consequent ex-

pense of keeping up the road the first year, with the fresh cuts and banks, all tending to wash and requiring constant work.

The income of next year, without further disasters, if the bridge can be rebuilt as soon as the contract requires, will not probably fall short of five hundred thousand dollars, and under the same circumstances the net earnings will be two hundred and fifty thousand dollars, which should be appropriated as follows:

To pay for 4 locomotives.....\$40,000
Do. 40 box freight cars.....28,000
To finish retaining walls, slides, and roof bridges.....30,000
Sinking Fund to renew iron rails and to pay bonds.....38,000
To pay 3 per cent. to stockholders and 6 on bonds.....136,500

Total.....\$272,500
or about twenty-two thousand five hundred dollars over the net profits. Which amount we hope to make over the estimate, and which, if we fail and still pay the dividend, will be a debt carried into the next year.

The income of the road would have been twenty-five thousand dollars more, without greater expense this year, if the State road of Georgia could have taken the freights promptly from our road. That road has ordered a large amount of additional machinery, and we hope will be able to take our freights promptly hereafter.

The safety of our road in this respect lies in the completion of the road from Chattanooga to Cleveland. It will bring the State road to a proper estimate of the value of our traffic, and induce proper outlays for machinery, and reduce freights to competing price with the river and more northern routes. The Cleveland road would add fifty thousand dollars at least to the income of your road, and thirty thousand to the clear profits. At the making of the Report a year ago, it was thought the Memphis and Charleston road would have been finished from Stevenson to Tusculum by the first of October last, and their cars running, and a large increase of business added to your road at Stevenson. This has not been done. The road will, it is now thought, be finished between these points in January next, and the cars run regularly thereafter from Tusculum to Stevenson. This will bring in a large amount of business. The McMinnville and Manchester Company have just begun to lay their iron, all of which is bought and the entire road bed ready for it, this road 31½ miles from Tullahoma to McMinnville, will be finished next summer, and contribute much to the income of your road. The Sewanee Coal Company are furnishing from three to seven car loads of coal, per day for transportation, and their business is rapidly increasing. The full force of all these roads will be brought to bear on yours most probably in 1857, when the increase of business will demand a large outlay for machinery and buildings, which together will require half the income of that year, after which the increase of machinery, &c., will bear so small a proportion to the large income that you may then expect, that you may look to that as the period from which to date the declaring of regular dividends, from clear earnings, after paying to the sinking fund to meet bonds at least one per cent., and as much to the renewal of iron and adding to machinery to meet the growing demands of a regularly increasing trade.

The income of your road, without serious accident, will be at least seven hundred thousand dollars in 1857, and by 1860 with usual crops and no serious calamity, nine hundred thousand dollars. To attain to this result in so short a time, the stockholders will have to invest, for the next two years, a large proportion of their income in machinery and outfit, and be able to encourage traffic by a prompt movement of freights, and great facilities to passengers and mails.

Abstract of the financial condition of the Nashville and Chattanooga Railroad Company, Nov. 30th, 1855.

CONSTRUCTION.		Dr.
Graduation and culvert Masonry ..	\$1,186,120 59	
Slides on Chattanooga division.....	74,131 58	
Bridging.....	297,311 74	
Railroad iron, chairs, and spikes...	730,524 87	
Timber for superstructure	165,644 43	
Laying do.....	134,439 73	
Engineering and contingent expenses	141,667 04	
		\$2,729,839 98

EQUIPMENT.		
Depot lots.....	\$35,752 48	
Depot buildings	94,749 16	
Wood sheds and water stations.....	20,451 16	
Division houses	4,285 78	
Tools and machinery.....	13,643 94	
Locomotives	224,950 43	
Cars.....	210,474 23—	604,307 18

CONTINGENCIES.		
Interest No. 1, "Cash".....	\$365,861 44	
Interest No. 2, "Stock".....	228,448 46	
Loss on Nashville and Murfreesboro' Bonds.....	\$66,321 98	
Less premium on Co.'s b'ds	9,884 28	
		56,437 70
Damages to Nashville, Murfreesboro', and Shelbyville T. P. Co.	23,262 50	
Expenses of collecting stock, lawyer fees, Court costs, and land damages.....	39,176 33	
		713,186 43

ASSETS.		
Due from individuals, agents, &c., equal to cash.....	\$59,993 07	
Doubtful.....	6,279 25	
		\$66,272 32
Bills receivable.....	21,112 34	
Cash.....	72,437 79	
Real estate exclusive of depot grounds.....	15,981 56	
Slaves	5,976 25	
Machine shop "materials on hand".....	17,100 88	
Nashville, Chattanooga, & Atlanta Telegraph Stock	1,373 59	
Unpaid individual subscription.....	70,634 95	
		279,839 68
		\$4,318,223 27

CAPITAL STOCK.		Cr.
City of Charleston, S. C.....	\$500,000 00	
Do. Nashville	500,000 00	
Do. Murfreesboro'	30,000 00	
Georgia Railroad and Banking Co.....	250,000 00	
Individual subscription	810,971 64	
Stock interest to 1st Jan'y, 1854	\$228,448 46	
Less fractional balance paid in cash.....	91 12	
		228,357 34
		\$2,319,328 98
Company's 30 year bonds endorsed by State.....	850,000 00	
Do. 20 and 25 year bonds do. do.....	625,000 00	
Do. 25 year bonds not endorsed by State.....	25,000 00	
Bills payable.....	94,433 41	
Due sundry individuals on account.....	3,206 89	
Suspense account	217 33	
Profits of road per Report for 1852-53	\$94,459 63	
Do. do. do. 1854.....	105,821 94	
Do. do. do. 1855.....	200,765 09	
		401,046 66
		\$4,318,223 27

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	68	Tennessee and Alabama.	30	246,486	679,906	In progr.	102,010	102,010	102,010	102,010
Androscog. & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	2,245,020	190,605	18	Memphis and Charleston.	288	2,103,177	3,563,362	In progr.	176,484	176,484	176,484	176,484
Ana. & Sagadahoc.	20	91,192	232,193	343,317	29,396	12,807	none	20	Mobile and Ohio.	627	2,300,000	3,664,991	In progr.	1,810,566	1,810,566	1,810,566	1,810,566
Kennebec & Portland.	72	1,211,396	1,607,229	2,470,593	228,747	114,642	none	14	Miss. Central.	158	642,534	628,303	In progr.	628,303	628,303	628,303	628,303
Portl., Saco, & Portland.	61	1,367,000	119,237	1,486,237	259,330	124,038	6	88	N.O., Jackson, and G. N.	100	1,300,428	1,828,812	In progr.	1,828,812	1,828,812	1,828,812	1,828,812
Hoston, Conc. & Montreal.	53	1,808,093	1,059,512	2,771,310	233,234	120,834	2	2	N.O., Opelousas & G. W.	350	1,111,760	1,071,895	In progr.	1,071,895	1,071,895	1,071,895	1,071,895
Cheshire.	53	2,083,825	946,919	3,181,997	372,592	181,015	none	18	Vicksburg, Shreveport & Tex.	111	1,000,000	1,500,000	In progr.	1,500,000	1,500,000	1,500,000	1,500,000
Concord.	35	1,485,000	none	1,412,578	329,744	158,632	8	84	East Tennessee and Va.	131	624,825	536,593	In progr.	536,593	536,593	536,593	536,593
Northern, N. H.	82	2,765,400	none	3,018,633	370,529	138,299	2 1/2	39 1/2	Nash. and Chattanooga.	161	2,319,330	3,543,694	In progr.	3,543,694	3,543,694	3,543,694	3,543,694
Con't & Passumpsic Riv.	121	1,048,145	787,608	1,780,062	162,677	55,173	none	none	Covington & Lexington.	98	431,091	169,299	In progr.	169,299	169,299	169,299	169,299
Rand & Burlington.	120	2,235,376	2,662,396	5,378,423	394,971	214,798	none	none	Lexington and Frankfort.	29	431,091	169,299	In progr.	169,299	169,299	169,299	169,299
Vermont Central.	117	5,000,000	3,550,236	8,463,386	820,119	214,798	none	none	Lexington & Big Sandy.	29	431,091	169,299	In progr.	169,299	169,299	169,299	169,299
Boston and Lowell.	27	1,830,000	325,635	2,188,595	489,754	140,377	6	65	Lexington and Danville.	65	698,236	699,061	In progr.	699,061	699,061	699,061	699,061
Boston and Maine.	83	4,076,974	150,000	4,179,535	906,790	421,561	8	82 1/2	Louisville and Frankfort.	65	698,236	699,061	In progr.	699,061	699,061	699,061	699,061
Berkshire.	21	600,000	none	600,000	42,000	7	none	7	Atlantic & Gt. Western.	254	866,939	77,294	In progr.	77,294	77,294	77,294	77,294
Boston and N. Y. Central.	71	2,234,600	1,500,000	3,310,948	102,852	42,355	none	2 1/2	Bellefontaine and Ind.	118	1,881,598	1,260,612	In progr.	1,260,612	1,260,612	1,260,612	1,260,612
Boston and Providence.	55	3,180,000	421,700	3,611,821	272,347	100,078	3	66 1/2	Cleveland and Erie.	95	1,881,598	1,260,612	In progr.	1,260,612	1,260,612	1,260,612	1,260,612
Boston and Worcester.	68	4,500,000	587,553	4,856,370	562,894	342,139	6 1/2	84	Clev., Col., and Cin.	141	4,473,721	374,127	In progr.	374,127	374,127	374,127	374,127
Connecticut River.	62	1,591,110	254,043	1,802,244	277,770	102,942	4 1/2	40 1/2	Clev., Zanesv., and Cin.	87	4,473,721	374,127	In progr.	374,127	374,127	374,127	374,127
Eastern, Mass.	20	299,107	469,311	747,008	51,246	none	none	none	Cleveland and Toledo.	200	2,675,425	2,689,301	In progr.	2,689,301	2,689,301	2,689,301	2,689,301
Fitchburg.	67	3,540,000	834,992	3,730,965	704,635	272,716	6 1/2	75	Clev. and Mahoning.	103	2,675,425	2,689,301	In progr.	2,689,301	2,689,301	2,689,301	2,689,301
Fitchburg and Worcester.	14	238,140	74,099	333,884	42,647	19,274	6	6	Clev. and Pittsburg.	133	2,675,425	2,689,301	In progr.	2,689,301	2,689,301	2,689,301	2,689,301
Lowell and Lawrence.	12	200,000	140,000	360,000	56,135	23,823	6 1/2	84	Cin., Hamilton & Dayton.	60	2,100,000	1,464,364	In progr.	1,464,364	1,464,364	1,464,364	1,464,364
Nashua and Lowell.	14	600,000	16,000	654,603	191,857	85,877	8	83	Cin., Wilm. & Zanesv.	131	1,120,450	1,131,265	In progr.	1,131,265	1,131,265	1,131,265	1,131,265
N. Bedford and Taunton.	21	600,000	none	600,000	198,491	66,533	6 1/2	72	Col., Piqua, and I. d. an.	72	1,120,450	1,131,265	In progr.	1,131,265	1,131,265	1,131,265	1,131,265
Newburyport.	14	137,260	154,554	287,418	32,677	4,666	none	none	Columbus and Xenia.	64	1,120,450	1,131,265	In progr.	1,131,265	1,131,265	1,131,265	1,131,265
Old Colony and Fall River.	87	3,015,100	314,834	3,434,164	649,656	142,800	6	82 1/2	Dayton, Xen. & Belpr.	53	437,838	422,658	In progr.	422,658	422,658	422,658	422,658
Pittsfield & N. Adams.	18	450,000	none	450,000	50,896	25,519	6	82 1/2	Dayton and Michigan.	140	1,076,602	393,011	In progr.	393,011	393,011	393,011	393,011
Vermont and Mass.	77	2,232,540	1,046,626	3,279,166	275,523	56,383	none	8 1/2	Easton and Hamilton.	42	448,411	835,994	In progr.	835,994	835,994	835,994	835,994
Western, Mass.	155	5,150,000	6,689,520	9,953,258	1,763,944	718,708	7	87 1/2	Little Miami.	65	2,963,921	1,171,785	In progr.	1,171,785	1,171,785	1,171,785	1,171,785
Worcester and Nashua.	46	1,141,000	218,244	1,394,703	209,118	82,959	2 1/2	43	Mad River and L. Erie.	205	2,451,650	2,572,932	In progr.	2,572,932	2,572,932	2,572,932	2,572,932
Providence and Worcester.	43	1,622,200	351,500	1,843,332	316,618	131,812	7	65	Ohio Central.	138	1,620,927	3,485,076	In progr.	3,485,076	3,485,076	3,485,076	3,485,076
Hartford and N. Haven.	72	2,356,000	939,000	3,313,932	730,012	352,799	10	122 1/2	Ohio and Penn.	187	2,451,700	3,129,000	In progr.	3,129,000	3,129,000	3,129,000	3,129,000
Hartf. & Prov. and Fishkill.	124	1,845,610	2,090,124	4,060,869	256,685	119,911	none	none	Pittsbg. & Mayav. & Cin.	50	1,350,000	2,206,357	In progr.	2,206,357	2,206,357	2,206,357	2,206,357
Housatonic.	110	2,000,000	474,177	2,429,066	330,792	18,351	none	none	Sandys, Mansf. & Newk.	135	403,975	609,050	In progr.	609,050	609,050	609,050	609,050
Naugatuck.	67	1,031,800	573,995	1,577,167	238,266	none	4	30	Scioto & Hocking Valley.	113	1,000,000	956,000	In progr.	956,000	956,000	956,000	956,000
N. York and N. Haven.	62	2,992,000	2,252,647	4,980,407	906,018	335,611	none	none	Springf. Mt. Vernon & P.	242	2,600,000	4,530,000	In progr.	4,530,000	4,530,000	4,530,000	4,530,000
N. Haven and N. London.	50	734,258	735,105	1,450,318	103,986	217	none	none	Tol., Wabash & St. Louis.	255	4,196,679	1,006,125	In progr.	1,006,125	1,006,125	1,006,125	1,006,125
N. London, W. & Palmer.	66	508,600	1,007,829	1,527,827	137,060	3,717	none	none	Cin., Log. and Chicago.	109	706,945	1,177,599	In progr.	1,177,599	1,177,599	1,177,599	1,177,599
Norwich and Worcester.	66	2,122,300	796,886	2,896,488	304,651	95,456	6	25	Evansv. & Crawfordsv.	88	1,213,723	1,442,859	In progr.	1,442,859	1,442,859	1,442,859	1,442,859
Buffalo, Conn. and N. Y.	100	1,482,766	1,402,244	2,896,963	123,147	50,762	none	none	Ind. and Cincinnati.	66	608,829	1,251,387	In progr.	1,251,387	1,251,387	1,251,387	1,251,387
Buffalo and N. Y. City.	92	798,439	2,587,849	3,401,868	254,770	52,030	none	none	Indiana Central.	83	834,157	1,011,971	In progr.	1,011,971	1,011,971	1,011,971	1,011,971
Buffalo and St. Line.	81	1,300,000	1,030,000	2,340,000	607,618	264,865	10	10	Ind., Clev. & Pittsburg.	66	608,829	1,251,387	In progr.	1,251,387	1,251,387	1,251,387	1,251,387
Cayuga & Susquehanna.	35	687,000	531,318	1,093,624	120,849	58,689	none	27 1/2	Jeffersonville.	64	608,829	1,251,387	In progr.	1,251,387	1,251,387	1,251,387	1,251,387
Hudson River.	144	3,767,891	8,933,804	12,391,363	1,753,986	603,010	none	27 1/2	Lafayetteville and Indianapolis.	66	608,829	1,251,387	In progr.	1,251,387	1,251,387	1,251,387	1,251,387
Long Island.	86	1,876,148	626,958	2,513,261	279,520	102,657	none	26	Madison and Indianapolis.	87	1,647,500	1,589,881	In progr.	1,589,881	1,589,881	1,589,881	1,589,881
New York Central.	534	24,354,869	14,462,742	25,253,913	5,458,581	3,162,126	8	92 1/2	New Albany and Salem.	288	2,635,121	5,281,848	In progr.	5,281,848	5,281,848	5,281,848	5,281,848
New York and Erie.	464	10,023,958	25,126,669	33,439,431	5,458,581	3,162,126	8	92 1/2	Peru and Indianapolis.	73	924,100	456,000	In progr.	456,000	456,000	456,000	456,000
New York and Harlem.	133	5,711,065	3,527,595	8,127,388	942,394	154,854	none	16 1/2	Terre Haute and Ind.	73	924,100	456,000	In progr.	456,000	456,000	456,000	456,000
Northern, N. Y.	119	1,611,527	4,522,413	6,435,565	618,527	145,733	none	1 1/2	Chicago and Rock Is. P.	182	3,141,000	2,387,155	In progr.	2,387,155	2,387,155	2,387,155	2,387,155
Oswego and Syracuse.	37	374,920	219,594	677,754	106,764	53,380	none	5	Chicago and St. Louis.	220	2,300,000	1,325,000	In progr.	1,325,000	1,325,000	1,325,000	1,325,000
Rensselaer & Saratoga.	25	610,000	140,000	888,182	231,348	76,827	5	5	Chic., St. Pauli & P'd du Lac.	178	2,300,000	1,325,000	In progr.	1,325,000	1,325,000	1,325,000	1,325,000
Saratoga and Washington.	54	899,900	1,063,234	1,891,993	183,959	37,669	none	none	Galena and Chicago.	298	4,334,800	1,189,304	In progr.	1,189,304	1,189,304	1,189,304	1,189,304
Syracuse & Binghamton.	71	739,614	1,118,751	1,636,117	162,648	66,407	none	none	Illinois Central.	707	4,419,440	18,001,426	In progr.	18,001,426	18,001,426	18,001,426	18,001,426
Troy and Boston.	27	439,492	493,500	1,107,473	162,648	66,407	none	none	Peoria and Quawaka.	93	569,889	816,454	In progr.	816,454	816,454	816,454	816,454
Watertown and Rome.	97	1,370,428	854,768	2,040,543	393,994	152,752	5	65	Ohio & Miss. (Wat. Div.).	147	1,780,206	3,292,403	In progr.	3,292,403	3,292,403	3,292,403	3,292,403
Belvidere and Delaware.	50	1,000,000	1,177,376	2,177,376	124,301	44,828	none	none	Terre Haute and Alton.	173	2,281,420	1,256,000	In progr.	1,256,000	1,256,000	1,256,000	1,256,000
Camden and Amboy.	94	1,500,000	4,763,184	1,682,456	652,456	12	none	none	Detroit and Milwaukee.	185	838,000	1,128,994	In progr.	1,128,994	1,128,994	1,128,994	1,128,994
Camden and Atlantic.	60	240,125	1,269,223	1,499,185	69,673	61,790	none	none	Mich. Central.	282	6,021,916	6,142,023	In progr.	6,142,023			

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$888,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866		
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	95	97
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	90	92½
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	80	81
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	75	75
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	93	93
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	88	90
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861		92½
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873		85
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863		87½
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	85	88
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	85	88
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	65	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	97	98
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	92
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	95
Jeffersonville	300,000	Do. 2d sec. conv.	7	April, October	"	1873		75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	90	92
Indianap. & Cin. (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		
Lake Erie, Wabash, and St. Louis	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	86
Little Miami	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76	78
Michigan Central	1,500,000	Do. conv.	6 2	May, 2 Nov.	"	1863	79	80
Do. do.	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	99	101½
Milwaukee and Mississippi	600,000	Do. do.	8	March, Sept.	"	1869	100	101½
Do. do.	650,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N. Y.	1862	97½	99
Do. do.	1,250,000	Do. 2d do. do.	8	April, October	"	1863	94	95
New Albany and Salem	500,000	Do. 3d do. do.	8	June, Decemb.	"	1877	88½	89½
Do. do.	2,325,000	Do. 1st section	10	April, October	"	1858-62	101	102
Northern Cross	1,200,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	80	100
Ohio and Indiana	1,000,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Pennsylvania	1,750,000	Do. do.	7	Feb'y, August	"	1867		100
Do. do.	2,000,000	Income, convertible	7	Jan'y, July	"	1865-66	92	94
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	7	April, October	Phila.	1872		85
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	N. Y.	1861	83	86
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	73	74
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	73	74

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85½
Do. do.	1,128,500	Do. do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N. Y.	1870	90	92
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108	110
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95½	96½
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	92	92½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90	90½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	81	82
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	83	83
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	99½
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	83½	84
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	86	87
Illinois Central	17,000,000	Mortgage, convertible	7	April, October	"	1875	81½	81½
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv 7 shars	7	March, Sept.	"	1860	86	87
Michigan Southern	1,000,000	1st mortgage, convertible	7	May, Novemb.	"	1860	90	90
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80	81
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1858-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	93	94
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85	85½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	86	86½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100½	101
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	99½	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	99½	100
Reading, issued 1843	1,573,000	Mortgage, convertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844 '48 '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	93
Do. do. 1849	3,469,000	Do. convertible	6	April, October	"	1870	84½	85½

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Asked p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Asked p. ct.
New York, 7 per ct. 1857	Feb'y, May, August and November	100	100	Milwaukee, 7 per ct. coup.	X Divers	82	83
Do. 5 do. 1858-60	88	88	88	New Orleans, 6 per ct. cp. R. R. X	Do.	78	78
Do. 5 do. 1870-75	99	99	99	Philadelphia, 6 per ct. 1876-98	Jan'y, July	90½	90½
Albany, 6 per ct. coup. 1871-81	X Feb'y, August	97½	98	Pittsburgh, 6 per ct. coup.	X Divers	77	78
Alleghany, 6 per ct. coup.	X Jan'y, July	64	69	Quincy, 8 per ct. coup.	X Jan'y, July	92	94
Baltimore, 6 per ct. 1879-90	Quarterly	98½	99	Racine, 7 per ct. coup.	X 10 Feb'y, Aug.	81	85
Boston, 5 per ct. coup.	X April, October	98	100	St. Louis, 6 per ct. coup.	X Long X	78	79
Brooklyn, 6 per ct. coup.	X Jan'y, July	99	101	Do. do. Municipal	X Do.	78½	79
Clev'rd, 7 per ct. cp. W. V. 1879	X Do. do.	101	101	Sacramento, 10 p. ct. cp. 1862-74	X Do.	76½	77½
Cincinnati, 6 per ct. coup.	X Divers	88½	89½	S. F. Cisco, 7 p. ct. cp. 1865, pay. N. Y.	X May, Novemb.	85	85
Chicago, 6 per ct. coup. 1873-77	X Jan'y, July	88½	89	Do. 10 p. ct. cp. 1871	X Do. do.	91	91
Detroit, 7 per ct. cp. W. V. 1873-78	X Feb'y, August	101	102	Do. 10 do. pay. N. Y.	X Jan'y, July		
Louisville, 6 per ct. cp. 1880-83	X Divers	79	79½	Wheeling, 6 per ct. coup.	X Divers	70	70
Memphis, 6 per ct. coup. 1882	X Jan'y, July	72½	72½	Zanesville, 7 do.	X April, October	97½	97½

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 16th, 1856

Per ct.	Per ct.
Indianap. & Cin., 2nd Mort. 7 per ct.	77
Cin. Wil. & Zanes 2d Mort. 7 per ct.	62½
Covington & Lexington, 2nd Mort. 7 per ct.	64½
Ohio & Mississippi, 2nd Mort. 7 per ct.	45
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	80
Indianap. & Cin., 7 per ct. Dividend	67
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	87

Per ct.	Per ct.
Cin., Wilm. and Zanesv., 25—Cin., Ham. and Dayton, 69½—	
Col. & Xenia, 82½—Cincinnati, 10½—Central Ohio, 15—	
Covington & Lexington, 22½—Dayton and Western, 20—	
Eaton and Hamilton, 30—Fort Wayne and Southern, 10—	
Indiana Central, 45—Indianapolis and Cincinnati, 5—Little	
Miami, 88—Mad River and Lake Erie, 22—Marietta and Cin.,	
18—Ohio and Mississippi, 3½—Hillsboro' and Cincinnati, 18—	
Junction (Indiana), 9½.	

By HEWSON & HOLMES.

For the week ending January 16th, 1856.

Per ct.	Per ct.
\$9,500 Cov. & Lex., 6 per ct. Income	45
4,000 " " 7 per ct. 2nd Mortgage	65½
3,000 Cin. & Chic., 8 per ct. Real Estate (30 days)	33½
5,000 Little Miami, 6 per ct. due in 1853 (16 days)	80
1,000 " do. do. cash	80
2,500 Marietta & Cin., 7 per ct. Income	48
2,000 Hillsboro' and Cin., 7 per ct. 1st Mort.	55
3,000 " " " "	50
725 Little Miami, Dividend Scrip.	86
224 Ind. & Cin. Dividend Bonds	65
10,000 City of Jeffersonville, 6 per cent	25
50 Shares Cincinnati & Chicago	10½
100 " Ohio & Mississippi	3
300 " " "	3½
86 " " "	3½
28 " " "	4
21 " Indiana Central	45
40 " Little Miami	88½
100 " Marietta and Cincinnati	17
200 " Eaton & Hamilton	28½
400 " " "	30
400 " " "	30½
20 " Cincinnati, Hamilton, & Dayton	62½
100 " Covington & Lexington (60 days)	25
14 " Cin., Wil. & Zanesv.	62½
23 " Greenville and Miami	2

Extract from the Circular of Robt. Benson & Co., per America.

LONDON, Jan. 4th, 1855.

The Money Market during the past week has been tight, and for two or three days there was an active demand for accommodation, more particularly on the 31st ult., caused chiefly by the preparations for meeting the last instalment but one, on the Turkish Loan, amounting to £500,000, due on the following day. The final instalment of £681,000 of this Loan falls due on the 25th of this month. A diminution of the accommodation usually obtainable in anticipation of the early payment of the dividends, has also added to the pressure. The current rate of interest on Government securities has not varied much, but on others, and on foreign securities, high rates have been paid. The diminution of Bullion in the Bank of England, according to the last return, amounted to £324,593. There does not appear to have since been much drain of specie from that establishment, although the following returns will probably show a further decrease. The arrivals of gold from Australia still continue to be taken up for France, and the export of silver to the East Indies and China has been large, and seems likely to continue. The value of money continues to rise on the Continent, and causes an impression to prevail that the Bank of England may have further to advance their rate of discount. In our last Circular we quoted Consols at 83½. On the state of the public revenue and expenditure, showing a larger deficiency than had been calculated upon, becoming known, extensive and speculative sales of stock took place, prices rapidly declined, and after some fluctuations we now quote consols at 87½ & 87¾.

No reply has yet been received from the Russian Government to the Austrian propositions for peace. Some well informed parties still entertain a favorable opinion of the probable results of this negotiation, but this opinion is not shared in by the public generally. Some change of opinion on this question, with the probable continuance of a large war expenditure, and the early prospect of fresh loans on the part of the French and English Governments, have contributed to produce a less buoyant tone of feeling than we have recently had.

occasion to notice. Nevertheless there is an absence of all despondency in the public mind; and as the trade of the country is known to be in a healthy state, people are confident that we are resting on a safe foundation, that the resources of the country are quite equal to the emergency, and that its prospects generally, and of its trade in particular, are rather encouraging than otherwise.

The prices of American securities have shared in the general depression, and there has been no response to the improvement manifested, according to the advices brought by the last steamer, in the New York stock market. There has been some little enquiry for Maryland sterling bonds, at 87½, for Penn. State Stock, at 71, and for Virginia 5 per cent. sterling bonds, at 81; all ex-dividend. The amount of business in railroad bonds has been very limited. New York and Erie 3d mort. bonds are offered at 83. Illinois Cen. Con. bonds have been sold at 74½, and Freeland's at 76.

ROBT. BENSON & CO.

R. BENSON & CO'S CIRCULAR PER "BALTIMORE."

London, Jan. 11, 1856.

Since our advices of 11th inst., we have little change of importance to note in our money market. Under the influence of contradictory reports as to the course of negotiations respecting the war now pending, Consols have fluctuated more than for some time past. The Bank of England Returns of the 29th ult., showed a further decrease in Specie of £161,602, and it is understood that the following one will show still less favorably. Higher rates of Interest for loans on securities have been asked, varying yesterday from 5 to 6 per cent on Government Securities, and 6 to 8 per cent on Foreign. In Paris the rates have been very much higher. There is, however, no alteration in the Bank of England rates. We quoted Consols last Friday at 87½, and 87¼. From this they gradually receded, and on Wednesday they touched 85¾—a point they also touched yesterday, in the course of a heavy monthly settlement. To-day they opened at 86¼, and 86¾ for Money, and 86¾, and 86¾ for the February account, but have since receded to 86¼ and 86¾ respectively.

Very little has been done in American Securities during the week. United States 6's have been done at 104. Pennsylvania 5's Bonds are wanted at 80. Maryland Sterling are quoted 87½ ex-dividend.

In Railroad Bonds transactions have been confined to Illinois Central Construction at 73½, and Freeland's at 76½. Erie 3d Mortgage has been sold at 82½ and 82, and Ohio and Pennsylvania Income at 76.

ROBT. BENSON & CO.

Marie & Kanz' Money Circular for the European Steamer of the 18th inst.

[TRANSLATED EXTRACT.]

New York, Friday, Jan'y 18, 1855.

Foreign and Domestic Exchanges being now both in favor of New York, the Money Market is beginning to be favorably affected thereby. In consequence of this improvement, the Stock Market showed a gradual upward tendency until yesterday, when the advices per America were received from Liverpool to the 5th inst. They announced a decline of 1½ per cent. on Consols, a great scarcity of money in London, and the prospects of an unfavorable issue to the present Peace negotiations. On this news there was a momentary depression, but to-day the upward movement has again manifested itself. This tendency is further stimulated by the large Railroad receipts for December, as noticed below. State Stocks are higher, with important sales in Indiana Fives.—Missouri and Indiana are 1 per cent. higher; Tennessee, 1½ per cent. City and County Bonds have been more active, with an upward tendency. Some sales have been made of Albany, Cincinnati, Jersey City, Louisville, Milwaukee, Quincy, and San Francisco City 10 per cent. bonds. Rochester City Bonds are scarce. Railway Bonds are firm, without important change or much activity. Erie 1875 Bonds have risen 1 per cent. Illinois Central Construction Bonds have scarcely varied.

Freeland Bonds have been sold at 87, and at 88, ex-privilege. Erie 1862 Bonds continue in demand, without sellers. Bonds not dealt in at the Stock Exchange—the various issues of Milwaukee & Mississippi Bonds are in good demand at an advance. Some Michigan Central 8 per cent., 1869, have also changed hands. Railway Shares have been active, and have advanced. Cleveland, Columbus, and Cincinnati (with the extra dividend off) has risen 2 per cent.; Erie 1; Galena and Chicago, 2; Milwaukee and Mississippi, 4; and Reading, ex-dividend, 3 per cent. Money is abundant on call, and the rate on business paper is 1 per cent. lower. Loans on call, 7 per cent.; first-class paper 8½ per cent. Exchanges are firm, with moderate sales. Francs are held for higher rates; chief sales at 5.20. London at 108¼.

MARIE & KANZ.

American Railroad Journal.

Saturday, January 26, 1856.

Authority of the Old Masters in Architecture.

Although we may earnestly deprecate such a condition of things, it does not appear, that men have been despised in these days because they have presumed to speak lightly of Jesus Christ. Yet in this country He is popularly regarded as a divine teacher; indeed, herein is the reason that a profane treatment of his religion, instead of exciting the horror of the cultivated, meets rather an earnest consideration, because his disciples are of the mass, while skeptics are more frequently of aristocratic mind and social position; but if the same philosopher ventured on similar liberties with the name of Michael Angelo, he would meet but sneers from the learned in the fine arts besides gaining for himself a place on the list of empirics. And this, because he would be in feeble opposition to the powers—because of an assumption that he could teach those who are well satisfied they know all; at the most he would be combatting only his peers.

In the face of this not very promising truth, we believe it is right; more than this, we believe, the corruptions illustrating themselves in the Architecture of to-day absolutely demand that we should inquire concerning the principles on which our art is founded; ask ourselves, if we dare, as to the amount of authority vested in the works of ancient artists, and by which they are held up as models for imitation. This we conceive will be the only point of difference in the discussion that, while some critics will claim for these glories of another day the position of precedents to be followed and scrupulously copied when approached, we contend that they are valuable to us only as they embody and illustrate the principles and the idea of the beautiful.

Art has best accomplished its mission, when out of the material at hand the greatest benefit has been conferred on mankind. This is not the vulgar doctrine of the Utilitarian, for as "man shall not live by bread alone," so benefits have not ceased when he has been fed and clothed upon. The demands of a cultivated intellect—a refined taste must be satisfied; the eye must be filled or the soul is yet empty.

With this statement of the premises our object may be well understood. We do not enter the lists against the classic artists; we do not intend a criticism on the Parthenon. We approach Ictenus with reverence, and are glad to sit at the feet

of Vitruvius; while none more than we admire the designs of Hermogenes and Callimachus.

But the Parthenon was for Athens and Minerva. While in its noble beauty we find laws that govern the designs of modern architects we would not hesitate to pronounce him stupid or a fool who attempted to reproduce that temple in New York or Cincinnati.

In the compositions of Italian artists we observe the horizon is high in the picture, while in German pieces it is very low. Yet in our own executions we should hardly place our horizon low or high, because that was the fashion of Leonardo da Vinci or Albrecht Dürer; but because in the piece to be delivered such an arrangement would most effectually present the conception. For the same reason we choose the distance of a picture. We may fall on the choice of Paolo Veronese or Poussin, but that is not what we seek in determining the point.

The ancients are valuable as teachers only as they present laws adapted to our uses, whether we regard the science of mechanics in the economy of the structure or the growth of a correct taste.

For us the analysis of those laws must be made by the scholar of this time and country. We owe no gratitude to those old masters for any generous intentions concerning posterity. Whatever is of value we must take—they give nothing. Yet, though Art acknowledged no duty to mankind—voluntarily no legacy to the world, we are in possession of the treasures of genius. Their devotion to the Gods—their consequent embodiment of the ideas of religion, have given us not simply a collection of temples fit to be models in art—beautiful in symmetry and grace and in the noble majesty of stupendous proportion; but temples of which every column, every stone is filled with divine inspiration, impressing on us ever a lesson of Love and Beauty and Virtue—of Justice, Courage, Power.

If we seem to question the judgment of our brethren whose professional pursuits lead them into the choicest fields of literature—whose lives are devoted to the study of works in which are exhibited the most intense efforts of genius governed by unerring taste, we shall not be accused of a want of appreciation of the beautiful in Art.

It is justly conceived, that important errors have been made by the architects of the United States. They fail to comprehend the demand of the times. The art is too greatly debased among us to be tolerated by an educated people.

The faults in Civil and Ecclesiastical Architecture, are, to be sure, different, both as to nature and magnitude. Yet we need not therefore consider them separately, we may for our purpose examine both the civil structures and the churches of the country and the governing sentiments in their designs.

We have never yet sighed for a new order in architecture. If we should behold such a spectacle, it will have been the fruit of no single invention, but will be gradually developed in the necessities of the age. Nevertheless, while we do not call for something radically new, we do insist that the Professors in Ecclesiastical Architecture shall come out of leading strings. As it is, if we may judge from the work of their pencils, they seem content if they have produced a scrupulously correct imitation of some MEDIEVAL edifice. Or

the furthest they venture from precedent will be found limited to one period in architecture. Thus to reproduce the elegant pillar of the choir of Lincoln Cathedral (circa A. D. 1200) in a structure founded on the decorated Gothic of the middle of the Fourteenth Century, would be a profanity, and the learned in the art would pronounce the specimen debased, without reference to the laws of Harmony and Beauty.

The artist is not the only critic to be consulted in a design. We may present very "pure specimens" in which no architect can find an error—but the unprofessional man of cultured tastes, may gaze and turn away unsatisfied. If this be so, it is right to mistrust the perfection of the design, it is beyond all doubt at fault. Here, we insist, is indicated a source of mistake and its correction. The architect by constant study of the history of his art has come to regard as sacred certain orders and ages. He looks upon each as a distinct arrangement, perfect in itself and above all profane approach. To criticise with the intention of change is not allowed; but the simple expression of opinion, is not only just and proper but common. Beyond this he dare not go; and if pleased with the harmonious outline of any example, he found thereon a design, to that example or its class he is fettered in the detail. He lives in a past age and is governed by religious dogmas, not by the genius of the times.

We illustrate our meaning by a reference to one or two elaborate works in New York. And first, the spire of Grace Church. It is necessary to admire it, because when erected, our people were in a condition to be astonished and captivated by whatever attempt at the magnificent might be made. Thus we have become accustomed to admire and thus we dare not withhold our admiration. Yet we venture to believe that no man of noble tastes can look at that spire without a profound feeling of disappointment. When its beauty is analyzed, when we have forgotten or are perhaps ignorant of the accuracy of its detail—we behold in it a caricature of the beautiful in nature and art that no man of genius would perpetrate if he were not in hopeless bondage to the dead.

Let us seek to comprehend the intent of Christian Ecclesiastical Architecture. Briefly, it is suggested by the aspiration of the Christian worshiper,—which aspiration is symbolized in the predominance of vertical lines. It is founded as to its general character on the structure of another temple—one not made with hands—set by the Creator in the forest.

This glorious temple of nature is fitting, in the grand proportions of its columns and the beauty of its groined vaults—in its cheerful but subdued colors—in its own soothing music and the enlivening anthems of its choir of innocents—to be that holy place wherein the Eternal Father shall descend to his children. All its holy promptings bring the soul of man into close communion with the Infinite.

Besides, there are historical associations connected with the Garden and the Forest, that make them more peculiarly sacred to the church. The primitive Christians were often driven to leave the town to assemble in a distant grove, where they should be free from the espionage of the pagan government or the jealousy of the Hebrew priest.

Of course, the harmony of arrangement is left to the taste of the architect. It is sufficient to say that generally the detail of ornament is supposed to exhibit, with vines trailing over the forest trees, beautiful fruits and flowers.*

Now, by this formula for design, what do we discover on analysing the beauties of Grace church spire? It is octagonal, decorated after the mode of the latter part of the Fourteenth Century and beginning of the Fifteenth. It springs from within the parapet of the tower, supported by arcs-boutans and rising acutely, is finished by an ugly, trifling cross. The sides are covered with diagonal panel work. The angles are adorned with monstrous crockets of most impossible shapes, the effect of which, except in faint moonlight, is confused and unsatisfying to the eye. The whole impression of majesty is destroyed by the detail of the ornament, which is undignified even to being frivolous. The pannelling is the flimsy lattice of any gentleman's garden, while the crockets remind one of the spasmodic efforts of certain larvae of the Lepidoptera, vulgarly known as *arpen-tenses*.

Leaving the spire, we descend to the tower and the main building, the proportions of which are faultless. But in this as in nearly all the churches of New York the finish is tasteless, *though correct*.

We regret that any artist should have been willing to place such execrable sculpture on the gables and angles of an edifice, daily exposed to the observation of a hundred thousand persons. Undoubtedly, these crockets are quite as elegant as any in New York, and the only reason for the infliction is, they are necessary to the perfectness of the specimen. Now we do not condemn this feature more than any other. What we deprecate, is the attempt to force upon us the taste of another age, demanding as a test of our culture, that we shall admire the fruits of that taste.

We might point to one more deformity. One common to other "pure specimens" quite as much as to this; we mean the pinnacles, which in this day of liberal outlay are not so beautiful as in the English Gothic of the Thirteenth Century. On both Grace and Trinity, the pinnacles are deformities—bald, square shafts, surmounted by tapering anmits, ornamented with crockets. The same fault obtains in the finish of the gables of Grace church as in the decorations of these pinnacles, which, instead of flowing out of the general design, are loaded upon it; epiphytes independent of the trunk for their life.

These square gaunt shafts, so ill proportioned seem raised for no other purpose than to bear a finial, which, with its accompaniments are thrust vauntingly forward, not even serving a strategical use, by which to disguise the vulgarity of its prominence. The turrets of the Thirteenth Century were far more beautiful.

Another instance of the same servility is exhibited in the interior of Trinity; where is intruded for ornament, what to the ancient was a

* Let me observe, that I state this only as the intent of Gothic architecture; the philosophy of its design. This, indeed, consists well with its history, for it grew out of the Grecian Art, "corrupted" first by the Romans—then undergoing various modifications in its march towards Western Europe. Grecian Art was perpetually a study of nature.

necessity. Immense columns of great richness—columns of which every capital is a study, on which our eyes have long feasted and for which in their proper place we should be profoundly grateful to the accomplished designer,—are raised in the midst of the house and serve as barriers, guarding the hearts of many sinners from the power of the word. These huge columns might well be used, when men, not familiar with the principles of engineering science, were to devise the means of roofing the large spans of cathedrals. That day has passed, and the modern architect, who seizes on the shrewd art of the unscientific by which he has disguised his ignorance, and without such need, forces it into service against reason, is certainly open to the charge of having studied history only to find models for imitation; that evidently he has not appreciated the principles of the art. But "the specimen is correct." And so too for the sake of a "pure example," we have the laws of acoustics violated; and when science has developed principles for the governance of interior construction, we must submit to the dictum of an antiquarian whose reverence for past time inspires him to raise one of those structures in which years ago a tolerable hearing only was obtained, by placing over the head of the preacher a painfully elaborate illustration of what our Savior said concerning a great stone that "on whomsoever it shall fall, it will grind him to powder."

(To be continued.)

Locomotives for Sale.

Parties wishing to purchase Locomotives are referred to the advertisement, to be found in another column, of the Providence and Worcester Railroad Company.

Lap-Welded Iron Tubes.

The first Lap-Welded Iron Tubes seen in this country, and the only sort suitable for Steam Boilers were imported by Thomas Prosser & Son, in 1845. It is surprising at this time, that so reasonable a contrivance should have been so difficult to introduce, but with their characteristic tenacity of old notions, the builders insisted upon the superiority of the copper tube or clumsy gas pipe. Undoubtedly the interests of Boiler-makers approved the introduction of this arrangement.—The Boilers were more profitable to build. The rusting of joints was depended on to some extent to prevent leakage. Scarcely less vicious is the method of attempting to fasten tubes with conical ferrules or thimbles, driven inside, which in addition to stopping the draft prevents the employment of efficient means for the purpose of clearing them.

Since 1845, Thomas Prosser & Son have introduced various improved methods of preparing and fixing tubes, drilling the tube plates, and in short, have entirely altered, and as they believe, materially improved on the economic arrangements of the workshop, and increased the durability of tubular boilers, by causing a better and more efficient class of men to be employed in the construction of them, as good mechanics alone are equal to the use of the tools which they have invented and introduced into the service of fixing tubes properly into the tube plates of boilers. Although the changes cannot be denied, there are doubtless many who will deny their claim to being the authors of them, which is always to be expected of

successful inventions. Nobody claims unsuccessful ones.

The experience thus obtained and daily improved upon, superadded to that of Mr. Richard Prosser, the English Patentee and Inventor of the only machinery capable of making a perfect lap-welded tube, has resulted in a perfected system of working.

Mr. Prosser's Chambering Drill, of which the object is to chamber a tube in the mid-thickness of a tube plate, for the purpose of expanding the tube therein, (as well as on each side thereof,) and thus afford support to the tube against over expansion, while the tube plate itself is embraced by it in the most perfect manner possible, is an ingenious contrivance, and too well known to require detailed description. In connection with this, is to be used Prosser's Treble Bead Expander, greatly superior to tools in common use, and insuring a perfectly tight joint under all circumstances.—A fact that has been amply proved by the thousands of tubes which have been so expanded, and have answered the purpose when every other method has failed.

We refer our readers to Mr. Prosser's advertisement.

Slopes for Cuttings and Embankments.

To find the distance of any slope-stake from center line when the ground has been cross-sectioned.

To the center cut, add the product of the half-bottom width by the ratio of side slope, and divide the sum by the difference between the ratio of the side slope and surface slope for the stake on the upper side, and by the sum of those ratios for the lower stake.

Thus, if half the bottom width $\dots = a$
 the centre cut $\dots \dots \dots = h$
 ratio of side slope $\dots \dots \dots = s$
 ratio of surface slope $\dots \dots \dots = g$
 and distance out on upper side $= x$
 while distance out on lower side $= y$ then

$$x = \frac{h + as}{s - g} \text{ and } y = \frac{h + as}{s + g}.$$

By surface slope is meant the profile of the cross section. The "ratio of its slope" is the ascent or descent per any unit of measure, expressed in a fraction of that unit. Thus a slope of 3 to 4 expressed as a ratio of slope is $\frac{3}{4}$.

The formula of which we make here a simple statement is demonstrated by R. G. Hatfield, of New York, Architect, in the Civil Engineer and Architect's Journal, 1855, p. 335.

Muskegoe Railroad.

The following is a statement of the earnings of this road for the past six months.

	Freight.	Pas'grs.	Mail.	Total.
August.....	\$3,499	\$3,353	\$625	
September.....	10,942	3,745	625	
October.....	15,300	3,479	625	
November.....	15,440	4,052	625	
December.....	12,824	5,465	625	

Earnings.....\$58,008 \$20,095 \$3125 \$81,228
 Gross earnings for same period for 1854.. 43,967

Increase.....	\$37,260
Transportation expenses from Aug. 1, to Dec. 31.....	\$24,094 \$17,260
Expenses of repairs of road and bridges.....	11,011 7,448

Net earnings for 5 months.....\$35,106 \$24,709
 \$46,122 \$18,258

The Victoria Bridge.

We gave in a late issue such portion of the report of Mr. Stevenson as related to the superstructure of the above bridge. We have since been requested to publish the balance of the report, which we give below, the subject being one of great interest to the Engineering profession.

To the Chairman and Directors of the Grand Trunk Railway Company of Canada.

GENTLEMEN.—Having learned that some doubts have been expressed respecting the fitness of the design for the Victoria bridge across the St. Lawrence at Montreal,—that it is more costly than necessary, and that other systems of structure less expensive, yet equally efficient, might with propriety be adopted—I feel called upon to lay before you in some detail the considerations which influenced me in recommending the adoption of the design which is now being carried out. In doing so, I beg to assure you that the subject was approached in the outset; both by Mr. Alexander Ross, your Engineer in Canada and myself, with a thorough consciousness of the enormous expense which must inevitably be involved, whatever description of structure might be adopted; also of the large proportion which this cost must bear to the entire outlay of the undertaking of the Grand Trunk railway company of Canada. We were, therefore, fully alive to the imperative necessity of studying the utmost economy in every part of the work, consistent with our notions of efficiency and permanency.

It will be my endeavor, in the following remarks, to satisfy you and those interested in the undertaking, that these objects have been steadfastly kept in view.

It would evidently be unreasonable to expect, that amongst professional men, an absolute identity of opinion should exist, either in reference to the general design, or in many of the details, of a work intended to meet such unusually formidable natural difficulties, as are to be contended with in the construction of a bridge across the St. Lawrence.

You will remember, that at the time I first entered upon the consideration of the subject, these difficulties were deemed by many well acquainted with the locality, and publicly stated by them, to be, if not insurmountable, at all events of so serious a character as to render the undertaking a very precarious one.

The information I received respecting these obstacles, when my attention was first drawn to this project, was so striking, that I reserved forming an opinion until I had visited the spot; had well considered all the detailed information which Mr. Alex'r Ross had collected, during several months' previous residence in the country; and had heard the opinion of many intelligent residents regarding the forces exhibited by the movements of the huge masses of ice, during the opening of the river in spring.

The facts gathered from these sources fully convinced me that, although the undertaking was practicable, the forces brought into action, by the floating ice, as described, were of a formidable nature, and could only be effectively counteracted by a structure of a most solid and massive kind.

All the information which has been collected since I made my first report, has only tended to confirm the impressions by which I was then guided.

For the sake of clearness and simplicity, the consideration of the design may be divided into four parts:—First, the Approaches; secondly, the Foundations; thirdly, the Upper Masonry; and fourthly, the Superstructure or Roadway.

The Approaches—extending in length to 700 feet on the south, or St. Lambert side, and 1,300 feet on the Point St. Charles side—consist of solid embankments, formed of large masses of stone heaped up and faced on the sloping sides with rubble masonry. The up-stream side of these embankments is formed into a hollow shelving slope, the upper portion of which is a circular curve of

60 feet radius, and the lower portion, or foot of the slope, has a straight incline of three to one, while the down-stream side, which is not exposed to the direct action of the floating ice, has a slope of one to one. These embankments are being constructed in a very solid and durable manner, and from their extending along that portion of the river only, where the depth at a summer level is not more than two feet six inches, the navigation is not interrupted, and a great protection is, by their means afforded to the city from the effect of the "shoves" of ice which are known to be so detrimental to its frontage.

For further details on this subject, I beg to refer you to the report made by Mr. Ross and myself on the 6th of June, 1853, to the Honorable the Board of Railway Commissioners, Quebec.

Advantage has also been taken of the shallow depth of water, in constructing the abutments, which are each 242 feet in length, and consist of masonry of the same description as that on the piers, which I am about to describe, and, from their being erected in such a small depth of water their foundations do not require any extraordinary means for their construction.

The Foundations, as you are aware, are fortunately on solid rock, in no place at a great depth below the summer level of the water on the river.

Various methods of constructing the foundations suggested themselves and were carefully considered, but without deciding upon any particular method of proceeding, it was assumed that the diving-bell, or such modifications of it on a larger scale, as have been recently employed with great success in situations not very dissimilar, would be the most expedient. The contractors, however, or rather the Superintendent, Mr. Hodges, in conjunction with Mr. Ross, after much consideration on the spot, devised another system of laying the foundations, which was by means of floating "Coffer dams," so contrived that the usual difficulty in applying Coffer-dams for rock foundations would be, it was hoped, in a great measure obviated.—When in Montreal, I examined a model of this contrivance, and quite approved of its application, without feeling certain that it would materially reduce the expense of construction below that of the system assumed to be adopted by Mr. Ross and myself in making the estimate. In approving of the method proposed by Mr. Hodges, I was actuated by the feeling that the Engineers would not be justified in controlling the contractors, in the adoption of such means as they might consider most economical to themselves, so long as the soundness and stability of the work were in no way affected.

This new method has been hitherto acted upon with such modifications, as experience has suggested from time to time, during the progress of the work, and although successfully, I learn from the contractors that experience has proved the bed of the river to be far more irregular than was at first supposed—presenting, instead of tolerably uniform ledges of rock, large loose fragments which are strewn about, and cause much inconvenience and delay.

They are, therefore, necessitated to vary their mode of proceeding to meet these new circumstances; and it may be stated that all observations up to this time show the propriety, notwithstanding the difficulty with dams, of carrying the ashlar masonry of the piers, down to the solid rock—and that any attempt at obtaining a permanent foundation by means of concrete, confined in "Caissons" would be utterly futile;—however, if it were assumed to be practicable, there would be extreme danger in trusting such a superstructure of masonry upon concrete, confined in cast-iron "Caissons" above the bed of the river; indeed, considering the peculiarities of the situation, and the facts which have been ascertained, this mode of forming foundations, is the most inappropriate that can be suggested, as it involves so many contingencies, that to calculate the extreme expense would be utterly impossible.

These considerations lead me, therefore, to the conclusion, that the present design for the founda-

tion is as economical as is compatible with complete security.

We are now brought to the question, as to whether the upper masonry is of a more expensive description than necessary, or whether it can be reduced in quality. This question is exceedingly important, since the cost of the masonry constitutes upward of 50 per cent. of the total estimated cost of the bridge and approaches. The amount of the item of expenditure for the masonry is clearly dependent upon the number of piers, which is again regulated by the spans between them.

The width of the openings in bridges is frequently influenced, and sometimes absolutely governed, by peculiarities of site. In the present case, however, the spans, with the exception of the middle one, are decided by a comparison with the cost of the piers; for it is evident that as soon as the increased expense in the roadway, by enlarging the spans, balances the economy produced by lessening the number of piers, any further increase of span would be wasteful.

Calculations based upon this principle of reasoning, coupled to some extent with considerations based upon the advantages to be derived from having all the tubes as nearly alike as possible, have proved that the spans which have been adopted in the present design for all the side openings, viz: 242 feet, have produced the greatest economy. The centre has been made 330 feet, not only for the purpose of giving every possible facility for the navigation, but because that span is very nearly the width of the centre and principal deep channel of the stream.

The correctness of the result of these calculations obviously depends upon the assumption, that the roadway is not more costly than absolutely necessary; for, if the comparison be made with a roadway estimated to cost less than the tubular one in the design, then the most economical span for the side openings would have come larger than 242 feet, and the amount of masonry might have been reduced below what is now intended. In considering the quantity of masonry in the design, you must, therefore, take it for granted for the moment, that the *tubular roadway* is the cheapest and best that could be adopted, and leave the proof of this fact to the sequel of these remarks.

It may, perhaps, appear to some, in examining the design, that a saving might be effected in the masonry, by abandoning the inclined planes which are added to the up-side of each pier, for the purpose of arresting the ice, and termed "Ice-breakers."

In European rivers, and I believe in those of America also, these "Ice-breakers" are usually placed a little way in advance of, or rather above, the piers of the bridges, with a view of saving them from injury by the ice shelving up above the level of (frequently on to) the roadway.

In the case of the Victoria bridge, the level of the roadway is far above that to which the ice ever reaches; and as the ordinary plan of "Ice-breakers" composed of timber and stone would be much larger in bulk, though of a rougher character than those which are now added to the piers, I have reason to believe that they would be equally costly, besides requiring constant annual repairing; it was, therefore, decided to make them a part of the structure itself, as is now being done.

To convey some idea of the magnitude of ordinary "Ice-breakers" placed on the up-side of the pier, and to enable you to form some notion of their cost, I cannot do better than quote the following, from the excellent report addressed to the Honorable John Young, by Mr. Thomas C. Keefe, whose experience in such matters, from long residence in the country, entitles his opinion as to the proper character of such works to confidence:—

"The plan I have proposed contemplates the planting of very large 'crib,' or wooden 'shoes,' covering an area of about one-fourth of an acre each, and leaving a clear passage between them of about 240 feet—a width which will allow ordinary rafts to float broadside between them. These 'islands' of timber and stone will have a rectangular

well left open in the middle of their width, to ward their lower ends, out of which will rise the solid masonry towers, supporting the weight of the superstructure, and resting on the rocky bed of the river. This enclosure of solid crib work, all round the masonry, yet detached from it, will receive the shock, pressure, and grinding of the ice and yield to a certain extent, by its elasticity, without communicating the shock to the masonry piers. These cribs, if damaged, can be repaired with facility, and from their cohesive powers will resist the action of the ice better than ordinary masonry. During construction they will serve as coffer dams, and, being formed of the cheapest materials, their value as service ground or platforms for the use of machinery, the moving of scows, &c., during the erection of the works, will be at once appreciated. Their application to the sides of the piers is with particular reference to preventing the ice from reaching the spring of the arches, which will be the lowest and most exposed part of the superstructure, if wood be used."

In the first design for the Victoria bridge, "Ice-breakers" very similar to the above described by Mr. Keefe were introduced, but subsequently the arrangement was changed, partly with a view of gaining the assistance of the whole weight of the bridge to resist the pressure of the ice, before it became fixed, and partly for the purpose of obviating a considerable annual outlay.

I have no data at hand to estimate correctly the cost of the ordinary "Ice-breakers" as described, but I have little or no doubt, that as I before stated they would have required to have been large and substantial masses of stone and timber, which in amount of cost would be scarcely less than, if not equal to, the inclined planes of masonry which have been added to the upside of the piers. On this point, however, as well as upon others in reference to some reduction in the quantity of masonry in the piers and abutments, I intend to address Mr. Ross, who being on the spot will be able to determine with more accuracy than I can the amount of actual saving which can be effected in the masonry.

Causes of Detention.

The Erie Railroad Company has recently added to its numerous operative accounts, one which keeps the Superintendent fully advised of the progress of its trains, and when they are more than ten minutes behind time, details the cause of detention. The reports from the various stations are communicated to the Superintendent, at his office, by telegraph. He is enabled, by glancing at the report for the day, to see the position of each train, and in case of an accident or detention which requires it, to issue the necessary instructions at once. The cause of detention also indicates, where the blame, if any is attachable, lies, so that he can call the culpable party to a rigid accountability. If the fault is in the engine or other classes of equipment, that also is made to appear in the report, and indicates what improvements are most desirable for the prevention of a recurrence.

We deem this one of the most valuable regulations in the operative department of our roads. We trust it will meet the attention of the Board of Railroad Commissioners and be at once incorporated into their schedule of requirements in the Reports of all the roads in the State.

Time is of more value to railway companies and to the public than most people are aware. For instance, suppose a train with two hundred passengers is detained two hours in one day, the aggregate loss is four hundred hours which, at one dollar per hour,—a low value to place upon the time of the business men who constitute the great majority of the travelling public,—is four hundred

dollars. The actual sacrifice, however, is often more than five times that amount to a single passenger. But, again, suppose a company is crowded with freight business to the entire capacity of its equipment, a train carrying two hundred tons of freight at three cents per ton per mile, about the average rate, each hour's detention involves the company in a loss of one hundred and twenty dollars, if the speed of the train be twenty miles the hour. It will be seen that the detention of a train five or six hours in a hurrying time is no small item of concern to the company's finances. Mr. McCallum's new regulation gives him the necessary data from which to correct, as far as possible, the causes of detention, and he is certainly entitled to great credit for instituting it. It must, if followed up and the data be made a proper use of, prove of great value to the company in an economical point of view, and also to the public who patronize the road.

His example is worthy of imitation by the managers and superintendents of railways generally.

Statistics of Navigation--Steamboats.

The annual report on commerce and navigation is always an interesting document. If carefully examined it will disclose many of the springs of commerce which we do not find in any other work. Looking over the statistics of steam navigation, we find some interesting facts. Steamboat building, which, in its commencement, increased with great rapidity, is now very much slackened: yet it still increases at a decided ratio. No steamboats were enrolled till 1823, and then only fifteen. Dividing the years since 1825, into periods of five years each, we have the following results:

Steamboats built from 1826 to 1830	196
" 1831 to 1835	297
" 1836 to 1840	538
" 1841 to 1845	620
" 1846 to 1850	965
" 1851 to 1855	1,296

If we suppose the average life of a steamboat to be about seven years, there are now in existence about 1,700 steamboats. The number in 1851 was 1,500, showing a gradual increase.—The steamboat tonnage of the United States is principally enrolled, or licensed, in the following ports, viz:

	Tons.
New York	107,692
Pittsburg	81,896
New Orleans	62,632
St. Louis	52,477
Detroit	32,180
Buffalo	38,262
Cincinnati	28,713
Philadelphia	26,252
Louisville	22,680
Mobile	20,515
Baltimore	16,340
Cleveland	15,012
San Francisco	14,279
Charleston	9,177
Perth Amboy	9,114
Boston	8,276

These are the large ports for steamboat navigation. The great divisions of rivers, lakes, and sea-board, are as follows:

	Tons.
Steamboat tonnage enrolled on the Ohio river	144,473
Residue of the Mississippi valley	129,050
Steam Tonnage of the Lakes	106,154
" on the Atlantic Seaboard	261,283
" on the Pacific coast	14,279

Aggregate..... 655,239
It will be seen that the steamboat tonnage of the Mississippi valley, including that of the Ohio,

amounting to 273,523 tons, is greater than that of the entire Atlantic coast.

The principal points for the building of steamboats are, Pittsburgh, New York, Cincinnati, Louisville, and Detroit; which, together, build more steamboats than are built in all the rest of the United States. Wherever boats may be enrolled, in the valley of the Mississippi, nearly all of them are built at Pittsburgh, Cincinnati, and the Falls of the Ohio. These ports built in 1854-5, about 100 steamboats.

The ocean steamboat building, has not increased so rapidly, as was at first anticipated. The reason is obvious. The ocean boats are immensely expensive, not merely in building but also in running. The prices, therefore, of transportation, are high, and thus the great bulk of passengers and freight take the "lines," as they are called, the sailing packets. The ocean steamers, however, will increase, and in time take the place, in a great degree, of sailing vessels.

Meeting of the Creditors of the Ohio Central Railroad.

D. W. Deshler, acting President of the Central Ohio railroad company, has given notice that a general meeting of the creditors of the road will be held in Zanesville, on Wednesday, 23d inst., "to take into consideration the annoying and embarrassing condition of its finances, the necessity for early relief, the proposed modes of funding, or extending the time of payment of their floating debt, or such other plan or plans of relief as may be suggested, that will insure to the creditors the best security for the ultimate payment of their claims, and protect the general interests of the road."

Public Debt of the City of Philadelphia.

The following statement will show the amount of the public debt of the city of Philadelphia and the dates at which the same is payable.

Loans contracted previous to the consolidation.

Years.	Five per Cents.	Six per Cents.	Total.
1856.....	\$49,968	\$150,550	\$200,518
1857.....	97,400	92,091	189,491
1858.....	115,500	55,528	171,028
1859.....	111,894	3,320	115,215
1860.....	876,643	378,263	1,254,907
1861.....	183,873	88,500	272,373
1862.....	118,400	38,196	156,596
1863.....	216,300	61,458	277,758
1864.....	134,700	47,760	182,460
1865.....	412,700	103,640	516,340
1866.....	67,500	30,870	98,370
1867.....	153,600	85,820	239,427
1868.....	132,954	103,527	236,481
1869.....	100,293	7,733	108,026
1870.....	122,800	176,892	299,782
1871.....	133,400	236,545	369,945
1872.....	97,600	133,550	230,150
1873.....	100,900	666,848	767,748
1874.....	53,900	113,161	167,061
1875.....	15,000	114,600	129,500
1876.....	9,400	617,753	627,153
1877.....	2,000	290,877	292,877
1878.....	2,000	311,831	313,831
1879.....	2,000	277,800	279,800
1880.....	76,198	579,545	655,744
1881.....	32,600	1,619,520	1,652,120
1882.....	9,400	395,000	404,400
1883.....	3,000	405,254	408,254
1884.....	10,600	1,350,800	1,361,400
1885.....	3,850	238,000	241,850
1886.....		250,000	250,000
1887.....		256,409	256,409
1888.....		225,000	225,000
1889.....		1,014,200	1,014,200
1890.....		750,000	750,000
1891.....		250,000	250,000
1892.....		925,000	925,000
1893.....		182,213	182,213
1894.....		30,000	30,000
1904.....		44,552	44,552

\$3,416,875 \$12,702,614 \$16,148,989

The total amt. of loans as per above statement.....\$16,148,980
From which there is to be deducted the Sinking Fund of the guardians of the poor, which has not been cancelled.....35,162

Balance.....\$16,113,827
Loans unpaid, due prior to July 1, 1854.....36,635
Loans unpaid, due prior to January 1, 1856.....13,808

\$16,164,270
Loans created since Consolidation.
North-Western Railroad.....\$375,000
Contracts.....96,900
Philadelphia Gas Works.....130,800
Police and Fire Alarm Telegraph....14,500

Total amount of funded debt....\$16,781,470

Statement Showing the Stock held by the City of Philadelphia in various Companies, and under the control of the Department of the City Treasurer

Pennsylvania Railroad Company.....\$5,000,000
North Pennsylvania Railroad Company 1,400,000
Sunbury and Erie do.....1,200,000
Hempfield do.....600,000
Northwestern do.....450,000
Schuylkill do.....4,000
West Philadelphia and Canal Company Stock and Loan.....10,000
Philadelphia Tow Boat Company.....7,500
Schuylkill, 394 shares Permanent Bridge Company (balance).....1,536
Blockley and Marion Plankroad Stock. 10,000
Belmont Avenue Plankroad Stock....10,000
Branchtown and Germantown Turnpike and Plank road Company 4 shares...100
Stock in the Moyamensing Gas Company.....1,200
Delaware and Schuylkill Canal Comp'y 500 shares.
Arbon Land Company, 240 shares.
Cairo City and Cairo Canal Company 10 shares.
Haverford Plankroad Company 80 shares.
Philadelphia and West Chester Turnpike, 80 shares.
Delaware County Turnpike, 20 shares.

Wisconsin Central Railroad.

A meeting of the stockholders was held at Elkhorn, Dec. 24th. There was a large representation present, and the report of the Directors showed that the work is progressing rapidly, and that its prospects are very flattering. There have been subscriptions to the capital stock to the amount of something over half a million of dollars, including stock subscribed by the towns of Geneva and Whitewater. The road is all graded to Geneva, and will be completed to that point next month; and between Geneva and Whitewater two-thirds of it is graded and ready for the superstructure; ensuring the road to this place early next fall.

The best point in the report is, that all this work has been paid for entirely by the proceeds of the stock subscriptions, and without the necessity of borrowing; this is a new feature in Western railroad building, and one that shows plainly the confidence of the people along the line of the road, in its management and their anxiety for its completion.

The following officers were elected for the ensuing year:

President—Le Grand Rockwell.

Directors—B. W. Raymond and Orin Lunt, of Chicago; C. M. Town, of Elgin; James Baskins and Godsell, of Geneva; L. G. Rockwell, of Elkhorn; Eleazer Wakely and Rufus Cheney, Jr., of Whitewater; E. C. Hulburt and J. E. Holmes of Jefferson; A. Rice of Lake Mills; J. S. Perkins of Waterloo; and Lewis of Columbus.—*Whitewater Gazette.*

Fitchburg Railroad.

According to the late report of this company, the total receipts for the year ending November 30th, 1855, were \$681,163. The running expenses (exclusive of interest) were \$457,092. Net earnings \$224,871. This is equal to \$6 33 per share on 35,400 shares, or \$5 95 per cent on the cost (\$3,765,998) of the road.

The floating debt is stated to be \$160,000, which the directors are of opinion can be discharged in the course of the present year. They recommend that no cash dividend be paid until the floating debt is extinguished.

The business of the last year exhibits a decrease of \$22,997 as compared with the previous year.

Considerable sums have been expended upon the viaduct across Charles river, in order to ensure greater safety to the passenger trains. The bridge between Charlestown and Somerville has been rebuilt, widened, and made solid. Considerable new track has been relaid, all of which amounts have been charged to running expenses, as the construction account has been closed.

It is stated that the system of low fares was effectually tried on the Fitchburg road, from July, 1848 to Dec., 1849, and the loss by this 18 months experiment was \$57,000.

It is said that on English and French Railroads, the fares range from 6.38 cents per mile for first class passenger trains, to 2.10 cents for third class trains. There are no season tickets on the English or French roads.

The low rates at which heavy freight has been carried short distances, and also the unprofitableness of branches, and their blighting effects upon trunk lines are clearly seen.

Estimate of the Agricultural Products of the United States for 1855.

The *National Intelligencer* has been furnished from the Patent Office with the subjoined interesting approximate estimate of the agricultural products of the United States for the year 1855, made up from the most authentic accessible data by D. J. Browne, the efficient Superintendent of the Agricultural division of the Bureau. It may here be stated that if there be any error in the estimate, it is in falling below rather than above the truth, either in the quantity or value of the products.

VEGETABLE PRODUCTS.

	Bushels.	per bush.	Total value.
Ind. corn.....	600,000,000	\$ 60	\$360,300,000
Wheat.....	165,000,000	1 50	247,500,000
Rye.....	14,000,000	1 00	14,000,000
Barley.....	6,600,000	90	5,940,000
Oats.....	170,000,000	40	68,000,000
Buckwheat....	10,000,000	50	5,000,000
Potatoes, all sorts.....	110,000,000	37	41,250,000
Flaxseed.....	58,000	1 25	72,500
Beans and peas	9,500,000	2 00	19,000,000
Clover & grass seed.....	1,000,000	3 00	3,000,000

	Pounds.	per lb.	Total value.
Rice.....	250,000,000	\$ 4	10,000,000
Sugar, (cane).....	565,000,000	7	35,550,000
Sugar, (maple).....	34,000,000	8	2,720,000
Hops.....	3,500,000	15	525,000
Tobacco.....	190,000,000	10	19,000,000
Cotton.....	1,700,000,000	8	136,000,000
Flax.....	800,000	10	80,000

	Gallons.	per gal.	Total value.
Molasses.....	14,000,000	\$ 30	4,200,000
Wine.....	2,500,000	1 00	2,500,000

	Tons.	per ton.	Total value.
Hemp.....	34,500	\$100 00	3,450,000
Hay and fodder.....	16,000,000	10 00	160,000,000
Orchard products.....			25,000,000
Garden products.....			60,000,000
Pasturage.....			143,000,000

DOMESTIC ANIMALS AND ANIMAL PRODUCTS.

	No. of Cattle.	Value each.	Total value.
Horned cattle.	21,000,000	\$20	\$420,000,000
Horses, asses, and mules..	5,100,000	60	306,600,000
Sheep.....	23,500,000	2	47,000,000
Swine.....	32,000,000	5	160,000,000
Poultry.....			20,000,000
Slaughtered animals.....			200,000,000
	Pounds.	Value per lb.	Total value.
Butter and cheese.....	500,000,000	\$ 15	75,000,000
Wool.....	60,000,000	35	21,000,000
Beeswax and honey.....	16,000,000	15	2,400,000
Silk cocoons..	5,000	1 00	5,000
	Gallons.	Value per gal.	Total value.
Milk, excl'sive of that used for butter & cheese.....	1,000,000,000	10	100,000,000

Mississippi and Tennessee Railroad.

The second annual report of this company states that—

They have 42 miles of track ready for the reception of the rails, and have purchased rails sufficient to reach the Cold Water Depot, 33 miles.—About one-half this quantity has been delivered at Memphis, and the remainder is now shipping from New Orleans. Arrangements are making for the delivery of rails for fourteen miles more in April.

The track has reached Horn Lake Depot and the company are now prepared to carry freight regularly to and from that station. Arrangements have been made to put a large force on the track by the first of January, and we may look forward to its early completion to Hernando, when large additions will be made to its business. Four locomotives have been purchased—two now on the track, and two to be delivered in January—and an equipment of cars sufficient to operate thirty miles.

In common with other roads, this has suffered all the inconvenience of a severe financial embarrassment, and its progress much delayed in consequence, but thanks to the energy of its officers and the liberality and public spirit of its President, Col. White, its credit has been preserved intact, and its liabilities promptly met.

We understand the entire road fully equipped, will not cost over eighteen thousand five hundred dollars per mile. This, certainly evinces great prudence and economy in its management, as but few roads in the South have been constructed so cheaply. Costing so little, and traversing a country unsurpassed in its resources of wealth, it must of necessity prove one of the best paying roads coming to Memphis, as well as one of great importance to her commercial advancement, and we should be glad to see her citizens extend all the aid possible to it. Its completion to the south bank of the Tallahatchie, within eighteen months, is positively assured, when we may count with certainty upon receiving by it at least one hundred thousand bales of cotton per annum.—*Memphis Bulletin.*

Ashtabula and New Lisbon Railroad.

At the annual meeting of the stockholders of the Ashtabula and New Lisbon railroad company, holden at the office of said company, on Thursday, the 3d inst., the following gentlemen were elected Directors:

Hon. Eben Newton, of Canfield; J. H. Quinn, of New Lisbon; Geo. C. Rice, of Nilea; James Stone, of Morgan; R. W. Griswold, Henry Fassett, Henry Hubbard, of Ashtabula.

At a subsequent meeting of the Directors, the following officers were elected:

Hon. Eben Newton, President; Henry Hubbard, Vice President; O. H. Fitch, Treasurer; Henry Fassett, Secretary.

Old Colony and Fall River Railroad.

The following is an abstract of the report of this company for the year ending Nov. 30, 1855.

The receipts have been as follows—

For Transportation of Passengers.

On main road.....	\$244,360
Bay State Steamboat Co.....	70,365
Cape Cod and Fairhaven railroad.....	35,957
New Bedford and Taunton ".....	12,729
Bridgewater Branch ".....	7,534
South Shore ".....	21,584
Dorchester and Milton ".....	14,384
Extra baggage.....	4,886
Expresses.....	7,137
U. S. mails.....	8,650
Rents.....	7,070
	\$434,652

For Transportation of Freight.

Main road.....	\$105,804
Bay State Steamboat Co.....	75,524
Cape Cod and Fairhaven railroad.....	19,451
New Bedford and Taunton railroad.....	4,935
Bridgewater Branch road.....	7,676
South Shore railroad.....	2,016
Dorchester and Milton railroad..	1,816
Gravel.....	1,622—218,847
	\$653,499

The current expenses have been..... \$350,081
To which add interest on debt..... 19,371
Rent of Dorchester and Milton railroad. 7,690

Making a total of..... \$377,132

The total capital stock of the company is \$2,700,000; the total indebtedness, \$292,650—of which \$198,200 is bonded, and \$94,450 floating debt.

The amount to the credit of earnings was at the date of the last report..... \$87,007
Net earnings for the current year..... 276,365

\$363,373

From which deduct dividends of July, 1855, and Jan'y, 1856..... 180,906

Amount now to the credit of earnings..... \$182,467

The company have on hand property not needed for the use of the road, to the amount of \$224,457.

The Directors for the current year are:

Alex. Holmes, Richard Borden, F. B. Crownshield, P. H. Peirce, C. C. Gilbert, James H. Beal, William J. Walker.

Connecticut River Railroad.

The late annual report states the capital stock of this company to be \$1,501,110, of which \$107, is preferred, having a guaranteed dividend of 8 per cent. till 1860. The road also has a funded debt of \$273,240. On the original stock, 5 per cent. dividend has been paid in 1855, (2½ in February and the same in August) and probably a dividend of 2 per cent. will be declared in February coming.

The receipts of the Connecticut River Railroad for the year ending Dec. 1, 1855, were \$286,562, of which \$142,925 was from passengers, and \$129,647 from freight. The expenditures of the same time were \$201,358, leaving a net income of \$85,204.

The following Board of Directors was chosen for the current year:

D. L. Harris, C. W. Chapin, Sam. Henshaw, Jas. K. Mills, Ignatius Sargeant, Henry W. Clapp, E. G. Howe, Abel Adams, C. P. Huntington.

Delaware, Lackawanna and Western Railroad.

The annual meeting of the stockholders of the Delaware, Lackawanna and Western Railroad Co., was held at the office of the company in this city, on the 22d inst. Reports were presented from various officers of the Company. The report of the Treasurer shows that the net revenues of the Company for the year ending Dec. 31, 1855, were as follows:

From transportation.....	\$250,956
From sales of coal.....	182,440
From rents.....	3,969

Total..... \$437,366

Dr.—To interest on bonds..... \$132,875
To interest on stocks..... 180,723
To interest on float'g debt. 45,182
To rent of Cayuga and Susquehanna R. R. 70,000—428,780

Surplus..... \$8,586

This result is encouraging, inasmuch as it shows that the earnings of that portion of the road which is in operation, including the Cayuga Division, and the sales of coal, have been sufficient to pay the entire interest on the stock, bonds, and floating debt, including the whole amount (some \$2,600,000) expended in the construction of the Southern Division, which has not yet become productive.

The whole cost of the railroad and its equipment has been..... \$6,034,281
Cost of coal property, mining improvement and fixtures..... 330,000

It is expected that the road will be opened thro' to Elizabethport about the 1st of March.

The following gentlemen were unanimously elected as officers of the company for the ensuing year: George D. Phelps, President; Wm. E. Warren, Treasurer; Andrew J. Odell, Secretary; D. Mills, J. J. Phelps, Wm. E. Dodge, George Bulkley, John I. Blair, Geo. W. Scranton, R. Sprague, Moses Taylor, Henry Young, Saml. Willetts, Wm. E. Warren, Thomas McElrath, Saml. L. Mitchell, and Rufus R. Graves, Managers.

Pittsburg and Connelville Railroad.

The annual report of the Pittsburg and Connelville Railroad states that the indebtedness of Gen. Larimer, for cash deposited with him as Treasurer, and bonds which he hypothecated without authority, at \$218,799. After his failure he paid \$2,318; and his assignee has since paid \$20,000, reducing his indebtedness to \$196,481, for which it does not appear that the company has one dollar of security, although the report expresses a "hope" that the assets in the hands of the assignee may prove sufficient to liquidate it. Legal proceedings have been instituted to recover bonds of a thousand dollars, hypothecated by Gen. Larimer for his individual use.

During the year new subscriptions have been received and stock issued to contractors, which has increased the capital to two millions of dollars.—The receipts on the twenty-five miles completed were \$1,533 for six weeks, and the expenses, \$1,378. The construction of the first division between West Newton and the Pennsylvania railroad at Turtle Creek, is going on rapidly. The estimated cost of the whole road, (147 miles) and the amounts expended to November 1st are as follows:

	Estimates.	Expended.
Railroad.....	\$4,650,000	\$778,346
Deposits, &c.....	325,000	169,521
Equipment.....	515,000	39,058
Total.....	\$5,500,000	\$986,924

The report claims an excess of \$1,701,021 assets over liabilities, in the hands of the company—

while the estimated cost of finishing the road with a single track, and equipping it, is \$4,413,076.

Virginia Railroad Tunnels.

The Richmond Whig gives the following extract from a letter relating to the progress of the work at the Blue Ridge Tunnel:

The whole perforation now is 3,601 feet, viz: 1,830 on the West side, and 1,771 on the East.—This makes, for the year 749 feet, which, however, is not a proper criterion for the future progress; as about one month should be deducted in consequence of a turnout of long duration. Since that time, that is in seven months, there have been excavated 492 feet, being a little over 70 feet per month. There remains on this day 672 feet.—The rock on the East side, where it used to be excessively hard, has changed for the better; but that on the West side has taken its place. Through materials like this, which dulls drills after a few blows, an advance of 70 feet per month is very creditable to the men, who are well chosen experienced hands.

The main Tunnel, however, was not the object of my great solicitude. I feared at one time that the Brooksville Tunnel, through the most treacherous rock imaginable, might take longer than the principal one; but I have now the satisfaction to say that, taking advantage of a short time, during which the impending mass ceased falling, we passed, at least, successfully through the most perilous portion of the work; and that it is now secured so strongly by timbers, that there is an almost certainty of its being completed early in June, if not before. The strength of the protection was severely tested lately, by an immense fall of rock, about one hundred cubic yards, from a height of about 120 feet, which compressed the logs and brush piled up on the top of the timbering and arch to deaden the shock of any such fall, which it did effectually; blowing out by the compression of air the lamps in the tunnel, which, together with the rumbling noise of the descending mass frightened the men inside, as may be well be imagined, but caused no damage whatever; on the contrary, it served to prove the vast strength and safety of the work, and will now serve as an additional shield.

Mobile and Ohio Railroad.

This great work is progressing rapidly to an early completion throughout its whole length. The earth work has been completed throughout the whole extent or so nearly so as to present no delay in laying the superstructure. The road has already reached Lauderdale Springs, about 160 miles north of Mobile, and the rails are being laid at the rate of half a mile per day. The Bigbee is now in navigable order, which will enable the company to ship their iron to Columbus and operate at two points at the same time. We learn that the company has ample resources to enable it to prosecute the work with vigor and without the hindrances heretofore experienced.

Those farmers who can afford to hold their crops over till next spring, may confidently rely upon the road's approaching within striking distance of them by that time.

We are happy to notice quite a revolution in public sentiment in our county in favor of this great enterprise. Already are its beneficial effects being experienced by us. The surplus produce of our farmers finds a ready sale, and large portions of rich unimproved lands, are selling for fair prices, whilst the old settler can get double and sometimes treble prices of the original cost for his improved lands.

A spirited determination is springing up to build a branch from our thriving town to Okolona, the half way station on said road. Our Pittsboro' friends insist upon its extension to their village, whilst Grenada claims the privilege of connecting the two roads, (the Central and Mobile and Ohio railroads) by extending it the whole way from Okolona to Grenada.

What say you citizens of Chickasaw, Calhoun and Yallowbusha? Are you ready for action?—Speak out and let us hear from you. The columns

of our paper are open to you.—Houston (Miss) Argus.

Lake Superior and South East Railroad.

The *Lake Superior Miner* of Dec. 1st, reports the formation of a railroad company to be called the Lake Superior and South East Railroad Company—the line of road to be from Fond du Lac, Wisconsin, running north to the State line, at or near the line between ranges 32 and 33, thence by the valley of the East branch of the Ontonagon river to some point on the Minnesota mine and thence to the city of Ontonagon.

The following gentlemen have been nominated the Board of Directors: Wm. B. Ogden, of Chicago and Fond du Lac railroad; E. K. Collins, of Collins' Iron Co., Marquette County, New York; J. W. Brooks, Esq., of M. C. R. R., Detroit, Mich.; Horatio Bigelow, of Copper Falls Mine, Boston, Mass.; Jas. M. Cooper, of Cliff Mine, Houghton County, Pittsburg Pa.; Wm. J. Gordon, Esq., of Cleveland Iron Co., Cleveland; Ex-Gov. Doty, of Fond du Lac, Wis.; Ex-Governor Farwell of Madison, Wis.; Charles T. Harvey, of and for Marquette county; Col. Chas. Whittlesay, of and for Houghton County; Augustus Coburn, of and for Ontonagon County.

The projected road is to embrace two branches, one to Marquette and another to the Cliff mine, and thence to Copper Harbor.

Mobile and Ohio Railroad.

The *West Tennessee Whig*, of the 4th inst., has the following railroad intelligence:

"Robt. G. Payne, Esq., the Railroad Commissioner for the State, left our city a few days ago, in company with Capt. Childe, the Chief Engineer of the Mobile and Ohio railroad, to examine the first thirty miles on the northern end of the road, to ascertain if the same is in a condition to entitle the company to the issuance of State bonds for the purchase of iron, in accordance with the act of the Legislature of 1853-54—which aid is ten thousand dollars per mile. Mr. Payne will review the road, and return to Nashville and make his report to Gov. Johnson, and if the report is favorable, of which we have no doubt, the Governor will at once order the bonds, to the amount of \$300,000 to be issued; and in a few short months the rail laying will commence.

"About ninety-five miles of the one hundred and six in Tennessee, are now graded, upon which \$550,000 has been expended; so when the track laying commences there will be no occasion for a cessation until the whole State is passed through. This should be a strong argument in favor of the State aid being granted, although the first thirty consecutive miles are not literally ready for the iron."

Indiana Central Railroad.

At the annual election of the Indiana Central railroad company, held at the office of said company, on the 7th inst., Chas. Parry and Samuel Hannah, of Indianapolis, John T. White of Rayville, William Petty of Cambridge city, David Commons, John S. Newman, Joseph W. Jackson and Wm. S. T. Morton, of Centerville, were unanimously elected Directors.

The Board organized by the election of the following officers:

John S. Newman, President.
Charles Parry, Vice President.
John M. Commons, Secretary.
Sam'l Hannah, Treasurer.
Jas. M. Smith, Superintendent.
Henry L. Pope, Assistant Superintendent and Railroad Master.

Lebanon Valley Railroad.

The Directors of the above road for the current year are as follows:

President.—Hon Simon Cameron.
Directors.—Isaac Eckert, Samuel Bell, Gustavus A. Nicolls, John W. Killinger, John Tucker, William Strong, Secretary and Treasurer, Daniel S. Hunter.

Philadelphia, Wilmington, and Baltimore Railroad.

The annual meeting of the stockholders of the above railroad company was held in Wilmington, on Monday 14th inst., when the report of the President and Directors was received, and the following gentlemen elected directors for the ensuing year:—Samuel M. Felton, M. Brooks, Buckley, Moncure Robinson, Ambrose B. Smith, Joseph C. Gilpin, John A. Duncan, Jesse Lane, Mahlon Betts, Frederick A. Curtis, John C. Groome, J. I. Cohen, jr., Thomas Kelso, Columbus O'Donnell, Enoch Pratt, Thomas Donaldson. At a subsequent meeting the Directors organized by electing S. M. Felton, President, and Alfred Horner, Secretary and Treasurer.

We learn that Mr. John P. Winslow, the efficient Superintendent of the Providence and Worcester railroad company, has been invited to that post on the Boston and Lowell railroad. He enters the duties of his new position on the 1st proximo.

Knoxville and Kentucky Railroad.

The subscription of \$50,000 stock in the Knoxville and Kentucky road, authorized by a vote of the citizens of Knoxville has been made, and preparations are being made for the issuance of the bonds.

Louisville and Nashville Railroad.

The city of Louisville, by a vote of 1,957 to 381, has decided to extend further aid to the above road, to the amount of \$1,000,000.

NOTICE TO

Railroad Contractors.

Memphis, Clarksville, and Louisville Railroad.
THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect, at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

Maps, profiles, and plans can be seen at the office of the Company in CLARKSVILLE, or inquiries made of the undersigned.

W. B. MUNFORD, Pres't M. C., & L. R. R.
CLARKSVILLE, Tenn., Jan'y 16th, 1856. 614

LOCOMOTIVE ENGINES FOR SALE.

THE PROVIDENCE & WORCESTER R. R. CO. offer for sale TWO LOCOMOTIVE ENGINES, in good order and in daily use. Weight of Engines twenty tons each, with 14 by 18 inch cylinders. Drivers five feet diameter. For further particulars inquire of the undersigned, at PROVIDENCE.

JOHN B. WINSLOW, Superintendent.
PROVIDENCE, Jan'y 10th, 1856. 2m4

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

Railroad Iron Wanted.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

A. WILKINS.

RAILROAD IRON.

Winterhoff, Piper & Co.,
82 BROAD STREET.

OFFER FOR SALE, VIZ:
1,000 TONS Guest & Co., 50 lbs., to arrive from London in New York.
500 TONS Guest & Co., 58 lbs., Erie pattern, per ship Euxine now on the voyage from Bristol to New Orleans. 1m3

Second Hand Locomotive

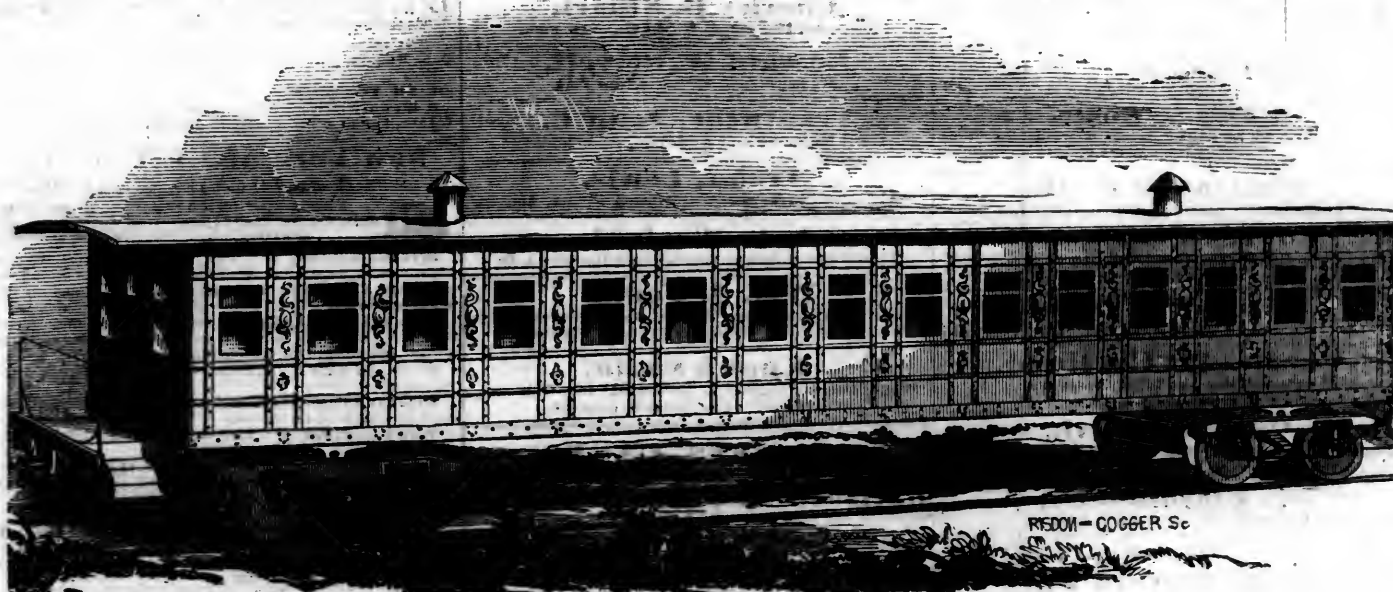
FOR SALE VERY LOW.

Weight 13½ tons.—4 ft 8½ in. Gauge.—11½ in. Cylinder.—16 in. Stroke.—4 ft Drivers.—New Tender on 6 wheels.—Engine in perfect repair.

The above will be found a very serviceable engine for graveling, switching, lumber and coal trains, and contractors' use, and can be had on excellent terms on application to

ELLIOTT & CO.,
4 William st., N.Y.

LA MOTHE'S PATENT IRON RAILROAD CAR.



WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dudgeon's Hydraulic Jack, Sewall's Salinometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

CHAS. W. COPELAND,

Consulting Engineer.

1717

Railroad Iron.

1,000 TONS Welsh Rails, 60 lbs. to the yard, now in bond and for sale by
CLARK & JESUP, 70 Beaver st., N. Y.

EDDY'S

Patent Car Locomotive and Tender Wheels.

GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies through out the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they undergo no annealing process which gives them a deeper and harder chill than those of any other manufacture.

W. F. SHATTUCK, G'l Agent, 229 Broadway, N. Y.

Railroad Iron.

225 TONS Welsh Iron, 56 lbs. to the yard, in store and to arrive. For sale by
CLARK & JESUP, 70 Beaver st., N. Y.

Railroad iron.—Locomotives.

6,000 Tons Rails, 58 to 61 lbs. per yard.
1,000 " " 55 " " "
200 " " 49 " " "

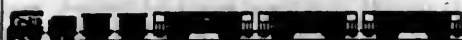
Several LOCOMOTIVES of best manufacture, adapted to a variety of gauges, on hand and for sale by

H. H. GOODMAN & CO.,

No. 7 Wall st.,
New York.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.

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4117

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**To Civil Engineers and Con-
tractors.**

JUST PUBLISHED—A set of Tables for finding, at a glance,
the true cubical content of Excavation and Embankments
for all Bases, and for every variety of Ground and Side Slopes.
By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.
The Tables are 24 in number, printed in clear, bold type on
sheets of tinted paper, 25x16 inches. Sold in separate sheets,
at 25c. each, or the whole handsomely bound in cloth in one
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sellers.

Testimonials may be seen at the office of this paper. 38

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2, Do. 16 x20, Do. 5 feet,
1, Do. 15½x22, Do. 4½ feet,
all of which have 4 wheels connected with centre bearing
trucks; wrought in frames and pedestals; copper flues; lifting
link valve motion. H. & F. BLANDY.
ZANESVILLE, Ohio, August 11th, 1865. 38

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No 5.]

SATURDAY, FEBRUARY 2, 1856.

[WHOLE No. 1,033, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, February 2, 1856.

The Pacific Railroad.

The question of a railroad to the Pacific will be one of paramount interest and importance till it is finally set at rest by the construction of a road, or till further examinations shall show its impracticability. In one sense a road is practicable on any route, for all difficulties in Engineering resolve themselves into questions of means. A road to the Pacific may be possible, but not expedient, weighing the advantages gained with the cost of securing them.

But at any reasonable cost we must have the road. That a practicable route can be found, we have no doubt. The great obstacle in the way of the speedy construction of the road is the fact, that no proper steps have been taken by Government to settle this question of route. It is true that numerous exploring parties have been sent out, but none of these have been constituted in a manner so as to develop any considerable amount of accurate information touching the main objects of the expeditions. None of the expeditions have been headed by experienced Railroad Engineers—nor has any one had a distinct branch of ser-

vice, whose sole speciality was the practicability of the road in all its details. A great amount of useful information has been gained without contributing as much as it should to the creation of a correct public opinion upon the general subject. What is particularly needed at the present time, is to have the information obtained, popularized—translated from the official and scientific style of the report into one of common life. The next step should be, to place all the surveys in the hands of a commission composed of our most eminent railroad Engineers to report the results which have thus far been reached, and to take any further action in the measures that may be deemed important. Till the measures indicated are taken, we shall not begin to make any substantial progress.

Public opinion takes no particular direction, because there are no certain guides for it. Almost everybody imagines himself wise upon the subject of the road, because he really knows nothing about it. All assume the conditions necessary to the success of their plan. All speak with authority, because the subject has not yet been taken out of the realm of opinion.

The first step in the right direction will be to ascertain the cost of constructing and operating a road to the Pacific, compared with such standards as the Western Railroad of Massachusetts, the N. Y. and Erie, and the Baltimore and Ohio. The only questions, then, remaining, will be the expenditure of its construction, and who shall build it.

It is of course useless to speculate upon what would be the result of a properly conducted inquiry of the character named. We hazard the opinion, however, that it would show that roads upon none of the routes could be built for less than \$100,000 per mile. Before any is built, we expect to see the General Government contributing a considerable portion of the capital required.

Marietta and Cincinnati Railroad.

The track of the Marietta and Cincinnati Railroad is now laid to Big Sandy Creek, 14 miles west of the City of Athens, to which point the road will be completed and in operation early in the month of March next. This company are pushing on the construction of their work with remarkable energy.

Labor-saving Tables, for the Use of Civil Engineers.

In February, 1844, we published in the RAILROAD JOURNAL a set of twenty-six Tables for the Calculation of the Cubic Contents of Excavations and Embankments. These tables were prepared by an experienced and well-known Southern Engineer, whose knowledge of the wants of the profession induced him to present his brethren what was felt to be so much needed on all sides.

The manner in which those tables have been appreciated, and the accompanying demonstration of the laws on which the amounts for correction were prepared, is shown in the fact, that nearly the whole extraordinary edition was immediately sold. They should have been published independently in pamphlet form, and would doubtless have been now in common use. Of their value we have experimental knowledge. Although we had prepared tables for ourselves, we rarely found them in the offices of Engineers, and our own had been rather the leavings of labor than the result of any systematic efforts to prepare such. The necessity for them needs not to be demonstrated; the calculation of the prism occurring in earthwork is simple and easy. But the estimate for each section of 100 feet is tiresome drudgery, and is really a waste of time. It will be interesting to Engineers in possession of the back volumes of this Journal to glance over the pages and recall the many spasms of the profession to reduce the labor in this sort of work. It is unintellectual, simple drudgery. Since 1844, no tables suited to general use have come under our notice till of late, those prepared by M. E. Lyons, C. E. of the Lebanon Valley Railroad.

These tables are twenty-four in number, suited to all the Bases and Slopes possible within that limit, and embracing a universal table applicable to all Bases and Slopes and Surfaces. This "universal" table is fortunately free from the objection generally existing against tables with the same object in view, viz:—that their use requires an amount of labor and care quite equal to primary calculations.

They are the most perfect conceivable both as to typography and accuracy. They are printed on sheets that may be had separately by those engaged in estimating where the Slopes and Bases

are settled, or they can be procured bound in one volume, 16x24 inches.

The experiments on colors made by Babbage, previous to publishing his Logarithmic Tables, determined him to use paper of buff tint, as securing greater distinctness for tabular printing. Mr. Lyons has adopted the same hue, and his paper has been made expressly for this purpose.

These tables are endorsed by Richard B. Osborne, Esq., who had used them for years, and who declares that he would not be without them. Mr. Osborne says "they are a regular labor-saving machine," and mentions particularly their value to Contractors. We learn, too, from Major Trimble that he most cordially welcomes them as saving a vast amount of the "wearying and monotonous labor of working them out under the old system." Another letter from G. A. Nicolls, of Reading, approves their publication as ensuring accurate returns. We hope they may lead to an abolition of the stupid, lazy, and utterly dishonest practice of calculating by simple average of end areas.

Let every Contractor have a set for his own defence.

Engineers ought to come forward at once, and be sure that if the enterprising compiler of all this labor does not make money by the operation, he shall not be subjected to loss. And if every man in the profession were provided, Mr. Lyons would hardly be saved a considerable sacrifice.

Central Ohio Railroad.

A meeting of the creditors and others interested in the affairs of this corporation, was held at Zanesville, on the 23rd ult., W. B. Hubbard Esq., in the chair.

A committee consisting of thirteen individuals, six of these residing out of the State, and one from each county on the line of the road, was appointed; in addition to which another committee of five was instructed to ascertain the amount of stock and indebtedness of the company.

The following is the report presented by the committee of thirteen, subsequently adopted by the meeting:

Resolved, That it be recommended to the Board of Directors, to prepare a series of Fourth Mortgage Bonds in sums not less than \$100, nor more than \$1000, of a sufficient amount at par, with forty per cent. at par, of preferred stock of the company, to take up and pay all of the outstanding floating debt of the company—such preferred stock shall be entitled to interest at the rate of seven per cent. per annum, to be paid semi-annually in the city of New York, and such interest shall be payable to the exclusion of dividends upon any common stock heretofore, or which may hereafter be issued by the said company, and such preferred stock shall also participate *pro rata* in any dividends over seven per cent. per annum, which said company may declare, with the privilege on the part of the company of redeeming the said preferred stock at par at its pleasure, at any time after three years from the date of its issue. The said Mortgage Bonds, to be payable in New York after 20 years from the first day of Feb'y next, with interest at the rate of seven per cent. per annum, payable semi-annually at the same place, with interest warrants attached, in the usual form, and such Bonds to be made transferrable by delivery at the option of the holder and convertible into stock, each at par, at any time during the running of the Bonds. *Provided*, that any creditor aforesaid shall have the privilege of taking a greater amount of his debt than forty per cent. in preferred stock, if he shall choose so to do. And the Directors are requested to obtain, if

found necessary, further legislative enactment, to enable them to carry out the foregoing measure.

Resolved, That the Directors provide a suitable sinking fund of not less than ten per cent. upon the whole issue of the said 4th Mortgage Bonds, wherewith to redeem the same at maturity, and which fund shall from time to time be invested by purchase in the aforesaid Fourth Mortgage Bonds, and in them alone.

Resolved, That those who may, on the 1st day of June next, be the lawful holders of the preferred stock heretofore authorized to be issued, be empowered to recommend to the Board of Directors, the names of three or four members of such Board to resign, and to nominate a like number to be appointed by the remaining directors in their places.

At a meeting of the Board of Directors held on the 24th ult. they unanimously approved of the report.

Commerce of Cleveland, Ohio.

At great expense of time and labor, we have been enabled to gather statistics as to the amount and value of articles received and shipped at this point during last year.

For the sake of presenting the whole thing in a nut-shell, we recapitulate from all these tables:

Received by Lake.....	\$81,558,335
" Railroad.....	91,066,230
" Canal, say.....	16,000,000
Total.....	\$191,624,565
Forwarded by Lake....	\$77,121,622
" Railroad.....	84,691,861
" Canal, say.....	10,000,000
	\$171,813,486

Grand total for 1855.....\$363,438,051

The increase of trade for 1855 over 1854, is more than \$186,000,000—saying nothing about the canal trade—of which increase the lake contributes \$65,239,529, and the railroads \$71,559,546. Of course a large amount of the property received by lake passes over the railroads, and vice versa, so that it enters into the computation twice. Yet it pays its tribute to this place, and shows an amount of business which may well astonish those not familiar with the commerce of the lakes.

Florida Railroad.

We are glad to learn that this important work across the neck of the Isthmus of Florida is making excellent progress. The contractors, among the principal of whom is Gen'l Alexander McRae of Wilmington, N. C., are men of pecuniary ability and of great experience in the matter of railroad construction. General McRae is particularly distinguished for his successful management of the Wilmington and Raleigh railroad, the Presidency of which he assumed when the road was almost completely broken down. Under his management the road was almost entirely reconstructed, and he left it in every respect a first class work. In reference to the progress of the contractors in the Florida railroad, we are allowed to make the following extract from a letter of recent date from the Secretary, to the President of the company.—

"I have just returned here from an examination of the work on the line of our road from here to Lofton, ten miles, and am very much delighted with the progress so far. The work is exceedingly well executed, and is in a greater state of forwardness than I expected. From here to Cashens (about four miles) every thing is complete and ready for the cross-ties. From Cashens, the piling and trestle work crossing the Amelia salt marsh, is completed a distance of fifteen hundred feet, and it is progressing at the rate of over one hundred feet a day. This trestling is admirable, the

timbers of the best description, and as firm, apparently, as a rock. On the other side of the Amelia, the road over Pine Island is complete. Then comes another small piece of salt marsh which is subcontracted, but not yet finished. It is, however, in the hands of a very energetic man who does his work rapidly and well. From there to O'Neals creek, about two miles, nearly every thing is finished. At O'Neals creek there is a gap of a few hundred feet, and a small bridge is required. From there about a mile further the road is finished. A large number of the hands are at work on the remaining three miles to Lofton; many of them now engaged on Lofton bank. The bank there is fourteen feet high, (for a distance of half a mile,) but they have nearly finished it, and made some progress on the excavation. It will not be long before this first ten miles is ready for the iron, and a better piece of road I don't think can be found anywhere. You would be very much pleased to go over it. The shanties and other buildings are now erecting along the line of the next section of ten miles."

East Tennessee and Virginia Railroad.

This road, it will be remembered, will form a link in the great chain extending from Washington, D. C., to Memphis, Tenn. By the last Report, made up to the 9th of November, 1855, it appears that the company have suffered considerably from the financial depression of 1854-5. Operations in construction, however, have been steadily persevered in. On the first 50 miles north of Knoxville, the grading and cross-ties are nearly ready for the iron, and 16½ miles of this have recently been opened. The rails are being laid down at the rate of one mile and a-half per week. At this rate, the cars will be able to run as far as Russellville, 50 miles, in a short time. The iron is being forwarded as fast as it can be laid down, and no further delays are expected on that account. On the northern end, about 50 miles are graded, extending from the Virginia State line to Greenville; and on 20 miles of this the cross-ties are laid down. The iron for laying this part of the road is to come by the Virginia and Tennessee line; and, of course, cannot be delivered till the completion of the latter work to that point. Between Russellville and Greenville is a section of 25 miles six of which are graded, leaving only 19 miles to be done, in order to complete the whole line. All this can be put under contract at any moment, if the funds are forth-coming. A few thousand dollars of loans have been obtained from parties along the line, and it is believed that this can be increased to \$20,000 or \$30,000. Hopes are also entertained that a like amount can be got from the State, payable in four or five years, with the interest annually. The present crops in that part of the State are abundant, and full confidence is felt in the success of this work.

A difficulty has been felt with the State bonds, which by law cannot be negotiated at less than par. As they have settled below this point for some time, it is suggested that the proper step for the State to take is to raise the rate of interest, which would have the effect of bringing them to a premium at once. The amount of these which have been received to date of report was \$669,000, of which \$100,000 have lately been remitted for the purchase of rails.

The maximum grade on the road is 68 feet per mile. The shortest curves have radii of six degrees, or 955 feet—similar to those on the Virginia and Tennessee road.

The following is an abstract of the company's—

GENERAL ACCOUNT.		DR.
Construction, including gradation, masonry, bridging, ties, &c.....	\$629,817	
Iron and equipment, shops and depots.....	264,385	
Miscellaneous, as engineering, salaries, interest, office expenses, &c.....	139,579	
Cash, bonds, &c. on hand.....	321,307	
Debits and accounts due.....	5,457	
Balance due for stockholders.....	203,473	
	<hr/>	
	\$1,564,018	
	CR.	
Individual subscriptions.....	\$367,875	
County do.....	100,000	
Floating stock bonds.....	157,550	
State of Tennessee bonds.....	669,000	
Interest, premiums, rents, bills payable, &c.....	75,600	
Stock bonds.....	23,375	
Debt and accounts due to contractors and other parties.....	170,618	
	<hr/>	
	\$1,564,018	

Mineral Point Railroad.

We have received a copy of the exhibit recently put forth by this company. The work was chartered in 1852, with a capital stock not exceeding \$2,000,000; but it is proposed to use only about half that sum for the present road. The company have also the right to issue bonds at any rate of interest. The line starts from its junction with the Illinois Central at Warren, 24 miles west of Freeport, where the Galena and Chicago road terminates; and pursues a route nearly due north to Mineral Point, a distance of 32 miles. At Gratiot it forms a connection with the Southern Wisconsin road. There are other works projected, which, when completed, will bring this into connection with the principal lines of Wisconsin and the entire region of the Upper Mississippi.

Warren, its southern terminus, is the most northerly point on the Illinois Central Railroad. The country along the line is remarkably fertile, producing in abundance the ordinary grains, as wheat, corn, oats, &c., besides annually exporting large numbers of live stock. Mineral Point has grown, without any outside influence, to be a place of some two or three thousand population. The county, of which it is the seat of justice, contains over 15,000 inhabitants. It is in the very heart of that great mineral district which has yielded annually, on an average, for the last twelve years, 20,000 tons of lead ore. There is at present setting towards these mines an increasing amount of capital, while numbers of miners who left for California are again returning to their old field of labor. In addition to the lead product, ores of copper, zinc, and mundaic are found in abundance.—The only obstacle to the working of copper hitherto has been the want of fuel; but this deficit will at once be supplied, on the completion of the road, [when it is estimated, ten thousand tons of coal will pass over it the first year.

There is hardly another mineral district in the world, where the richest soil is found in immediate proximity to inexhaustible deposits of mineral ores; and where at the same time, the construction of railroads is both so easy and indispensable for every purpose.

The estimated surplus of agricultural products to be annually exported, is 80,000 tons. The minerals with lumber, &c., will amount to 60,000 tons additional, making a total of 140,000 tons per annum. This amount at \$1.50 per ton, would give a gross annual income for freight of \$210,000, to which adding passengers and mail transportation would make a total of \$259,000, of which the net gain would not be less than 53 per cent., or \$137,000.

The capital of the company is \$1,040,000, as follows:

Stock.....	\$420,000
1st mortgage bonds.....	320,000
2d do.....	300,000
	<hr/>
	\$1,040,000

The company have exchanged with Iowa county \$150,000 second mortgage bonds; and with two towns seven hundred shares capital stock.

As to the present condition of the work, the right of way has been obtained; the grading and masonry are nearly completed; and the cross-ties are nearly all on the ground. Contracts for superstructure, equipment, buildings, &c., have been made—all payable in the company's securities.—It is expected that the whole work will be completed by the close of this present year.

It should be stated that, in consequence of an agreement to throw all their business on the Illinois Central and the Galena and Chicago roads, the latter companies have guaranteed an annual income of \$56,000. This sum is to be set aside to pay the interest on the first, and \$250,000 of the second mortgage bonds. The county of Iowa provides for the interest on \$150,000 by a special tax for that purpose.

Richmond and Danville Railroad.

We gave in a late issue a short notice of this work. Since then, a copy of their last annual report has been received, showing their operations for the year ending 30th September, 1855. The earnings for that period were:

Passengers.....	\$90,419
Freight.....	216,102
Mails and express.....	9,788
	<hr/>
Total.....	\$316,309
Transportation expenses.....	171,647
	<hr/>
Net gains.....	\$144,662

The road is now open to Barksdales, 127 miles from Richmond, and only 14 miles from Danville. At date of report, the track had been laid to within five miles of the latter point, to which place it will be put down as fast as the weather will permit. The year's business shows an increase of \$94,454 over that of the twelve months preceding.

The financial condition of the company is at present quite favorable, and the future is looked forward to with the fullest satisfaction. Since the previous annual meeting, the \$220,000 of bonds then on hand have been readily disposed of, at the rates authorized by the meeting. The proceeds enabled the Board, in May last, to purchase 1,000 tons of rails additional, which was done at a cost of \$52.50 per ton. Since that date iron has risen in value much more than the amount of the discount lost on selling their bonds. An issue of \$150,000 five year mortgage bonds has also been since made and sold at similar rates.

On the bridge over Dan river, at Danville, the

masonry is built and the timber framed. It cannot, however, be finished until the road reaches that point.

The ship Harriet Augusta, in 1854, perished at sea, having a cargo of iron on board belonging to the company. Since then, the sum of \$9,538 67 has been collected from the underwriters. A competent agent has been employed to secure the remainder as early as possible.

The office of Chief Engineer has been dispensed with, and that of Superintendent created. The total amount of expense for Engineering has been \$145,800.

In 1854, the proportion of net earnings to expenses was 40½ per cent. Last year, it was 45¼, and this figure will certainly increase, when the road reaches Danville.

The gross receipts for the months of October and November last, were about \$82,000; for the same period in 1854, they amounted to only \$49,500—an increase of nearly 70 per cent.

At the previous annual meeting, the amount of stock subscribed, but not paid in, was—from private stockholders, \$29,820; and from the State \$33,000. During the year \$46,000 of this have been collected; leaving due only \$10,000 from individuals and \$15,000 from the State. Part of this will doubtless be collected.

The capital stock is now \$2,000,000; cost of road and equipment, about \$3,200,000; debt \$1,200,000. Of the last \$600,000 are due the State, being made redeemable by the application of one per cent per annum, for 34 years, when it will be extinguished. Two hundred thousand dollars are in bonds guaranteed by the State, and mature in 25 years from their issue; \$250,000 not guaranteed, fall due in 1859; and \$150,000, in 1860. The annual interest charge, including redemption fund, on all these is \$78,000. It is proposed to apply the net earnings to the redemption of the 1859 and 1860 bonds henceforth.

The following synopsis, from the Treasurer's report, shows the receipts from all sources, from the date of organization to Sept. 30th, 1855.

From Individual stockholders.....	\$478,248
" Counties and corporations.....	310,000
" Commonwealth of Virginia.....	1,181,200
" State loan and bonds issued.....	1,086,647
" Miscellaneous sources.....	33,066
" Transportation department.....	808,804

Total of receipts.....\$3,892,466

The expenditures for the same period, for construction of the road, buildings, land damages, real estate, machinery and furniture of the road

is.....	\$3,259,597
Interest and redemption fund.....	129,132
Expenses charged the transportation department.....	536,200

Total expenditures.....	\$3,924,930
Debts due by the company.....	\$124,481
Debts due to the company and funds.....	92,017

32,463

\$3,924,930

Of the entire capital stock three-fifths, or \$1,200,000, are held by the State, less the amount not yet paid in. The receipts from all sources, for last fiscal year, were \$722,470; and the entire expenditures for the same period, \$673,883. The total gross earnings of the road from the opening of the first section, in January, 1851, to date, have

been \$804,409; and the net profits \$292,359. It will be seen that the net receipts for last fiscal year have been nearly as great as those of the other three years together.

The average distance operated in 1855, was 100 miles.

The rolling stock consists of 18 locomotives, 11 passenger, 3 baggage, and 271 freight cars of various kinds. The rolling stock is said to be in good order.

At the annual meeting a resolution was adopted to apply for an increase of \$2,000,000 to the company's authorized capital stock, on the three-fifths subscription principle by the State; for the purpose of extending the line in a westerly direction to some point on the Virginia and Tennessee Railroad.

The officers for the present year are—V. Witcher, President; P. Van Doursen, Secretary and Treasurer; R. P. Atkinson, Construction Engineer; and Chas. Campbell, Superintendent. The directors on behalf of the State are—J. B. Stoval, L. E. Harvie, and B. M. Jones; and on the part of the other stockholders—J. Brown Jr., and R. O. Haskins. Last annual meeting held December 12, 1855.

Journal of Railroad Law.

ASSESSMENTS OF DAMAGES.—THEIR ESTIMATION.

By statute law in most, if not all of the States, it is provided that railroad companies may take private lands for the purposes of their railroad; and if the owner and the company cannot agree upon the amount of damages, they are to be assessed by commissioners.

In determining the amount of damage, questions of considerable interest and importance have arisen, and particularly in determining how far the incidental advantages to the owners of land are to be taken into consideration. If the land taken be part of a farm, for instance, and it is used by the company for a depot, stationed at the terminus of a flourishing road, in consequence; the rest of the land rises from farm prices to city prices; doubling, tripling, or even quadrupling in value, are the company to pay the full value of the land which they take, and obtain no advantages from this increased value which they give to the land? They may make the fortune of the man whose lands they take; are they yet to be compelled to pay him damages?

In the Philadelphia and Reading Railroad Company *vs.* Gilson, 8 Watts R., 243, it appeared that Mr. Gilson, whose lands had been taken, owned a large hotel in Reading, (where the lands were situated) that the custom of the hotel had been increased, and the establishment rendered more valuable by the railroad. The hotel, however, did not stand upon the land which had been injured by the road. The court held, that the advantage accruing to Mr. Gilson through the hotel, could not be set off by the plaintiff against the injury done to him through other and different lands.

The Supreme Court of Massachusetts decided in the case of Meacham *vs.* The Fitchburg Railroad Company, 4 Cushing, 291, S. C. 1 Am. Rail. Cas. 584, that in the estimate of the damages to which a party is entitled for the location of a road over his land, allowance is to be made for any direct and peculiar benefit which he receives from the construction of the road, not shared in com-

mon with other landholders in the vicinity, but none for the general benefit which the owner may receive from the enhanced value of land in his vicinity, in consequence of the facilities afforded by the road. See also Upton *vs.* The South Reading Branch Railroad Company, 8 Cushing, 600.

In New York it is provided that commissioners "in determining the amount of compensation, shall not make an allowance or deduction on account of any real or supposed benefits which the parties may derive from the proposed railroad." Rev. Stat. N. Y. 4th Ed. 1,227. It was, however, decided in the case of the Troy and Boston Railroad Company *vs.* Lee, 12 Barbour, 169, that "in making appraisal of this kind, the true rule, the only rule which will do justice, is to determine what will be the effect of the proposed change upon the market value of the property. The proper inquiry is, what is it now fairly worth in the market, and what will it be worth, after the improvement is made?"

In the latter case of the Albany Northern Railroad Company *vs.* Lansing, 16 Barbour, 69, the Court seems to have adopted a different rule, more in accordance with the statute. The Commissioners making the appraisal in that case, stated the rule by which they should be guided to be, that they should allow "full compensation for the land taken, including therein the damages to the adjacent land by reason of such taking, but they should not allow compensation for prospective damages." The Court sustained this rule. "The obvious intention of the legislature was," say the Court, "to confine the Commissioners to an estimate of the price to be paid by the railroad company to the owner upon this involuntary sale of his land, regardless of the benefits or injuries which might result to him in consequence of the contemplated improvement."

"They certainly," say the Court, "were not required to confine themselves to the actual, abstract value of the land to be taken, as though the owner would have no other lands left to be affected by it. Had they done this, their award would have been less than \$100, for it was admitted upon the hearing that the average value of Mr. Lansing's land was \$175 per acre. They were to consider how the taking of the land, but not the use of it, in any particular mode, would affect the residue of the owner's land. Would it leave that residue in an inconvenient, unmarketable shape? If so, this fact might properly be taken into the account in determining the amount of compensation. Thus, if the land to be taken should lie between the owner's house and the highway, the amount of compensation should be vastly more than for the same quantity of land equally valuable in itself, but situated in some part of the owner's premises. The commissioners, therefore, were right when they decided that they would include in the compensation for the land to be taken, 'damages to the adjacent land by reason of such taking.' But the fact that the land to be taken would be used for a railroad, rather than any other lawful business, formed no part of the materials out of which the award was to be made. Whether the land was to be used for a railroad or a garden, was a question, so far as compensation was concerned, with which the commissioners had nothing to do. Their duty was to award compensation for the taking of the land, not for the use to which it

should be applied when taken. Nothing could be more unjust in principle, than to prohibit the commissioners from considering the benefits which the owner of the land would derive from the construction of the road, and yet require them to consider what inconveniences or injuries might be the result of such construction."

From these authorities it would seem that in assessing damages for the taking of lands, the commissioners are to give the railroad company the benefit of any enhanced value their railroad may give to the land from which they take; but they are not to consider either such general incidental advantages as the landowner may enjoy in common with the rest of the community, nor such injuries from the use to which the land taken is put, but only those which result directly from the taking of the land itself.

Railroads in Mississippi.

We give below an extract from the late message of the Governor of Mississippi in reference to the railroads of that State. It gives a very clear idea of the system which will supply to the State all needed railway accommodations. The State has already done much for the encouragement of her leading lines. The Gov'r very properly, we think, advises the extending of further aid, and there can be no doubt that the railroads now in progress will prove remunerative investments, while they will become of incalculable benefit to the people of the State. In none of the new States have the people taken hold of railroad enterprises with more energy and vigor than in Mississippi, and there is no State in which they promise a better result.

The following are the extracts referred to:—

The act of February 4th, 1854, granted to the Southern Railroad Company an extension to the 8th day of March, 1855, to complete the road to the Alabama line, and in accordance with the requirements of this act, the sureties on the bond of the company, given to the State, to build five miles of the road east of Brandon, by the 1st of January, 1854, and ten miles more by the 1st of June, 1854, filed their agreement in writing with the Secretary of State, that this act of extension should not impair or in any manner effect their liability on said bond. The work on the road has not progressed with the expectations of the company, and whether they have a prospect of completing it to the Alabama line, by the time specified, I am not advised. A report will doubtless be made by them to the present session of the Legislature.

Under the act of 2d March, 1854, to aid in the construction of the New Orleans, Jackson, and Great Northern railroad, in the State of Mississippi, and for other purposes, I appointed Powhatan Robinson, Engineer, to survey and locate the line of the Gulf and Ship Island railroad, and to make out the proper profiles, maps, &c., and an estimate of the cost of building said road. The work was well executed, and for full information on this subject, I refer you to the report of the Engineer, with my letter of appointment and instructions to him, and his splendidly executed map, showing the line and profile of the road. Five thousand dollars were paid to Mr. Robinson, on my requisition for this work. All that the law allowed.

Under the same act, which reserved in the Treasury a sum not to exceed one hundred thousand dollars, when collected subject to the requisition of the Governor, in favor of the Mobile and Ohio Railroad company, in accordance with the provisions of the act of 16th March, 1852, on the report of S. B. Parker, appointed agent of the State, by me, under said last act, to examine ten miles of said road, made ready for the iron rails,

in this State, and in continuation of that portion of the road in running operation in the State of Alabama, and on the delivery to me by the President and Directors of said company, of certificates of stock in said company, for the sum of one hundred thousand dollars, that sum was paid, on my requisition, to said company, for which the certificates of stock were deposited by me in the Treasury. Copies of the report of the agent, and of my letter of appointment and instructions to him, are herewith submitted.

Under the same act, there has been paid to the New Orleans, Jackson, and Great Northern Railroad Company, the sum of one hundred and forty-three thousand dollars. And to the Mississippi Central Railroad Company the sum of sixty-two thousand five hundred. For which sums, severally, these companies have deposited certificates of stock for the State in the Treasury.

Some differences of opinion existed between these three companies as to their rights under this act, and some delays were caused in making to them the several payments. But these differences were amicably adjusted by mutual agreement between them, and the balance of the proceeds of the Internal Improvement lands, as it is realized, now goes to the New Orleans, Jackson, and Great Northern, and Mississippi Central roads, in the proportions specified in the act.

The Mobile and Ohio railroad is now completed to the Lauderdale Springs station, near the north boundary of Lauderdale county, a distance of one hundred and fifty-three miles from Mobile, and the cars are running successfully to that point. The iron rails, before the last of December, were laid down seven miles north of the above station, beyond the line of the southern boundary of Kemper county, and are gradually being extended, as fast as the ability of the company will admit. The business and travel of the road surpass expectation, and the limited available means of the company, exhausted always by their continued effort for the extension of the track, scarcely enables them to furnish it with machinery and rolling stock sufficient for the demands of the every day increasing transportation. The advantages to the country through which the road passes, and which it is reaching, heretofore remote from market, and destitute of facilities, have neither been calculated nor anticipated. Reality now presents them with astonishment even to those who in anticipation supposed they had most fully realized them. The road-bed is mostly completed and in readiness for the iron rails to the Tennessee line, and in fact mainly so to the northern terminus, near the mouth of the Ohio river. This road is under a good direction. It stands upon a firm basis, and will go through; but it requires aid to give it that progress which the value of time and the great interests of the country now demand.

The New Orleans, Jackson and Great Northern Railroad is completed, and in successful running operation to Osyka, on our State Line a distance of eighty-eight miles from New Orleans. It reached this point, to which it has been brought, almost exclusively, if not entirely, by means furnished by the State and citizens of Louisiana, and city of New Orleans, about the 4th of July, 1854. Since that time the iron rails have been laid six miles north of Osyka. Upon this portion of the line the cars are running, but it is not open yet for general trade. The grading of the road is completed to Brookhaven, in Lawrence county, a distance of thirty-eight miles from Osyka. The means of the company have not been available to purchase the iron for this part of the road. The distance from Osyka to Jackson by the line of the road, is ninety-five miles (air line 91½ miles.) If the iron rails were laid to Brookhaven, it would be in running operation within fifty-seven miles of the capital. Fifteen miles of the road is completed, and in running operation from Jackson north towards Canton, and the whole line will be completed to Canton by the middle or last of February next. The road is graded twenty miles or more in Monroe county, north and south of

Aberdeen, but the company has not been able to reach that section with iron rails.

This road forms one of the most important lines throughout our State, and in its connections with other roads, one of the most important lines in the United States. Its means are sufficient, if they were available, to construct portions of it, if not the whole line, gradually, but slowly. It requires additional aid to give to it that progress which it merits, and which the great interests and necessities of the country so imperiously demand.

Twenty-four miles of the Mississippi Central railroad are completed, and now in running operation from the Memphis and Charleston road to Holly Springs. The business upon it equals and exceeds the expectations of the company. One hundred and twenty miles of additional road bed from Holly Springs south, and Canton north, together, will be in readiness for the iron rails by July next—a considerable portion of this distance being now in readiness for the cross-ties. But thirty miles of the earth-work on the whole line are not let to contract. A recent purchase of iron rails has been made by the company, sufficient to lay down fifty miles, commencing at Canton and Holly Springs by the first day of April next. And had the company the necessary means vigorously to prosecute the work, the whole line could be put in operation within two years from this time. The success of this road has been remarkable. While the Mobile and Ohio, incorporated in 1848, and the New Orleans, Jackson, and Great Northern in 1850 and '52, have their commencement at important commercial cities, and look to their northern termini as forming connections with great through lines of travel, the points of terminus which they connect being always regarded as essential to the success of railroad enterprises, this road receiving its charter in 1852, and connecting by its points of terminus simply with these other roads, with the one at Canton, and the other at Jackson, in Tennessee, passing through a country supposed to be unfavorable for a railroad line, and looking apparently to local support, has in its progress and prospects kept pace with, if not surpassed either of the others—promises to keep up with the swiftest to completion, and is destined, besides the immense local traffic which awaits it, to become an important link in the great line upon which the ever swelling volume of commerce and travel is to find its way from the valley of the West to the shores of the Gulf. The company has received from all sources about \$820,000—has expended for construction, equipment, &c., about \$940,000 including what has been expended on the work, the available means of the company is about \$2,000,000, and the estimated cost of the road, with partial equipments, is \$3,000,000. Hence it will be seen that but \$1,000,000 additional is required to complete the work.—This amount, if now rendered certain, as the line progresses, would ensure the completion of the entire road by the first day of January, 1858.

I will not speak to the Legislature of the incalculable value of these roads to the State when completed. If all do not see and feel it, no suggestions of mine could make it manifest. The time has passed when the value of well directed railroad improvements is to be calculated. Axioms are propositions admitted. So is the value of railroad improvements. These roads when completed, will form together a continuous line of eight hundred miles within the limits of our State. In connection with others now in progress, and others still which will necessarily grow up as arms or branches of these, they will soon make to our people for all the purposes of commerce and travel, distance a point and time but a moment. The brilliant prosperity which they will give to our State the most sanguine has not conceived, and wonder herself will be astonished of the magnificent results. In their connection with other lines they will place us in the same communication throughout the United States, and the bell which tolls the departure of the iron horse from the Lakes on the North will scarcely have its echoes returned from the waters of the Gulf, before his neigh will be

heard upon its tranquil shores. The despatch which announces his departure from the Empire City of the North, borne by the genius of Franklin, transmitted to Morse, with lightning rapidity along the wire line, will but have heralded his coming upon his iron way, in time for the man of commerce, in the Crescent City of the South to take care of his freighted train. And all this will pass through our State.

I would not recommend to the Legislature any thing that would embarrass the State or burden the people. But these railroads I think should have our aid. They linger wistfully for completion, but slowly without our help. The high-mettled steed is upon the track, and only waits for the hand of the State to turn him upon the open line, with a loosened bit. The burdens of our State Government are not now onerous, and the advantages of these works, if not now seen, when completed, will be so felt by the people as to be appreciated.

The State has already over three hundred thousand dollars invested in stock in these roads, and when the proceeds of the sale of the Internal Improvement Lands are realized, will have over half a million. This fund, however, has been derived from the General Government, and the State herself has done nothing for the roads.

I, therefore, recommend to the Legislature to consider the propriety of so increasing the revenue as to raise a surplus in the Treasury of two hundred thousand dollars to be invested in stock, by cash payments annually, to these several companies, in proportion to the extent of their lines within the limits of the State, to be applied to the purchase of or payment for iron rails when the road beds are in readiness for the iron superstructure. And that all monies loaned at interest to these companies, or invested in their roads or stock in the State be exempted from taxation until the several roads are completed. This will be a small sum for the State to raise, and a small sum for each of the companies to receive. But it will be a cash sum to them, and inspire confidence in their success by the encouragement given them by the State. And large amounts of private capital, it is believed, now driven from the State, to be loaned elsewhere, when exempted from taxation, and inspired with confidence by the State aid to these roads, will seek investment in their bonds and stocks, and furnish them with ample means to progress rapidly to completion. This last suggestion will be objected to by some, as a special privilege. The Constitution authorizes the grant of special privileges, in consideration of great public benefits conferred. Incidental advantages in this case will result to those who make the loans, but the object is to benefit those works of great utility to the State. This principle has already been recognized in reference to these companies, by similar exemptions in their charters.

That this appropriation shall be continued for five years, and when the Mobile and Ohio railroad is completed, the amount proportioned to it shall then be invested in stock in the Southern railroad—the amount to the Central when completed, in the Mississippi and Tennessee railroad, and the amount to the New Orleans, Jackson, and Great Northern railroad, when completed, in the Gulf and Ship Island railroad, all as first provided. This in two or three years will complete the three first roads—in three to six years the three last, and the State will have invested in them a paying stock of more than one million and a half of dollars, yielding a dividend to be appropriated to any other objects of internal improvement she may desire, or then to the great purpose of education, or if to none of these, then sufficient to pay the expenses of her government, without taxation. Should these suggestions meet with the approval of the Legislature, it will be for their wisdom so to arrange the Revenue Law as to produce the desired result. It is believed the restoration in part of the Revenue Act of 1846, with some additions to the present law, will accomplish the object.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	68	Tennessee and Alabama	80	246,486	679,906	In progr.				
Androsog. & Kennebec	55	642,343	1,475,080	2,245,020	190,605	12,807	none	18	Memphis and Charleston	283	2,103,177	3,563,362	176,484	102,016			
Androsog. & Kennebec	70	91,192	232,192	343,317	29,396	12,807	none	20	Mobile and Ohio	527	2,300,000	3,666,991	628,308	In progr.			
Kennebec & Portland	12	1,211,398	1,607,229	2,470,598	228,747	114,642	none	14	Miss. Central	188	642,634	628,308	In progr.				
Portl., Saco, & Portland	51	1,367,000	1,119,237	1,486,327	259,330	124,088	6	88	N.O. Jackson, and G. N.	100	none	1,825,812	In progr.				
Boston, Concord, & Montreal	93	1,808,093	1,659,512	2,771,310	233,234	120,834	none	18	N.O. Opelousas & G. W.	111	1,000,000	2,500,000	In progr.				
Cheshire	53	1,883,825	949,919	1,511,997	372,892	131,015	none	83	Nick. Shreveport & Tex.	151	1,302,423	1,077,895	In progr.				
Concord	36	1,485,000	none	1,412,674	329,744	158,632	8	83	East Tennessee and Ga.	111	1,000,000	2,500,000	In progr.				
Northern, N. H.	82	2,765,400	none	3,016,633	370,529	138,299	2 1/2	39 1/2	East Tennessee and Va.	151	1,302,423	1,077,895	In progr.				
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	162,687	55,173	none	79	Nash. and Chattanooga	151	2,319,330	3,843,094	316,090	112,177	none		
Rutland & Burlington	120	2,235,376	2,662,396	5,378,428	394,071	none	none	65	Covington & Lexington	83	431,091	159,299	635,363	90,990	34,864		
Vermont Central	117	5,000,000	3,550,236	8,463,366	820,119	214,793	none	65	Lexington & Big Sandy	28	540,117	61,525	570,463	In progr.			
Boston and Lowell	27	1,830,000	325,635	2,188,505	489,754	140,377	6	79	Lexington and Danville	85	698,236	609,061	1,589,566	244,014	90,902	6	
Boston and Maine	21	4,076,974	150,000	4,179,535	906,790	421,561	8	79	Bellevue and Frankfort	254	866,939	77,294	613,231	238,010	114,592	none	
Berkshire	21	900,000	none	600,000	42,000	7	none	79	Bellefontaine and Ind.	118	1,881,598	1,260,612	2,805,821	238,010	114,592	none	
Boston and N.Y. Central	74	2,234,000	1,200,000	3,310,948	102,352	42,335	none	2 1/2	Cleveland and Erie	95	4,473,721	374,127	4,548,133	1,162,601	557,905	9	98
Boston and Providence	65	3,160,000	350,705	3,611,821	558,671	201,578	none	65	Clev. Col. and Cincin.	141	2,676,425	2,688,301	6,124,629	736,272	390,686	10	72
Boston and Worcester	69	4,500,000	587,553	4,858,370	952,894	342,139	6 1/2	84	Clev. and Mahoning	103	2,688,770	2,516,162	4,818,153	450,215	255,868		62
Connecticut River	62	1,591,110	254,043	1,802,244	277,770	102,942	4 1/2	84	Clev. and Pittsburg	133	2,100,000	1,464,364	2,961,978	483,620			63
Eastern, Mass.	60	2,583,400	2,850,325	4,447,459	730,269	346,425	7	44 1/2	Cin. Hamlet & Dayton	60	1,120,450	1,121,265	2,326,459	In progr.			20
Essex	20	299,107	469,311	747,008	51,246	none	none	83	Cin. Wilm. & Zanesville	54	1,484,560	149,000	1,481,733	356,366	187,516	10	
Fitchburg	14	238,140	74,009	333,884	42,647	19,274	6	72	Col. and Xenia	54	1,418,560	131,032	1,440,447	340,781	168,949		82 1/2
Fitchburg and Worcester	12	200,000	140,000	363,658	56,135	23,823	6	72	Columbus and Xenia	54	1,418,560	131,032	1,440,447	340,781	168,949		82 1/2
Lowell and Lawrence	14	600,000	16,000	664,003	191,887	55,877	6	83	Dayton, Xen. & Belpre	63	437,835	422,658	860,496	In progr.			
Nashua and Lowell	21	500,000	none	533,953	198,491	56,593	6 1/2	82	Dayton and Michigan	140	1,078,602	393,011	1,185,896	In progr.			
N. Bedford and Taunton	14	137,260	154,554	287,418	32,677	4,660	none	82	Eaton and Hamilton	42	448,411	835,994	1,345,673	113,859	53,256		30
Newburyport	87	3,015,100	314,834	3,434,164	649,056	142,800	6	82	Little Miami	65	2,963,921	1,171,785	4,243,661	424,061			27
Old Coffey and Fall River	18	450,000	none	443,677	50,896	25,619	6	87 1/2	Mad River and L. Erie	208	2,451,650	2,572,932	4,426,461	424,061			27
Pittsfield & N. Adams	77	2,232,540	1,046,626	3,207,867	275,523	66,383	none	9	Central Ohio	135	1,520,927	3,485,076	4,243,661	424,061	Recently opened.	none	20
Vermont and Mass.	155	6,160,000	6,689,620	9,653,258	1,765,944	718,708	7	87 1/2	Ohio and Penn.	187	2,451,700	3,219,000	6,670,700	1,111,629	602,117	9	20
Western, Mass.	46	1,141,000	218,244	1,304,708	209,118	82,960	2 1/2	65	Pittsburg, Mayv. & Cin.	50	1,350,000	2,298,357	3,562,357	328,958	164,479	none	
Worcester and Nashua	43	1,622,200	351,600	1,843,332	316,616	131,312	7	65	Sandys, Man. & Newk.	127	1,350,000	2,298,357	3,562,357	328,958	164,479	none	
Providence and Worcester	72	2,350,000	939,000	3,313,932	730,012	352,799	10	122 1/2	Seloto & Hocking Valley	135	408,975	509,000	888,858	In progr.			
Hardford and N. Haven	123	1,845,610	2,090,124	4,060,369	258,685	119,611	none	30	Spring Mt. Vernon & P.	113	1,000,000	950,000	In progr.				
Hardf. Prov. and Fishkill	110	2,000,000	474,177	2,429,066	830,792	18,351	none	30	Tol. Wabash & St. Louis	242	2,500,000	4,530,000	In progr.				
Housatonic	67	1,031,800	573,995	1,577,167	238,266	none	4	25	Cin. Log. and Chicago	255	1,496,679	1,006,125	2,080,433	In progr.			10
Nagatuck	62	2,992,000	2,262,647	4,980,407	906,018	335,611	none	30	Evansville & Crawfordsv.	109	708,945	1,177,596	1,844,541	127,400	64,552		
N. York and N. Haven	60	738,258	735,105	1,450,318	103,986	217	none	25	Ind. and Cincinnati	88	1,213,723	1,442,859	2,179,061	356,012	193,142	7	61
N. Haven and N. London	60	600,000	1,007,826	1,627,827	137,060	8,717	none	25	Indiana Central	66	608,829	1,251,387	1,069,060	321,400	186,224		45
N. London, W. & Palmer	66	2,122,300	796,856	2,969,488	304,661	95,456	6	25	Ind., Clev. & Pittsburg	83	834,157	1,101,971	1,671,544	In progr.			20
Norwich and Worcester	100	1,482,766	1,402,244	2,597,963	123,147	60,752	none	25	Jeffersonville	64	1,014,252	694,000	206,544	94,318	none		
Buffalo, Conn. and N. Y.	92	798,339	2,537,849	3,401,868	254,770	52,030	none	25	Lafayette and Indianapolis	64	1,647,500	1,589,881	3,237,351	645,827	371,402	none	10
Buffalo and St. Line	81	1,300,000	1,030,000	2,343,849	507,618	254,855	10	92	Madison and Indianapolis	288	2,535,121	5,281,848	6,643,189	150,000	90,000	none	15
Cayuga & Susquehanna	144	3,877,891	8,933,804	12,891,363	1,753,956	603,010	none	17	New Albany and Salem	73	858,314	1,495,321	239,992	159,323	10		
Hudson River	50	1,735,148	626,958	2,518,261	279,520	102,657	none	17	Peru and Indianapolis	73	924,100	456,000	1,495,321	239,992	159,323	10	
Long Island	534	24,154,800	14,462,742	25,233,913	6,663,551	3,162,126	8	92	Terre Haute and Ind.	182	3,214,500	2,387,155	6,214,152	In progr.			85 1/2
New York Central	404	10,023,958	25,126,669	33,439,431	6,488,993	2,627,118	none	51 1/2	Chicago and Rock Is. P'd.	220	2,300,000	1,325,000	3,625,000	In progr.			
New York and Erie	133	5,716,050	3,527,596	8,127,388	462,394	154,854	none	51 1/2	Chic. St. Paul & P'd. do Lac.	178	2,300,000	1,325,000	3,625,000	In progr.			
New York and Harlem	119	1,611,527	4,522,413	5,435,565	618,527	145,733	none	17	Galena and Chicago	298	4,834,800	1,189,304	5,866,283	1,506,710	942,231	17	107 1/2
Northern, N. Y.	37	374,920	219,594	677,754	106,764	53,380	none	17	Illinois Central	707	1,419,440	18,001,426	17,698,099	1,632,118			94 1/2
Oswego and Syracuse	25	610,000	140,000	888,182	231,348	76,327	5	5	Peoria and Oquawka	93	569,889	818,544	1,388,342	In progr.			
Rensselaer & Saratoga	54	899,900	1,063,234	1,891,993	183,959	37,666	none	5	Ohio & Miss. (Wat. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.			
Saratoga and Washington	71	1,317,614	1,118,761	1,638,117	152,048	60,407	none	5	Terre Haute and Alton	173	2,281,420	1,254,000	3,537,424	In progr.			
Syracuse & Binghamton	27	439,492	493,500	1,107,873	193,964	52,752	5	65	Detroit and Milwaukee	185	1,328,994	1,128,994	1,966,960	In progr.			
Troy and Boston	97	1,370,428	854,768	2,040,543	124,301	44,925	none	5	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656		89 1/2
Watertown and Rome	50	1,000,000	1,177,376	2,177,376	124,301	44,925	none	5	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,045,208	2,410,000	875,000	10	86 1/2
Bevidere and Delaware	60	1,000,000	1,177,376	2,177,376	124,301	44,925	none	5	Green Bay, Mil. & Ch.	155	784,075	442,726	1,193,768	In progr.			
Camden and Albany	40	240,125	1,269,223	1,499,185	60,673	61,700	none	120	Milwaukee and Miss.	200	988,665	1,827,584	2,704,593	687,940	307,632	17	81
Camden and Atlantic	31	3,253,925	798,596	4,063,338	824,032	440,447	10	120	Milwaukee & Water'n	92	354,861	132,000	514,238	In progr.			
New Jersey	75	2,000,000	1,632,085	3,506,226	378,145	180,796	7	120	Milwaukee and Horicon	72	354,861	132,000	514,238	In progr.			
New Jersey Central	62	1,155,715	851,500	1,549,622	238,596	99,377	6	120	Milwaukee & La Crosse	69	354,861	132,000	514,238	In progr.			
Morris and Essex	56	1,184,600	28,411	1,212,911	In progr.				Racine and Miss.	68	354,861	132,000	514,238	In progr.			
Cumtland Valley	109	2,865,175	1,895,897	4,140,365	In progr.				Hannibal & St. Josephs.	13	292,351	580,000	823,310	In progr.			
Del. Lack. & Western	38	600,000	150,000	750,000	In progr.				N. Missour.	13	1,138,208	684,294	1,093,336	In progr.			
Erie and North East	28	600,000	150,000	750,000	In progr.				Pacific	130	2,803,692	3,903,174	4,463,726	160,000	In progr.		
Harb'g & Lancaster	38	600,000	150,000	750,000	In progr.				St. Louis and Iron Mt.	49	445,170	186,116	In progr.				
Little Schuylkill	19	2,530,855	731,402	3,287,678	In progr.				Panama								

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	---	85
Buffalo and State Line	600,000	Do. Inconvertible	7	April, October.	"	1886	---	---
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1886	90	85
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1888	90	92 1/2
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1889	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	---	51
Do.	800,000	2d do. Inconvertible	7	March, Sept.	"	1885	---	61
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage Inconvertible	7	20 Jan. 20 July	"	1867	---	93
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	---	90
Cleveland, Painesville, and Ashtabula	567,000	Do. Inconvertible	7	Feb'y, August.	"	1861	---	92 1/2
Do. do.	800,000	Do. convertible	7	Feb'y, August.	"	1860	---	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	---	85
Cleveland and Toledo	525,000	Do. Inconvertible	7	Feb'y, August.	"	1863	---	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October.	"	1862-72	---	86
Do. do.	1,200,000	Do. Inconvertible	7	April, October.	"	1862-72	---	86
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	---	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. Inconvertible	7	Feb'y, August.	"	1863	97	80
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88 1/2	80
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	85	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	95
Jeffersonville	300,000	Do. 2d sec. Inconv.	7	April, October.	"	1873	---	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	100
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	92	50
Indianapolis and Cincinnati (for Lawb. & U.M.)	500,000	Do. conv. till 1857.	7	March, Sept.	"	1866	---	119
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	---	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859.	7	Feb'y, August.	"	1865	---	76
Little Miami	1,500,000	Do. Inconv.	6 1/2	May, 2 Nov.	"	1863	78	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October.	East.	1860	88	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	87 1/2	99
Do. do.	650,000	Do. 2d do. 1858	8	April, October.	"	1863	84	95
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88 1/2	101
New Albany and Salem	600,000	Do. 1st section	10	April, October.	"	1868-62	---	101
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	---	80
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	---	100
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	---	82
Do. do.	2,000,000	Income, convertible	7	April, October.	"	1872	78	83
Pennsylvania (Central)	6,000,000	1st mortgage, conv. till 1860.	6	Jan'y, July	Phila.	1860	92 1/2	83 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. con.	7	May, Novemb.	N.Y.	1861	---	83 1/2
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	---	78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	---	---
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1867-77	75	77
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	74	75

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84	84 1/2
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	86 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	89	88 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108	110
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95 1/2	96
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	90	92
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	89 1/2	90 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	81	83
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	84	84
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	97	99
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	82	84
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	63	64
Illinois Central	17,000,000	Mortgage, Inconvertible	7	April, October.	"	1875	81	81 1/2
Do. (Free Land)	8,000,000	M'g 345,000 acrs.-priv. 7 aha's	7	March, Sept.	"	1860	86	87
Michigan Southern	1,000,000	1st mortgage, Inconvertible	7	May, Novemb.	"	1860	91 1/2	80
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80	81
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	---	97 1/2
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	92	94
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	84	84 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	85 1/2	86
Do. do.	3,000,000	Non-ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100 1/2	100 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	99	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	99	100
Reading, issued 1843	1,573,000	Mortgage, Inconvertible	8	Jan'y, July	Phila.	1860	---	---
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89	91
Do. do. 1849	3,469,000	Do. Inconvertible	6	April, October.	"	1870	85	86

CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Ask'd p. ct.
New York 7 per ct. 1857	Feb'y, May	100	98	Milwaukee 7 per ct. coup.	X	Divers	81
Do. 5 do. 1858-60	August	97	98	New Orleans 6 per ct. cp. R.R. X	Do.	Do.	78
Do. 5 do. 1870-75	November	99 1/2	100 1/2	Philadelphia 6 per ct. 1876-98	Jan'y, July	89 1/2	90
Albany 6 per ct. coup. 1871-81	Feb'y, August	96	97 1/2	Pittsburgh 6 per ct. coup.	X	Divers	75
Allegany 6 per ct. coup.	Jan'y, July	64	69	Quebec 5 per ct. coup.	1868 X	Jan'y, July	92
Baltimore 6 per ct. 1879-90	Quarterly	97	98	Racine 7 per ct. coup.	1873 X	10 Feb'y, Aug.	81
Boston 5 per ct. coup.	X	April, October	98	St. Louis 6 per ct. coup.	Long X	Divers	78
Brooklyn 6 per ct. coup.	Long X	Jan'y, July	99	Do. do. Municipal	X	Do.	78 1/2
Cler'fd. 7 per ct. cp. W.W. 1879	X	Do. do.	100	Sacramento 10 per ct. cp. 1862-74	X	Do.	76 1/2
Cincinnati 6 per ct. coup.	X	Divers	88 1/2	S.F. 7 p. cp. 1865 pay. N.Y.	X	May, Novemb.	85
Chicago 6 per ct. coup.	1873-77 X	Jan'y, July	88 1/2	Do. 10 p. cp. 1871 X	Do. do.	91	92
Detroit 7 per ct. cp. W.W. 1873-78	X	Feb'y, August	101	Do. 10 p. cp. N.Y.	X	Jan'y, July	105
Louisville 6 per ct. cp.	1880-83 X	Divers	79	Wheeling 6 per ct. coup.	X	Divers	70
Memphis 6 per ct. coup.	1882 X	Jan'y, July	72 1/2	Zanesville 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 22d, 1886.

BONDS.	Per ct.
Cin. & Chicago, 10 per ct. Ral Estate, Butler & Meredith	40
Indianap. & Cin., 2d Mort. 7 per ct.	77
Cin., Wil. & Zanes. 2d Mort. 7 per ct.	62
Covington & Lexington, 2d Mort. 7 per ct.	65
Ohio & Mississippi, 2d Mort. 7 per ct.	42
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	88

STOCKS.	Per ct.
Cin., Wil. and Zanesv., 22.—Cin., Ham. and Dayton, 64.—	---
Col. & Xenia, 82 1/2.—Cincinnati & Chic., 10 1/2.—Central Ohio, 16.—	---
Covington & Lexington, 21.—Dayton and Western, 20.—	---
Eaton and Hamilton, 30.—Fort Wayne and Southern, 10.—	---
Indiana Central, 47.—Indianapolis and Cincinnati, 15.—Little	---
Miami, 38.—Mad River and Lake Erie, 20.—Marietta and Cin.,	---
18.—Ohio and Mississippi, 5.—Hillsboro' and Cincinnati, 18.—	---
Junction (Indiana), 10.	---

BY HEWSON & HOLMES.

For the week ending January 23d, 1886.

BONDS.	Per ct.
\$4,000 Cov. & Lex., 7 per ct. 2nd Mortgage	67 1/2
3,000 Cin. & Chic., 8 per ct. Real Estate	35 (& int.)
5,000 Cov. and Lex., 10 per ct. Income	62 1/2
2,000 Cin., Wil. and Zanesv., 7 per ct. Income	61 1/2
2,000 Ohio & Mies. 7 per ct. 2nd Mort.	40
3,000 Little Miami, 6 per ct. due in 1883.	50
2,000 Marietta & Cin., 7 per ct. Domestic	50
1,000 Hillsboro' and Cin., 7 per ct. 1st Mort	50
600 Burnet House Stock	40

STOCKS.	Per ct.
30 Shares Centra' Ohio	20
258 " Indianapolis and Cincinnati	60
100 " " "	60 1/2
50 " " "	61
119 " Little Miami	90
30 " Cin., Wil. & Zanesv.	20
253 " Indianapolis and Bellefontaine	20
100 " Peru and Indianapolis	16
10 " Columbus & Xenia	84
101 " Eaton & Hamilton	30
100 " Ohio & Mississippi	8 1/2
310 " " "	4 1/2
138 " " "	4 1/2
100 " " "	5
100 " " "	7 1/2
74 " " "	20
85 " Covington & Lexington	20
65 " " "	20 1/2
50 " " "	21
20 " Cincinnati, Hamilton, & Dayton	63

Marie & Kanz' Money Circular for the European Steamer of the 28th inst.

[TRANSLATED EXTRACT.]

New York, Jan'y 28, 1885.

Foreign Exchanges continue low, and the condition of the Money market shows a gradual improvement. But public Stocks remain dull, and in many instances the quotations are below those of our last circular, of the 18th inst. This state of things is due to the general cautiousness inspired by the present position of the London market. Our last advices from Liverpool are to the 12th inst., received per *Baltic* on the 24th. The intelligence was to the effect that money was growing still more stringent in London; that the Specie reserve of the Banks of England and France had again disappeared; and that Consols had fallen to 86. This news creates fears of a further advance in the Bank rate; and the recollection of the effect produced by like proceedings last Autumn, prompts those who feel disposed to purchase to await the decline which they expect must result from this circumstance.

State Stocks are steady with few sales. California and Missouri Bonds have fallen 1/4 per cent; New York State 5s, 1860, have advanced 1, Indiana 1/2. City and County Bonds—some few sales have been made at St. Louis City, Milwaukee, and San Francisco 10 per cent. Bonds, with a slight decline on the two first. Some transactions have also been made in Des Moines County 8 per cent. Bonds. Railroad Bonds are weak, with a very limited movement. Chicago and Rock Island Bonds have declined 2 per cent.; Erie 1883, 1; Illinois Central Construction Bonds 1/2 per cent.—Freeland Bonds are offered at 87, and ex-privilege at 83 with few buyers. Erie 1862 Bonds have advanced 1 per cent. Bonds not dealt in at the Stock Exchange—Galena and Chicago 1st and 2d mortgages—are about the only ones which have led to any business.

Railroad Shares have been very dull. Chicago and Rock Island has declined 1 per cent.; Cleveland and Toledo 1 1/2, Erie 3/4, Galena and Chicago 3, Illinois Central 1, Michigan Central 1 1/2, and

Reading 3 per cent.; Cleveland, Columbus, and Cincinnati has advanced 1. Cleve. and Pittsburg 4, Harlem $\frac{1}{2}$, and Hudson River 1 per cent.; Milwaukee and Mississippi, after advancing to 85, has receded to 81 $\frac{1}{4}$.

Money is growing gradually easier. Loans on call at 7 per cent. First class paper 8 per cent.; names less current 9all. Exchanges have not been active. London chiefly at 108 $\frac{1}{8}$ at 108 $\frac{3}{8}$.—Paris, 5.20a5.21 $\frac{1}{4}$.

MARIE & KANZ.

American Railroad Journal.

Saturday, February 2, 1856.

Authority of the Old Masters in Architecture.

(Continued from page 57.)

Let us pause. Is it true that these errors are the mistakes of architects alone? Are they not rather the result of a universal misconception, through which we have come to surrender our right to think,—a misconception, by which we are taught to regard as unqualified authority the works of past ages, sanctified by the glories of classic learning and poetry, or the genius and devotion of pious bishops.

This mistake assumes, that the tastes of certain periods were perfect. That the flood of new discoveries and inventions, the increased number of studies for taste, developed in a more general as well as more profound knowledge of the works of nature, illustrated in the sciences, some of which are newly born—a larger world than ever before known—have failed to develop in any degree, the genius of man as to his appreciation of the beautiful in the fine arts; that, consequently, modern taste is not authority in architecture unless it is subservient to ancient art. This is the proposition. It is slavishly stated in the most emphatic tones through the portals of a thousand structures, that are to-day rising from the ground all over this country.

May we not gain something by a careful consideration of the facts that may demonstrate the unreasonableness of this state of things,—facts that seem not to enter the minds of our profession.

To facilitate the inquiry, we may at one and the same time notice the claims of MEDIEVAL and GRECIAN masters. And here we ask leave to make a deflection. We wish to consider the Greek temples in common with what are known as Christian Orders, while we are aware of a popular notion prevailing, that they are inappropriate to the uses of Christian worship, the ground of objection to their use being, that they are heathen temples erected for the worship of false gods and are surrounded with associations not congenial to our religion. This notion we repudiate as not founded in truth.

Without endorsing the philosophy of Dr. Walker in treating of religion, we cannot so well express our own views concerning the worship of the Greeks than to cite his remarks on that interesting subject.*

"They must be ignorant indeed of the wonderful people of whom I now speak, who allege, that the Greeks worshipped the mere statue of the god and not the personified virtue. Even the history of their religion proves the reverse. It was the tomb which became the altar and re-

tained nearly its form. It was the expression of love, of regret, of veneration for departed virtue, which became divine adoration; and, as individual acts and even individual names were ultimately lost in one transcendent attribute, so were individual forms and features, in its purified and ideal representation. Here, then, instead of finding the worship of men, or of their representations, we discover a gradual advance from beings to attributes—from mortal man to eternal virtue—and a corresponding and suitable advance from simple veneration to divine adoration.

"When in great emergencies of the State, the sages and the soldiers of Athens, in solemn procession repaired to the temple of Minerva, turned their faces toward the statue of the goddess, and prostrated themselves in spirit before her—let the beautiful history of Grecian science tell, whether in the statue, they worshipped the mere marble structure or in its forms and attributes beheld and adored a personification of eternal truth and wisdom and so prepared the mind for deeds, which have rendered Greece forever illustrious. Or when returning from a Marathon or a Salamis the warriors of Athens followed by trains of maidens and matrons and old men offered thanks to the god of victories—let the immortal record of the long series of glorious achievements which succeeded these, tell, whether gratitude to their heroes was not there identified with homage to the spirit or the divinity that inspired them.

"True it is, that, whenever physical or moral principles are personified, the ignorant may be led to mistake the sign for that which is signified; but one of the most admirable characteristics of the Grecian religion is, that with a little effort every external form may be traced to the spirit, which it represents and every fable may be resolved into a beautiful illustration of physical or moral truth. So that, when mystic influences with increasing knowledge cease to sway the imagination, all powerful truths directed the reason."

In all this, Dr. Walker does not vindicate the errors and absurdities, which poets and others introduced into mythology.

We shall be understood, therefore, as justifying those artists, who have not subscribed to the ridiculous doctrine that on philosophical ground erases the architecture of the classics from ecclesiastical orders.

We resume the discussion as indicated.

It would seem to be a sufficient reply to make those who insist on our accepting terms from the ancients, that in all things in life we have need of other laws;—that, when free to choose, our tastes, in other matters than the fine arts, our passions and pursuits are of a higher kind; that the objects of our structures, even of the religious edifice are of another nature; that our civil and social institutions, more than all things else, are changed from those of the East. That, in short, we live in another time—another world.

To illustrate thoroughly this argument, would be to enter fields of science far too widely extended for the purpose of the present essay. It will be impossible to do more than touch on its various suggestions. Our object will be, not so much, to demonstrate the truth of the proposition as it will seek to impress on the mind of the architect the fact, such is the nature as well as the degree of differences alluded to, that the subject is

worthy of serious study with reference to his art. We shall have accomplished an important end, if we succeed in prevailing on our brethren to think independently.

First. Though it appear hardly necessary to invite attention to the social condition of past ages, whether of the ancient Greek and Roman Schools or the later builder of mediæval periods, with the phenomena of which every scholar is familiar, still, it is believed that much good would result from a careful study with reference to this question. For instance; a glance at the Grecian theater would reveal a condition of things so gross, that polite ears might not listen to the recital; this grossness not constructive but absolute and positive, as for instance in Aristophanes' comedies,—betraying a bestiality of mind quite inconsistent with our idea of superior culture. Yet this amusement is classic.

Classic too, is that Etruscan bronze seal, excavated near Cortona*—representing a conference between an adulteress and her lover—with a figure of the Leno, who planned the meeting. Yes classic! As may be supposed, classic virtue among women was of another sort from what is expected of Christian women. Instead of chastity they had fortitude and certainly fortitude is an admirable virtue. Its value among the Romans cannot be better illustrated than in the life and death of Porcia, the daughter of Cato, who by thrusting a knife into her thigh and supporting it there during eight days without complaining, proved to Brutus her fitness to be a confidant in his conspiracy, and who on his defeat showed still her devotion to her husband by swallowing burning coals and so ending her life.

Woman had much the same influence in society that she has now; her power over men is sufficiently illustrated in the anecdote of Themistocles,† who said of his infant boy, "This little fellow is the most powerful person I know, for he completely governs his mother, while she governs me, and I the whole of Greece."

Without pursuing this thought, which, while it has its value, does not bear directly on the case in hand, we pass to what it must be acknowledged, has immediate reference to our ecclesiastical architecture.

1. The temples of the gods as well as the early English churches were not visited by the people for the purposes to which the modern Christian church is dedicated. The ancient devotee went to worship; and only to worship. The modern disciple enters the sacred building for the purposes of worship, but also for communion with the saints and to hear those lessons concerning life, that teachers of his own caste may read to him. Thus our congregations are to a certain extent, social gatherings, and have the need of new arrangements, even new conceptions.

This was not comprehended by the Clerical Architect of the middle ages. For their time, doubtless, they did well. But religious practices are modified. We no longer enter the church for the purpose of mortifying the flesh, while we listen to the preacher. In all our notions of comfort, we demand higher provisions for its enjoyment

* Mus. Cortoneus. tab. 18.

† Plut. Themistocles.

* Walker on Beauty, pp. 30—34.

than was thought essential to the happiness of men five hundred or more years ago.

Thus the subject of ventilation is now well understood, and the contrivance for its proper conduct and regulation is as much the province of the Architect as the designing of the structure.

Now, too, we may justly complain, if we are forced to sit on narrow, uncomfortable seats, so very correct in being modeled on a Christian pattern of the fifteenth century, that after its use we feel that we may have indeed been born in that age. We have learned what they did not know—the art of making a comfortable seat. Let us have the advantage to be derived from that knowledge.

The laws of acoustics, and the proper apportioning of light demand a consideration they have not received. What has been the course pursued by the artists of America? Without arriving at the true spirit of the art, they have fastened upon our cities most costly buildings that will in time come to be regarded as the work of unscientific hands—the fruits of ignorant genius.

But we have a choice to make; either we must tear down some ancient landmark and regulate the proportions of the edifice and its form with reference to correct natural principles, or we must still preserve cumbrous intrusions to be disguised as ornaments, with unreasonable apportionment in every important particular, while we rest contented that we have present "a pure example of one of those fine old churches of the middle ages!"

2. The higher conception of what constitutes a religious life, should have an important bearing on Sacred Architecture; especially in its influence on the lighting and decoration of churches. The days of asceticism have passed. The dull, gray life of the trembling religionist who loved Christ solely because he feared the Devil, has given place to the cheerful earnestness of the hopeful child of God. The object of life is to live—not to die; to increase in knowledge of all that is good and great; and truth. Christian life is an aspiration heavenward; not a sigh nor a moan in dread of evil.—Hence, then, the "dim religious light" of the old Bishops will not be found suited to the wants of a nobler age. Light! More light! is the great demand of the day, perhaps in nothing more than theology. And for this reason do we build our churches, and place in the Pulpit wise men to expound the Faith.

The light of the forest is not dim though soft.—Streams of sunshine come pouring down through the windows of that temple, like beams of truth from God's everlasting throne. This light from above in the natural forest is beautifully significant; but in the structures to which it suggests the most, we rarely see such a thought indicated. The simplest and noblest form in which it can be applied is the dome, which at the same time pictures forth that grander dome, whence light is supplied to the world.

We are more than ever struck with the beauty and appropriateness of the dome to the Christian temple, since the erection in this city of the beautiful Church of All Souls—beautiful and complete as it stands now, without the campanile and spire.

As to sentiment, the dome is equally significant, while more reasonable than the spire. True, the spire points heavenward; but then it is pretentious;

angular, crystalline, harsh; sharp, narrow, contracted; and such its moral.

The dome is equally celestial in its aspirations. It is modest in its ambition; soft and gentle. It conveys an impression of liberality and Christian benevolence, as an opening hand dispenses treasure. And as its horizontal lines give breadth and scope, it tells of large views and profound. It shadows forth a guardian hand that shelters while it protects *all souls*. Admitting a light directly from the skies, it suggests an unerring light from the fountain of truth.

It is only strange, that after the glorious example in the old world, we who have copied every possible deformity, have neglected this principal beauty.

3. The extended sphere of commerce and trade, with the attending improvements in the arts of navigation and locomotion, seems in their power to have forced changes of some sort in civil art. This influence is not limited to those buildings that are used for mercantile purposes. It is seen in the architecture of the mansion house. Commerce with its necessities having called for new ships, that are built to suit the demands of the business in which they shall be engaged, the same spirit of independent originality extends to the storehouse and dwelling of the merchant.

It is hardly possible to say as much of the Railroad Depots of the country, for which men of the most comprehensive profession are to a degree responsible. Out of New England, there are few decent buildings for the purpose in the United States. And there, some beautiful designs are mutilated by that everlastingly present mania to build "*correct examples*."

However, notwithstanding this mistake in exterior design, a real treat is found in contemplating the ingenious arrangement of Roof-trusses, whether of wood or iron. And this leads to the thought that commerce, in its progress and increasing wants, develops the means of satisfaction. Thus, without being aware of its approach, a new order of Civil Architecture is forced on us. It is impossible to escape the fact, wherever we go, in the world of towns that a revolution approaches in the art of design, as well as of building. With all its frivolities, so whiningly dwelt on by weeping editors and moralists, we live in an age of strength and power; an iron age.

This material, iron, is hewing its way through the prejudices of artist and mechanic; is sapping the foundation of ancient orders. True, it has yet developed few examples above a handsome stove pattern; but we are not sure the study of stoves may not be of use to the speculations of the designer. A thousand tastes are illustrated in these household fixtures, and varied purposes. Very fortunate is it that cast-iron stoves were generally introduced in this country before iron was applied to outside building purposes. Otherwise we should have been vexed with the constant effort to mould it in the forms, and in this case, unscientific proportions of Grecian art. As it happens, we find a refreshing originality present in almost every iron building.

(To be continued.)

The attention of parties using stationary engines is asked to the advertisement of McNab & Carr in another column.

California.

SACRAMENTO VALLEY RAILROAD.

We learn that the first division of this road, being about 23 miles, has been completed and is now in successful operation. Its line is identical with the great route of travel from the city of Sacramento to the mines; so that the road must at once enter upon a very large business, which at California prices, would make it the best stock of the kind in the country.

The road has been constructed in the course of a few months by a party of enterprising contractors from this city. The dispatch with which it has been built is characteristic of everything that relates to California.

The opening of this road inaugurates a new era in the history of this State. It will form the base of a great system not only for California, but embracing, perhaps, the continent in its folds. California is now stretching out her iron arms to meet those in progress from the East. The construction of railroads on the Pacific coast cannot fail to exert a very strong influence on promoting the construction of a great line spanning the continent.

We notice by the California papers that the road is held in high favor in that State, and that as dear as money is, the stock is selling only at a small discount from par in San Francisco.

Reading Railroad.

Below we give an abstract of the Report of this road for the year ending November 30th, 1855.

GENERAL ACCOUNT.		Dr.
Railroad	\$14,197,978	81
Depots	282,242	94
Locomotive engines and cars	2,791,716	42
Real estate	1,172,996	47
Telegraph stock	19,180	00
	\$18,464,114	64

Expended in 1855:	
Railroad, for new sidings, &c.	\$21,748 46
New stone bridges	134,173 11
New engines and cars	281,389 29
New depot expenses	29,961 11
Real estate, bought	58,877 32
Telegraph stock	200 00
Workshops	11,225 18
New engine house, Pennsylvania Avenue	7,491 08
	540,065 55

Total	\$19,004,180 19
Assets:	
Cash	\$101,966 90
Bills receivable	58,346 32
Freight and toll bills, receivable first week in December, 1855	129,793 84

Total	\$290,107 06
Less wages, materials, bills, and drawbacks	168,045 91
	\$122,061 15

Stocks and bonds held by the company	591,491 01
Materials on hand, current business of the road, and debts incurred for 1856	413,212 29
Debts due the company incurred in current business	\$128,640 37
Debts due to the comp'y, partly secured by real estate	\$746,209 15
Less prob'ble loss	248,367 07
	497,842 08

622,182 15

\$1,753,246 90

years. The Central Ohio road was also out of order the greater part of the year.

The present abundant crops requiring to be transported, give good hopes of a large and profitable business for the present fiscal year. The tunnel on the Central road is now nearly completed, and no further interruption from this source is apprehended.

Much complaint, and we consider with justice, is expressed at those companies who are in the practice of reducing the charges for freight transportation, to a point below paying rates. Such a course is certainly suicidal. Were the public to take a proper view of the matter, instead of approving such a course, it would instantly excite their suspicion that the road in itself was intrinsically weak, or its management radically wrong.

The two 5 per cent. dividends have both been declared in stock, the company having made heavy expenditures on construction, payment of debts, joint stock account, purchase of their own stock, &c., besides having a large surplus on hand at the close of the year.

The following are some of these items of extraordinary expense:

Construction, as bridges, depots, stations, &c., &c.....	\$23,442
On joint stock account, for new machinery, &c.—Co's share.....	44,376
On payment of debts.....	33,524
Capital stock bought in.....	9,400
Amounts due by other railroad companies and individuals.....	9,980
Interest and taxes.....	36,149
Cash on hand.....	34,370

\$190,242

The assets and liabilities of the company, on the 1st of December, were:

ASSETS.	
Length of road.....	54½ miles.
Side tracks.....	8½ "
Total.....	63 miles.
Construction acc't.....	\$1,237,446
Equipment.....	244,287
Total.....	\$1,481,733
Stock in other roads.....	178,050
Telegraph, steamboat, real estate, second track, joint stock and bonds, bills and acc'ts receivable, cash, &c.....	188,998
	\$1,848,781
LIABILITIES.	
Capital stock.....	\$1,484,550
Mort. bonds, due 1859.....	18,000
Bonds issued to Central Ohio railroad company in payment of stock.....	60,000
Bills and acc'ts payable.....	71,091
Dividends and surplus acc't.....	215,140
	\$1,848,781

The annexed extract from the President's report is worthy of special notice:

"The operations of your road during the past year has been quite satisfactory. The trains have been run with uniform regularity, and at the highest rates of speed consistent with safety. No accident of any moment has happened on the road during the year. No passenger has been killed; nor even injured, from the want of care on the part of the company, or any of its employees. Nor, we are happy to know, has this been peculiar to the past year. The road has been in operation nearly six years, having been opened in Feb'y, 1850, and notwithstanding the large number of passengers that have been carried over it during that time, none have been killed or seriously injured. Nor has any collision of trains or other alarming acci-

dent happened during that period. The result is, the reputation of the road for the safe and speedy carriage of persons and property is justly equal to that of any other railroad. This freedom from accident has not been simply fortuitous. It may be traced to causes, which if they had not existed, opposite results would doubtless have challenged your attention. Without detailing these causes, your Board would refer to the admirable discipline organized and enforced by your Superintendent among the employees, as one of the principal means that has given such security to the travel and trade that has passed over your road, to which may be added the superior structure of the road, the good working condition in which it has been uniformly kept, and the excellent character of the machinery and equipment. For the procuring of these no proper expense has been spared; your Board being satisfied that true economy, as well as a faithful regard for the public interests, have alike required that no expenditure should be withheld from the road or its appointments, that could reasonably add to the safety of the travel or to the regular and speedy transit of freight."

The rolling stock consists of 38 locomotive engines, of which 13 are first-class, 44 passenger, 14 baggage, and about 500 other cars of various kinds. Number of miles run by locomotive engines, 680,587. Cost of repairs per mile run \$8.06.

The officers for 1856 are—

W. Dennison, Jr., President; W. H. Clement, Superintendent; S. E. Wright, Treasurer; and Cyrus Fay, Secretary. The remaining Directors are—Robt. Neil, Alfred Kelley, D. W. Deshler, R. W. McCoy, L. Goodale, W. B. Hubbard, Joseph R. Swan, all of Columbus;—Jacob Strader, Jno. Kilgour, and R. S. Springer, of Cincinnati; and Abm. Hivling, of Xenia.

Ohio and Mississippi Railroad.

The principal topic of conversation in financial circles yesterday, was the condition of this road, and the nature of the proposals said to have been made for its completion. It is now thoroughly understood, that its present condition, for the stockholder, is as bad as bad can be. This is sufficiently clear, from the fact, that for months past, the stock has been a mere foot-ball in the market, lighter than the lightest fancy, and last week, was worth but two and a half cents on the dollar, with, if possible, a downward tendency.

It is needless for us to attempt to trace all the causes, that have combined to produce this unfortunate result. * * * We come to the proposition in question.

To understand this, it is necessary that we first exhibit the present financial aspect of the Company's affairs.

The total am't of stock is.....\$6,383,035

This includes \$1,000,000 issued to the city of Cincinnati, to secure the payment of its \$600,000 loan of bonds.

Am't of 1st mort. bonds.....	\$2,050,000
Am't of 2d mort. bonds.....	1,500,000
Floating debt.....	550,000
Due contractors.....	150,000

Total debt.....	\$4,250,000
Add stock.....	6,383,035

Apparent cost.....\$10,338,035

It is hardly necessary to say, that all of this immense sum has not been expended upon the road or its appointments. The fact that the Company has paid eight per cent. annual interest upon its stock in stock—that some of its hypothecations have been made at rates recklessly low, and that it has submitted to enormous interests must explain most of the deficiency. The case rests as we have stated it, except that since the August reports, from which our figures are mostly taken, \$228,000 additional interest has accrued.

Under all these circumstances, which, it must be owned, are sufficiently discouraging to the stockholders, an association of less than a dozen New York capitalists, but representing private fortunes, amounting to over fifteen millions of dollars, have offered to complete the road, according to the original specifications, and supply it with rolling stock. Among the parties interested are Wm. H. Aspinwall, Joseph W. Alsopp, Henry Chauncey, Charles Gould, David Leavitt, David Hoadley, and E. J. Woolsey.

The terms proposed are about as follows:

1. The Company shall issue mortgage bonds sufficient to bring the whole amount up to ten million dollars.

2. Cincinnati shall pay the interest upon her bonds, and look to her stock and wharf property, as security for her claims.

3. Contractors and holders of the floating debt shall exchange it for scrip, which will in turn be exchanged for these mortgage bonds 12 months after the completion of the road.

4. The capitalists to pay all other interests and to throw no bonds on the market until the road shall have been opened one year.

5. The whole line to be finished and in running order within eighteen months from the date of the contract.

The amount of cash necessary to be advanced by the capitalists, is estimated to be about thus:

To complete the road.....	\$1,500,000
Add'l rolling stock.....	250,000
To pay interest now due.....	210,000
To pay int. next 18 months.....	372,710
Contingencies and expenses.....	100,000

Total.....\$2,432,710

They propose to take up the 2d mort. bonds, of which they can control the principal amount, by an exchange for the new issue, paying more or less premium. The result of the speculation to the capitalists, as near as we can cipher, may stand about thus:

2d mort. bonds.....	\$1,500,000
Premium, say.....	300,000

Total.....	\$1,800,000
1st mort. bonds.....	2,050,000

\$3,850,000

Total bonds.....	\$10,000,000
Deduct.....	3,850,000

Leaves.....\$6,150,000

Probable value, say 70c.....	\$4,305,000
Cost of completing road.....	2,432,710

Possible profit.....\$1,872,290

The estimates we have given are derived in part from the Company, and in part from the capitalists; and, of course, are but an approximation toward the actual figures that might appear in the future. We are satisfied, however, that they cannot be very far from correct. Hard as these propositions may appear to the city Treasury and the stockholders, they are a vast improvement upon their present situation; and if no better proposals are offered nor can be obtained, these should be accepted.

If the city should nominally lose half a million, it would be poured into her coffers over and over again by the advantages of the completed road. Trade and travel go North of us and ignore our existence, for the want of this great through line of communication with the West and South.—Cincinnati Commercial.

Fort Wayne and Chicago Railroad.

The tracklaying on the Fort Wayne and Chicago Railroad was completed to Columbia on the 22d inst., and the road is now open to that point, the county seat of Whitley county, 20 miles west of Fort Wayne. The track laying west of Columbia will be resumed with the opening of Spring, and reach Plymouth early in the summer, where a temporary connection with Chicago will be formed by way of the Peru and Laporte road.

Railroads of New York.

Statement showing the length, cost, amount of stock, debt, gross earnings and expenses of all the railroads of New York, for one year, ending Sept. 30, 1855.

Name of Corporation.	Length of track laid.	Length of double track including sidings.	Total cost of road, equipment, and other expenditures.	Name of Corporation.	Amount of capital stock now paid in.	Total amount now of funded and floating debt.	Name of Corporation.	Gross Receipts.	Gross Expenses.
Albany Northern.....	*33.00	25	\$1,739,004	Albany Northern.....	\$439,094	\$1,300,000	Albany Northern.....		
Troy and Rutland.....	31.77	...	344,188	Troy and Rutland.....	249,939	130,879	Troy and Rutland.....	\$16,000	
Alb. & W. Stockb'go.....	38.00	6.00	1,930,895	Albany and W. Stockb'go	1,000,000	930,895	Albany & W. Stockb'go..	323,318	219,991
Blossburg & Corning....	14.81	1.60	496,058	Blossburg & Corning....	250,000	223,007	Blossburg and Corning...	38,182	6,303
Black River and Utica....	16.00	1.44	974,000	Black River & Utica....	643,330	317,859	Black River & Utica....	26,261	12,401
Buff. & N. Y. City.....	91.00	5.50	3,401,868	Buff. & N. Y. City.....	798,439	2,587,849	Buff. & N. Y. City.....	288,392	256,496
Buff. & State Line.....	69.00	12.50	2,491,364	Buff. and State Line....	1,300,000	1,040,000	Buff. & State Line.....	679,750	323,987
Buff. Cor. & N. Y.....	100.00	6.25	2,819,096	Buff., Corning, & N. Y..	1,487,874	1,499,783	Buff., Corn., & N. Y....	42,048	19,256
Roch. & Gen. Valley.....	18.45	1.25	693,961	Roch. and Gen. Valley...	554,270	176,118	Roch. & Gen. Valley....	167,522	106,143
Brooklyn City.....	17.16	17.26	844,344	Brooklyn City.....	902,660	none.	Brooklyn City.....		
Canan. & N. Falls.....	98.57	6.89	3,495,832	Canan and Niag. Falls...	1,315,000	2,279,854	Canan. & N. Falls.....	322,116	277,501
Canan. & Elmira.....	46.84	2.86	1,275,796	Canan and Elmira.....	434,111	922,393	Canan. & Elmira.....	299,178	104,583
Chemung.....	17.40	2.06	400,000	Chemung.....	380,000	70,000	Chemung.....	88,162	70,839
Cayuga and Susq.....	34.61	3.49	971,976	Cayuga & Susquehanna..	687,000	506,686	Cayuga and Susquehanna	135,433	86,784
Eighth Av., N. Y.....	4.89	5.09		Eighth Av., N. Y.....	762,500		Eighth Av., N. Y.....	215,583	132,592
Flushing.....	7.80	0.39	310,962	Flushing.....	133,131	250,866	Flushing.....	39,753	38,902
Hudson and Boston.....	17.00	0.26	175,000	Hudson River.....	3,758,466	9,250,362	Hudson River.....	1,870,804	1,208,141
Hudson River.....	144.00	101.00	12,737,898	Hudson and Boston.....	175,000	none.	Hudson and Boston.....	44,873	34,647
L. Island, Hicksville				Long Island, Hicksville,			Long Island, Hicksville,&		
& Cold Spring Br.....	95.00	10.05	2,558,986	and Cold Spring Br'ch..	1,875,148	668,949	Cold Spring Branch...	329,974	185,331
N. York Central.....	555.88	306.20	28,523,913	N. Y. Central.....	24,154,860	14,462,742	New York Central.....	6,563,581	3,401,455
N. York & Erie.....	464.00	265.00	33,742,317	New York and Erie.....	10,023,958	25,906,540	New York and Erie.....	5,429,489	2,680,327
N. York & Harlem.....	130.75	30.38	6,458,804	New York and Harlem...	5,717,100	4,069,769	New York and Harlem...	1,191,069	301,451
N. York & N. Haven.....	62.00	58.25	4,906,794	New York & N. Haven...	2,992,460	2,284,656	New York & N. Haven...	936,025	594,358
Northern (Ogdensb'g)...	118.00	17.75	5,470,535	Northern (Ogdensb'g)...	1,633,022	4,406,874	Northern (Ogdensburg)..	501,517	369,798
Oswego & Syracuse.....	35.17	2.40	723,683	Oswego and Syracuse....	393,512	216,681	Oswego and Syracuse....	145,893	67,558
Pottsdam & Watert'n....	29.36	0.50	749,683	Pottsdam and Watert'n..	467,200	294,189	Pottsdam and Watertown.	26,385	26,385
Rens. & Saratoga.....	25.22	2.01	896,423	Rensselaer and Saratoga.	610,000	140,000	Rensselaer & Saratoga..	242,591	128,398
Saratoga & Schenec....	21.00	1.57	480,020	Saratoga and Schenect'y.	300,000	109,000	Saratoga and Schenec...	30,150	2,282
Syracuse & Bing.....	79.69	5.34	2,272,777	Syracuse & Binghampt'n.	768,369	1,578,804	Syracuse and Bing.....	158,682	136,981
Saratoga & Whitehall...	41.25	3.77	895,000	Saratoga & Whitehall...	500,000	395,000	Saratoga and Whitehall..	71,909	49,822
Sixth Av., N. Y.....	3.75	4.12	786,657	Sixth Av., N. Y.....	750,000	4,491	Sixth Av., N. Y.....	212,455	165,234
Second do.....	9.00	9.00	426,323	Second do.....	357,600	370,141	Second do.....	174,883	62,628
Troy & Boston.....	27.23	3.23	1,109,821	Troy and Boston.....	437,830	733,079	Troy and Boston.....	156,363	101,198
Troy and Bennington....	5.38	0.23	248,260	Troy and Bennington...	74,100	173,515	Troy and Bennington....	15,846	
Troy & Greenbush,...	6.00		*294,796	Troy and Greenbush.....	*274,400	*385,000	Troy and Greensburg...	85,023	81,664
Third Av., N. Y.....	5.75	5.75	1,170,000	Third Av., N. Y.....	1,170,000	40,000	Third Av. N. Y.....	292,475	112,821
Watert'n & Rome.....	96.76	10.11	2,068,063	Watertown and Rome....	1,371,263	800,979	Watertown and Rome...	401,043	231,899
Totals.....	2,611.49	912.25	\$128,888,080	Totals.....	\$69,141,544	\$78,125,820	Total.....	\$21,562,697	\$12,098,173

* These figures have been obtained from other reports made to the State Engineer.

History and Properties of Aluminium.

A fine bar of aluminium is now on view at the Polytechnic Institution, where Mr. Pepper explains its history and properties. This metal was discovered by Sir H. Davy in 1808. Oersted endeavored to exhibit the metal in a detached form, by the employment of chloride of aluminium, and about thirty years ago Wohler succeeded in obtaining a few grains of it. It has been reserved, however, for M. St. Clair Deville to produce (in the private laboratory of the Emperor of France) a whole bar of aluminium, which has been presented to Mr. Pepper by the Emperor. After giving a brief history of the metal, the non-success of experiments for obtaining it, and the "sodium" and "voltaic battery" processes, Mr. Pepper describes its nature and properties. "Aluminium" is classed by M. Deville as an "unalterable" metal, intermediate between the precious and the more common metals. Mr. Fownes includes it in the same category as glucinum, yttrium, cerium, lanthanum, didymium, zirconium, and thorium—all of them "metals of the earth proper." The specific gravity of aluminium is 2.56 (or 2.60 according to Mr. Fownes, water being taken as unity). This is about one-eighth of the gravity of platinum, and one-third that of iron, platinum being 20.98; gold, 19.26; mercury, 13.57; silver, 10.47; iron, 7.79; zinc, 6.5; and titanium, (next above aluminium), 5.30. The equivalent of aluminium is 13.69. The metal is beautifully white, with a slight bluish tinge, and reflects light clearly. It is malleable and ductile, almost without limit; when passed through

the fingers it exhales a slight odor of iron. It is a perfect conductor of electricity,—the best known among the metals,—and is negative to zinc. It melts at a rather higher temperature than zinc, and is excessively fusible. The chemical properties of aluminium are invaluable. It resists oxygen,—water has no action upon it at any temperature,—and even sulphuretted hydrogen—that great defacer of the brightness of metals in large towns,—exercises no destructive influence upon it. It is now, moreover, ascertained that the metal does not decompose water. This aluminium bids fair to become one of the most useful and serviceable of the metals, and from it have already been manufactured some medals and watchwheels of exquisite workmanship.—*London Athenaeum.*

Simple Mode of Cutting Stone.

Among the French machinery will be found a very ingenious and simple mode of cutting stone, exhibited by a man named Chevaliere. He causes a wire to run at a high velocity over the surface which he wishes to bisect, and by dropping on it a mixture of sand and water, the operation is rapidly completed. The hardest granites yield so quickly to this process, that the inventor can, with one-horse power, separate it at the rate of a square foot per hour, the wire running at the rate of 40 feet per second. Using the ordinary saw, the amount of work would require three-horse power, and would expend 15 francs worth of material, instead of one franc, which is all that the wire costs.—*London Mining Journal.*

State Treasurer's Report.

According to the report of the Treasurer of New York, for the fiscal year ending Nov. 30th, 1855, there was a balance on hand, at that date, of \$516,623 13. The demands upon the Treasury have all been promptly met. During the year, the following amounts on the various classes of bonds specified have been paid:

General Fund Bonds.....\$21,000
Internal Improvement Bonds.....13,140
Adjusted Bonds.....24,394

\$58,534

The present indebtedness of the State is as follows:

General Fund Bonds due May 1st, 1856. \$79,000
Pontiac Railroad " July 1st, 1856. 97,000
University " " " 99,000
Penitentiary " Jan. 1st, 1859. 20,000
Full p'd 5 million loan due " 1860. 40,000
Adjusted " " 1863. 177,000
Internal Improvement bonds, due on demand.....4,950
Unrecognized, (part paid) now outstanding, \$364,000, value of which Jan. 1st, 1856.....213,123
These fall due Jan. 1st, 1856.
Internal Improvement Warrants.....4,645

\$2,389,958

The last Legislature passed an act, approved on Feb. 12th, 1855, requiring the holders of that class of bonds known as the "part paid or unrecognized five million loan bonds," to surrender the same for adjustment within six months from the passage of said act; and in case of failure to present such bonds within the time prescribed, interest thereon was to cease.

In accordance with this act, there was due notice given, and \$2,319,000 bonds of this class have been already surrendered, leaving \$364,000 outstanding. The rate at which these bonds are now adjusted; with the interest thereon, is \$505 51 for each \$1,000. The surrender of these is regarded as a matter of much interest to the people of the State.

The interest on the public debt, as now adjusted, will be \$143,397 48, payable semi-annually in the city of New York.

Victoria Bridge.

From the interest felt by the Engineering profession in reference to this great work, we give this week the report of the Engineer in charge, Alexander Ross, Esq., addressed to Mr. Stevenson, whose report we have already given.

MONTREAL, Nov. 30, 1855.

MY DEAR SIR:—

Your favor of 2d instant, in reference to the Victoria Bridge, I have received; and, in reply, I have to observe, that the question of economy in the masonry is one which, in every point of view, had received from me the most mature consideration that my acquaintance with the subject, and the peculiarities incident to this locality pointed out as necessary; and I shall endeavor to make clear to you, as shortly as I can, how far my opinions upon this subject are verified by the experience we have already had, both as regards the form and character of the design for efficiently answering its purposes, as well as the disposition of its leading features [stone and iron] with the view to the utmost practicable economy.

The various parts referred to in your letter, I shall take up in the order in which they occur.—First, the abutments. These, it appears, are considered unnecessarily large, and more costly than the tubes, and it is suggested that they may be reduced by making openings in, or by shortening them. These abutments are not in reality what upon paper, they appear to be, a solid mass of masonry; they are hollow—each having eight openings or cells, 48 feet in length, and 24 feet in width, separated by cross walls five feet in thickness. The flank wall on the down stream side rising nearly perpendicular, is seven feet in thickness, and that on the up stream side is sloping from its foundations upwards to an angle of 45°; its thickness is 12 feet, and presents a smooth surface to facilitate the operations of the ice, on which account its form has thus been determined; and to ensure greater resistance to the pressure of the ice, the cells are filled up with earth, stone, and gravel, so that one solid mass is thus obtained at a moderate cost. The subjoined plan and section of this work will better explain its form and proportions.

The idea of introducing any other description into the abutments than those described, is altogether inadmissible; passages through it where ice could accumulate, would ensure its inevitable destruction upon the first hydraulic pressure it had to encounter.

I have observed in this immediate neighborhood the effects of swift currents created by obstructions in the river on a recently formed causeway constructed of timber connecting a small island below the bridge with the shore, having openings about twelve feet in width at intervals of about thirty feet.

In the autumn of last year the openings were partly covered by heavy timber and planking

strongly secured by iron work, and the consequence has been, that during last winter, the first crush of the ice, in forcing its passage through, destroyed every timber, plank, and bolt, that opposed it. Having got under, it was immediately blocked up, and the pressure of water still forcing its way, the jam became at length so tight, that it burst with an explosion.

It is stated that the length of the abutments is unnecessary and greatly in excess. Upon paper this may seem so, and a recollection of the idea conveyed to my own mind subsequent to the earlier considerations of this subject, which led me to the conclusion of adopting their dimensions, prevents my attaching much importance to such a view as I otherwise might do. You will recollect that the bridge is approached from the north shore by an embankment 1,200 feet, and from the south shore 800 feet in length, the river being thereby narrowed to this extent; the waters thus far embayed, have now to find their way through the bridge, and the current overcharged with ice, sweeping its way along the front of the embankment into the nearest passage attains ere reaching it, a velocity which nothing but the most substantial masonry should resist. This, it will be seen, bears on the question of the length to which such masonry should extend, and I am more than ever convinced that I have not exceeded the limits which prudence dictates; thus confirming my original view in reference to this particular and very important point. I think you will readily admit that I have given ample reasons in justification of the extent of the abutments, bearing in mind that the form of construction contributes more to their apparent magnitude than a cursory glance at their appearance upon paper would justify one in supposing; and as to their cost, it is not to be supposed that the large and costly preparations made in machinery and other appliances for carrying on these works, could in fairness be allowed to remain altogether unaccounted for until redeemed by the slow progress of each succeeding pier.—You will remember the consideration given to this subject at the time the contract details were under discussion, and I believe the most equitable adjustment was then arrived at for the mutual protection of both parties to the contract.

The two abutments have been proceeded with, and both have had their foundations (the most expensive parts) completed. The northern abutment, commenced last year, is finished to the level of 8 feet above summer-water level, and its extreme end for about 60 feet in length is raised to the height of 20 feet above that level, forming a slope to the embanked approach, which is (throughout its extreme length of 1,200 feet) brought up to nearly the same level, and secured, I hope for all time.

The south abutment is also finished to the height of three feet above summer-water level, and secured for the winter. This abutment would have been nearly completed this summer but for the unexpected depth of deposit, gravel, sand, and large boulders we had to clear out before reaching the rock, amounting to 8 feet in depth, more than we anticipated or had any reason to expect from our previous examinations and soundings.—Next summer will enable us to finish this part of the structure, all the stone for which is prepared and now upon the adjoining land, covering several acres to the extent of three and four blocks in depth.

Next as to the piers:—It is alleged that their depth is far greater than necessary; this, it appears, is on the assumption that they are 39 feet deep in the shaft. A reference to the accompanying diagram of pier No. 5 disproves this statement; the depth, you will perceive, is only 33 feet. The tube requires a bearing surface of 21 feet, we have therefore only six feet on either side; the idea of any reduction, therefore, at once falls to the ground; and even if such were admissible, your estimate of the value of such reduction is erroneous. This you will at once see when you consider, that placing the first foundation stone in any one of these piers requires an outlay of from 55 to

60 per cent of the total cost of each pier; there is, therefore, only about two shillings and six pence a cubic foot left for the remainder, and if any reduction had to be made, this rate would determine its just value.

It is true that in the arrangements for payments on account, a uniform distribution of the cost of each completed pier has reference to the masonry alone—a reasonable distinction being made between that above and below water level, the latter being paid for at a rate allowing of some remuneration for the previous outlay, at the same time reserving for that above such level, a sufficiently ample allowance to ensure its completion.

The two large centre piers being alluded to, I would merely remark in reference to these, that they were designed as distinctive objects marking the navigable channel, that no reasonable ground for complaint on this account could be alleged; their ample dimensions also serve as a necessary protection against accidents incident to every navigation where it is possible to run against any obstruction existing within reach of reckless and unguarded steering. Although these reasons cannot be altogether overlooked, it has long since occurred to me that in breadth they might be diminished about 25 per cent., and such diminution I had in contemplation, provided any future observation in reference to the ice did not deter me from such a course. In regard to this I have further to observe, that these piers are in deep water where the ice does not ground, and where the pressure in consequence requires greater power of resistance; any diminution in these piers which I might according to my own views of the case be induced to adopt, I should treat as some compensation, as far as it went, for the increased depth of the foundations generally, which are found greatly to exceed our anticipations; although every pains had been taken to ascertain what these would be, we find in the progress of the works that the bed of the river in most parts is formed of large boulders heaped together in large masses, the interstices being filled up with gravel, sand and mud, in many instances forming a hard concreted mass, and in others the reverse; beds of quicksand and mud being as frequent as any other. Three thousand tons of such material we had to clear out of the foundation of No. 5 pier, as you will see indicated on the diagram already referred to, below the level at which our previous examination would lead us to expect the foundation we sought. One of the boulders taken out, by admeasurement, would weigh about 11 tons; masses of 3 and 4 tons are strewn as thickly as pebbles on the seashore. The shallows in the river are evidently formed by these deposits, and I have no doubt in every instance where these shallows appear, we shall have to encounter similar difficulties. In pier No. 3, we found a depth of four feet at one end, and nine feet at the other, to clear out ere we reached the rock. These unlooked-for contingents have materially retarded our season's operations, otherwise we would by this time have Nos. 3, 5, and 6 nearly completed, as it turns out we require another season to accomplish this. And here I think it well to observe that up to No. 6 inclusive, the expensive outlays have already been incurred; the dams have been completed; and in all except No. 4, the water has been pumped out and the machinery erected for setting the stone, but No. 5 is the only one where we have been able to complete any masonry, owing to the unlooked-for causes I have already described. These contingents render it impossible to complete one pier in less than two seasons, though, as in the case of No. 1 pier, where no such unlooked-for difficulty arose, the whole was begun and completely finished in one season, thus saving the removal and re-erection of all the machinery and appliances necessary, besides the reparation of such damages as the winter operations may produce.

With regard to the ice-breakers, which is the next question referred to, the comparative cost between the detached or ordinary ice-breakers and those attached to the piers in the present design, this question is easily disposed of. You will remem-

ber three years ago, when considering the mode of construction to be adopted, that in every point of view the plan of detached ice-breakers was found to be so far deficient in merit, both as to cost and efficiency, as to lead at once to its total abandonment. I shall endeavor in as few words as I can to recall to your recollection the reasons which led to this conclusion.

I was fully informed at the time of the mode described in the report you refer to, which contemplated the planting of very large cribs covering an area of one quarter of an acre each, and leaving a clear passage between them of 240 feet; these islands (as they are called) of timber and stone were designed to have a rectangular well left open in their middle, out of which would rise the solid masonry towers supporting the weight of the superstructure. This inclosure of solid crib work was intended to surround the masonry, yet detached from it, and receive the shock and grinding of the ice, yielding to a certain extent by its elasticity, without communicating the shock to the masonry, and if damaged could be replaced with facility; they were designated also to reach the height of 30 feet above summer water level, this being necessary on account of the great height which the ice generally attains; the up stream face was intended to be sloped,—one of the primary requisites essential to the effectual performance of its duties.—This mode of construction you will readily perceive, comprehends very formidable dimensions, and it is only partially true as stated, that it could be made available in serving as a coffer-dam for getting in the foundations of the masonry. The usual precautionary measures of clay puddle would still be necessary to block out the water, and having already given you a description of the nature of the foundations we have to deal with, I need not now recount the difficulties which, under such circumstances, would present themselves.

You will also perceive that these quarter acre islands would occupy 25 per cent. of the water breadth of the river, one of the most prominent reasons for their abandonment when first considered.

The space occupied by the piers as being executed is only seven per cent.; this is a most important feature in the relative merits of the two modes of construction. Our present dams are generally about 5 or 6 feet above summer water, level, and cover an area corresponding nearly with that described; latterly we have constructed them similar to these, filling the external barrier with stone and the inner with clay, necessary to render them water tight; the force of the current is necessarily increased, and the natural consequence owing to the fragile nature of the deposits forming the bed of the river, is to undermine rapidly the part exposed to the action of the waters, thus rendering them more insecure every day, and requiring an immense amount of expensive labor for their protection. I mention these facts which our experience has brought to light, as an additional reason why we should not resort to such an objectionable mode of construction. As to their cost, assuming the existing dams to serve the purpose as far as they go, we should have to raise them to the height of 25 feet above their present level, and to add as much to their length up stream as the necessary slope at that end would require.

These ponderous erections would measure about 350 feet in circumference, and from their foundations to the top would measure 40 feet,—25 feet above the present dams. The wall thus formed of timber and stone, would be about 20 feet in thickness, the cubic contents of this mass above the level of the present dams would be 200,000 feet, and the masonry saved thereby would be exactly 20,000 feet, which is all that is required to form the stone cutwater or ice-breaker, attached to the piers. I believe no man capable of instituting a comparison, and with these facts before him, will for one moment hesitate in giving the preference to the attached ice-breakers as now being executed; their more permanent efficiency, founded in every instance upon the solid rock, placed beyond the reach of any influence exerted

by the currents, and their incomparable pre-eminence in relation to the space they occupy, together with their immunity from accidents (not requiring repairs of any kind,) a light in which the other mode can never be regarded; and, lastly, although not least, their evident economy in the first cost, places them immeasurably in the scale of merit beyond the temporary mode suggested as the substitute, on grounds which I think I have made clear are altogether untenable.

I believe I have now gone through the various points referred to in your letter to which you called my particular attention, and I hope my explanations of the existing state of our operations will satisfy you that we have pursued the right course in the designing and prosecution of this work.

The only observation I would desire to add, would be in reference to the reasons which led to the adoption of 242 feet as the span best suited in point of economy to fill up the space we had to deal with, although the masonry bears a larger proportion to the entire cost than a due regard to economy would appear to warrant, we find that to diminish the number of piers by one only, on each side of the centre span, within this item save 9 per cent., which would add 20 per cent. to the cost of the superstructure, as the proportion due to the sectional area of the tubes by this increase which would amount to about £80,000.

The centre span is of course an exception, the reasons which determined this were local both as to height and width, and could not be departed from.

You will bear in mind that a clear height of 60 feet is required at the navigable channel, a descent of one in 132 brings us to 36 feet above such level at the abutments. The ice in Dec., last year, rose to within eight feet of this point, as you will see indicated on the diagram of No. 5 pier, and some hours before it reached this point it made a clear sweep of all our dams and temporary works surrounding the pier and abutments, although filled with stone and protected in all possible ways by sloped fronts on the up stream side. In many statements which have been put forward, great stress has been laid upon the fact of some one or two experimental crib ice-breakers fixed some short distance above the site of the bridge, withstanding the shock of several winters operations; I have seen these, and have observed the cause of their standing the test, to be entirely owing to the fact of their being only some two or three feet above low water level, and in shallow water, so that as soon as the waters rise they are covered over, and so completely loaded with the accumulating masses of ice, that they are firmly held in their places; their insignificance alone saving them from destruction; time however has swept even these away, and they are nowhere to be found.

In conclusion, I feel it may duty to state, that, if after having duly considered the subject, you still think a saving can be effected in any part of the masonry beyond what I have pointed out as possible in the centre piers, I shall make it my aim to carry it out to the fullest extent practicable.

I am, dear sir,

Yours sincerely,

ALEXANDER ROSS.

R. Stephenson, Esq., M. P.

Indianapolis and Cincinnati Railroad.

The total earnings of this road for 1855, have been as follows:

	1854.	1855.		1854.	1855.
Jan..	\$12,855	\$29,497	July..	\$16,649	\$24,323
Feb..	21,598	24,210	Aug..	26,566	35,926
Mar..	27,202	32,275	Sept..	31,449	40,206
April.	19,438	31,193	Oct..	33,946	47,855
May..	17,372	30,895	Nov..	37,963	45,191
June.	21,401	28,375	Dec..	32,494	48,652
Total.....				\$299,433	\$418,663
					299,433

Increase..... \$119,230
—or 40 per cent.

The company have declared a cash dividend of

four per cent. for the earnings of the past six months. The result for the past six months give good reason to expect that the ratio of increase in earnings for the present year, will be fully as great as for the past.

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MONAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

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1,200 TONS, delivered at New Orleans, within the month of February. Apply to THEODORE DEHON, 10 WALL ST., NEW YORK. 28th January, 1856.

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Memphis, Clarksville, and Louisville Railroad. THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect, at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

Maps, profiles, and plans can be seen at the office of the Company in CLARKSVILLE, or inquiries made of the undersigned.

W. B. MUNFORD, Pres't M. C. & L. R. R. CLARKSVILLE, Tenn., Jan'y 16th, 1856.

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THE PROVIDENCE & WORCESTER R. R. CO. offer for sale two LOCOMOTIVE ENGINES, in good order and in daily use. Weight of Engines twenty tons each, with 14 by 18 inch cylinders. Drivers five feet diameter. For further particulars inquire of the undersigned, at PROVIDENCE.

JOHN B. WINSLOW, Superintendent. PROVIDENCE, Jan'y 10th, 1856.

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OFFER FOR SALE, VIZ: 1,000 TONS Guest & Co. 50 lbs., to arrive from London in New York. 500 TONS Guest & Co. 68 lbs., Erie pattern, per ship Euxine now on the voyage from Bristol to New Orleans.

Second Hand Locomotive

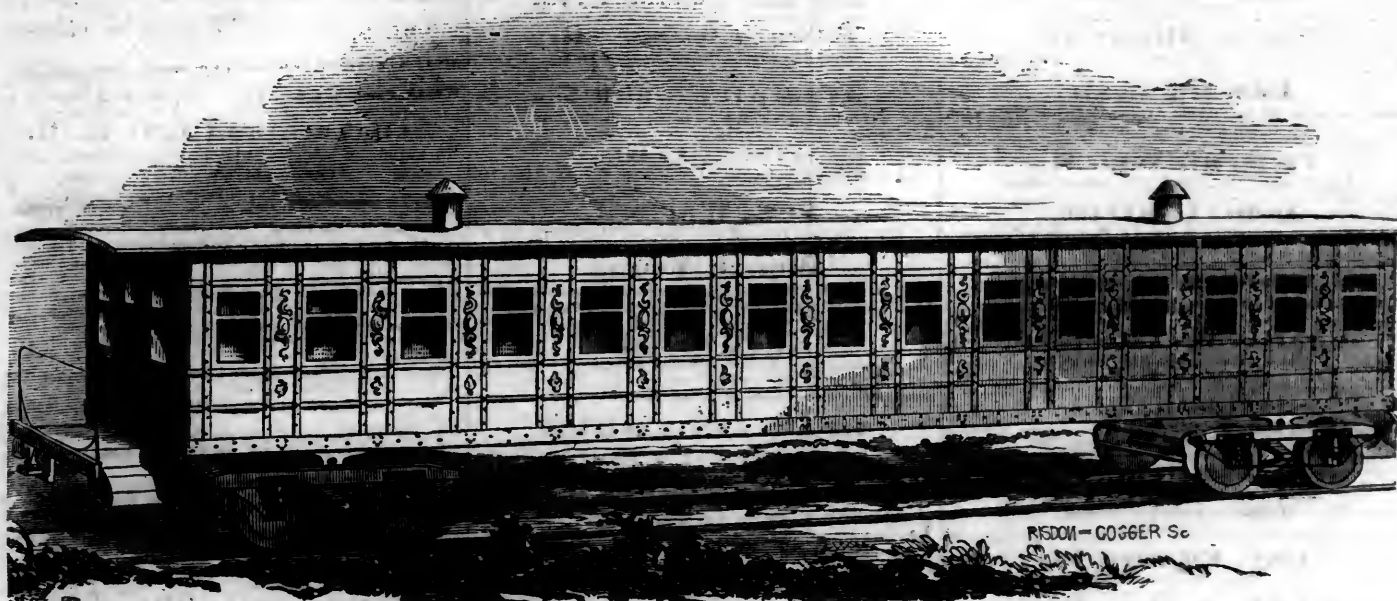
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Weight 13½ tons—4 ft 8½ in. Gauge.—11½ in. Cylinder.—16 in. Stroke.—4 ft. Drivers.—New Tender on 6 wheels.—Engine in perfect repair.

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200 " " 40 " " "

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TORONTO, Sept. 21st, 1855.

41tr

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several months during which it has been in use here, and for
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1st D. O. McCALLUM, General Supt.

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HARVARD UNIVERSITY.

THE next Term of this Institution will open on the first day
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Instruction by Recitations, Lectures, and Practical Exer-
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To Engine Drivers and Me-
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FIFTEEN to twenty Locomotive Drivers and Mechanics of
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Ohio Railroad at Whistler, five miles from Mobile City.

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REFERENCES: American Exchange Bank; Bank of the Re-
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To Civil Engineers and Con-
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JUST PUBLISHED—A set of Tables for finding, at a glance,
the true cubical content of Excavation and Embankments
for all Bases, and for every variety of Ground and Side Slopes.
By M. H. LYONS, Associate Engineer, Lebanon Valley R. R.

The Tables are 24 in number, printed in clear, bold type on
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Four First Class Locomotive
Engines for Sale.

1, Cylinders 16½x22, Drivers 5½ feet,

2, Do. 16 x20, Do. 5 feet,

1, Do. 16½x22, Do. 4½ feet,

all of which have 4 wheels connected with centre bearing
trucks; wrought in frames and pedestals; copper pipes; lifting
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ZANESVILLE, Ohio, August 11th, 1856.

33

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 6.]

SATURDAY, FEBRUARY 9, 1856.

[WHOLE No. 1,034, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, February 9, 1856.

Toledo, Wabash, and St. Louis Railroad.

The construction of this important work is drawing rapidly toward a close. Already is the road in operation to Peru, a distance of 150 miles. Since August last, trains have been run regularly from Toledo to Fort Wayne, a distance of 93; and since January 7th, to Huntington, a distance of 118 miles. The grading for the whole line, 243 miles, is nearly completed, and will offer no obstruction to the laying of the track, which may be carried on at the same time at various points on the line. The iron is either at Toledo or distributed along the route. The company expect to open the whole line in May next,—for which they have abundant materials and means provided.

The cost of the road on its completion will be about \$8,450,000, which sum is made up as follows—

Capital stock.....	\$3,000,000
First mortgage bonds.....	3,400,000
Second do.....	2,000,000
Real estate bonds.....	450,000

\$8,850,000

This last item of \$450,000 Real Estate Bonds is based on lands for which Stock has been issued. The total cost of the road, therefore, will be only \$8,400,000, instead of the amount represented by the Stock and Bonds.

The completion of the road has been somewhat delayed by causes familiar to every man who has been engaged in the construction of Western roads. The principal of these causes has been the unusual prevalence of sickness on the line of the road, and throughout the West, both in 1854 and 1855, by which the progress of all similar works was most seriously impeded. The past season has been one unexampled for abundance of rain, as the previous was for the absence of it. From the excessive fall during the past year, operations on the above road have also been seriously impeded. The company, too, have come in for their share of the inconvenience and distress caused by the extraordinary revulsion in the money market; high prices paid for labor and provisions; materials, &c., &c. But these were causes tending rather to increase the cost of the road than to retard its progress, as the parties having it in charge, and being interested in its construction, were able, and took good care to supply the means for construction as fast as they could be economically expended.

The great work, owing to the energy and ability with which its affairs have been conducted, and its construction carried forward, being now nearly completed, it will not be out of place to consider its probable merits as a paying enterprise. For of all such works the test of excellence is the income to be derived from them.

The general tendency of Western trade and travel is towards the Lakes. Those roads having a direction coinciding with the direction of these great water courses, are consequently the most productive. The reason is that they have a wider sweep of country dependent upon them, and are in no danger of having their trade drawn off in a different direction. All the produce raised west of Lake Michigan must fall upon it, on its way to

market. So all lying west of Lake Erie falls upon that. On the contrary, the Ohio river divides the trade of the territory lying between it and the Lake, reducing very materially the distance over which freight is moved.

The line of the Toledo, Illinois, and St. Louis railroad traverses a section, the trade of which naturally falls upon the Lake at Toledo. Its route, therefore, coincides with the most favorable direction for a heavy traffic. It occupies the natural route which has heretofore served as the avenue of this trade,—the Maumee and Wabash rivers. It is a somewhat remarkable fact that the prolongation of a line coinciding with the general direction of Lakes Erie and Ontario, and the valley of the St. Lawrence, would be identical with the route of the above road, and would strike the Mississippi river at, or near St. Louis. It is still more remarkable that the great depression in the continent in which the lower Lakes and the St. Lawrence lie, is continued in this general direction through the valleys of the Maumee and Wabash, for the whole distance traversed by the line of the above road.

Two advantages result from these facts—first, a good route; and secondly, the basis for a good local traffic. Upon the valleys of the Maumee and Wabash rivers, is concentrated the trade of the country contiguous. On their banks, particularly upon that of the Wabash, are numerous large and thriving towns, which are already the seats of a large trade. This concentration of trade has been promoted by the construction of the Wabash and Erie Canal, which for many years has been almost the sole outlet for the region traversed both by the canal and railroad.

The road with the connecting lines will form the shortest practicable route between the most westerly port on Lake Erie and St. Louis. All east and west lines must cross, and in a measure become tributaries to it—as at the point of intersection, it will form for each the shortest route to Lake Erie. The roads entering it from the West are the Fort Wayne and Chicago, the Logansport and Peoria, the Great Western of Illinois, and the Terre Haute and Alton,—all first class roads. All these connections will be soon formed, with the exception of the Logansport and Peoria. The Fort Wayne and Chicago will soon, in connection

with other roads, be opened to Chicago. The Great Western will reach Danville at least as soon as the Toledo, Illinois, and St. Louis. A direct line will then be formed from Toledo to Springfield, the capital of the State, and to the Illinois river, a distance of about 430 miles. The Great Western traverses one of the best portions of Illinois which must always have its outlet by way of the Lakes. The eastern portion of its line is underlaid with coal by which the Wabash valley must be supplied with this important article. Through the Illinois Central, a connection will at once be formed with the Terre Haute and Alton and with St. Louis. The Great Western railroad will soon be carried west to the Mississippi, to a point of junction with the Hannibal and St. Josephs railroad, which will carry the great line composed of the roads described to the Missouri river, a distance of nearly 700 miles from Toledo.

The only important connection in the West which will not immediately come into use will be the Logansport and Peoria railroad. The Peoria and Oquawka, which forms the Western portion of the line from Logansport to the Mississippi is now well advanced toward completion, a considerable portion of it being in operation, and rapid progress being made upon the balance of the line. The whole road will, probably, be in operation within two years from July next. When completed it will form a valuable auxiliary to the Toledo and Illinois railroad.

This road will also form numerous connections with roads running south, but these will be less so than those entering it on the West.—Among the former are the Cincinnati, Union, and F't Wayne, the Peru and Indianapolis, and the Lafayette and Indianapolis.

We regard the route of the Toledo, Illinois, and St. Louis railroad as an excellent one, both in reference to local traffic, and to the numerous and important connections of which it must constitute their trunk line. These connection lines, as already stated, are first class works in themselves. They must all use the Toledo and St. Louis railroad for nearly its whole length. They must command the trade of a very large area of country. We can see no reason, therefore, why the former should not take rank among the best Western lines, and become reasonably productive on its entire cost.

Texas Public Lands.

In the report of the Commissioner of the General Land Office, it is stated that the total area of the State comprises 175,591,560 acres. Of these there were titled by the authorities of Spain and Mexico, 22,581,484 acres; 3,741,241 granted by act of the 10th of January, 1852; and 44,834,686 claims originating under the Republic of Texas; making an aggregate of 71,160,411 acres, and leaving unappropriated 104,434,149. Those grants made by Spain and Mexico have been cut down by the courts nearly three million acres below former estimates. Over one-third of the land grant of 1853 has been surveyed. Of the claims originating under the State of Texas 28,249,075 acres have been returned and patented; 10,450,588 have been returned, but not patented; and 6,135,023 acres are still outstanding. Since the 1st of November, 1853, 1,373,048 acres have been granted for various specified objects.

Philadelphia and Sunbury Railroad.

This road was chartered in 1836, under the title of the Danville and Pottsville Railroad, the object of its owners being to construct a line from the waters of the Schuylkill to the Susquehanna at Danville. Prominent among the stockholders was the late Stephen Girard of Philadelphia, who subscribed \$250,000 to its construction. About \$200,000 were taken by other parties, and \$50,000 by the State, besides guaranteeing the interest on a loan of \$300,000, which made the company's entire resources \$800,000. In 1830, they commenced building their road from Pottsville westward to Ashland, 11 miles. The superstructure consisted of wooden rails overlaid with a light flat bar of iron. In addition to the road, wharves and other accommodations were built at Mt. Carbon. The road continued to be worked, under lease, with horse power for several years. In the mean time, the western section, 20 miles in length, was completed, having been graded for a double track, and laid with a wooden structure and flat-bar rail.

Various causes prevented the undertaking from resulting successfully. Among these may be mentioned the death of Mr. Girard, the greater cost at that time in working their coal mines than at other points, and the character of the work, which was too light for being operated with locomotives. In consequence, the superstructure was allowed to fall gradually into decay, the State had to pay interest on the guaranteed loan, and the stockholders remained without any return upon their investment. An act was accordingly passed by the Assembly, authorizing the road to be sold, which took place in July, 1852, to the present stockholders.

The first thing done by the new managers was to put their road into a proper condition. That part between Shamokin and Sunbury was graded anew, widened and repaired, and laid with a T rail, of 60 lbs. to the yard. From Shamokin to Mt. Carmel, nine miles, a new road-bed has been graded, besides a branch over a mile long from the main track to the Lancaster colliery. Bridges, depots, sidings, scales, &c., have since been either thoroughly repaired or furnished in the new. In Sunbury a frontage of 1,700 feet on the canal has been obtained, on which the necessary wharves, &c., are being erected. To this point another branch has been built; and the company's facilities are now sufficient to do a business of 300,000 tons annually. At Sunbury, connections with the Sunbury and Erie and the Northern Central railroads have also been established.

The total length of track laid, besides sidings, is 33 miles. The equipment consists of four first-class locomotives, 474 new and substantial coal cars, and 55 lumber and freight cars.

Hitherto the only outlet to the westward has been the Pennsylvania Canal, at Sunbury. The opening of the Sunbury and Erie road from that place to Williamsport has recently opened up a route to Western New York, by which the company expect to be able to export 200,000 tons annually. The completion of the Northern Central railroad to the same point will afford valuable connections with Baltimore and the entire lower Susquehanna valley. To the southward, the Mine Hill railroad will open up a connection with the Reading road at Pottsville. The whole will form

the most direct line between Philadelphia and Sunbury, as well as that part of Pennsylvania and New York to the North-West of the latter point.

There has been expended in the construction and equipment of the road, viz:

	Dr.
Grading and superstructure.....	\$375,710 27
Basin, lock, &c., at Sunbury.....	42,355 29
Lancaster colliery, for breaker, houses, saw mill, &c.....	51,187 34
Locomotives and cars.....	135,022 98
For 3,000 acres coal lands.....	300,000 00
Sale and interest account.....	242,358 24
	\$1,146,614 12

	Cr.
Cash on hand.....	\$39,613 83
Bonds.....	700,000 00
Funded debt.....	180,000 00
Floating debt.....	227,000 29
	\$1,146,614 12

This expenditure has been made, in addition to \$800,000 expended by the Danville and Pottsville railroad company in construction. The company have made an issue of \$500,000 second mortgage seven per cent. convertible bonds, secured by the road and 3,000 acres of coal lands owned by them, for the purpose of paying off their floating debt and extending their works. This will make their total obligations to be—

Stock.....	\$600,000 00
First mortgage loan.....	700,000 00
Second mortgage loan.....	500,000 00
	\$1,800,000 00

Grading, bridging, &c., of Western section old road, available.....	\$250,000 00
Eastern section, do.....	250,000 00
New road, track, equipment, &c.....	848,812 66
Land and colliery.....	351,187 34
Estimated amount for extension, &c.....	100,000 00
	\$1,800,000 00

The business of the road for 1855 was as follows:

Tolls on 116,917 tons of coal.....	\$63,959 86
Other freight and passengers.....	12,602 06
Rent of colliery, houses, &c.....	12,973 12
	\$89,535 04
Working expenses.....	36,199 59
Net gains.....	\$53,335 45

The estimated earnings for 1856 are—

300,000 tons of coal, at 56 cents.....	\$168,000
Other tonnage.....	20,000
Rents of colliery, houses, &c.....	\$2,500

	\$220,500
Current expenses.....	51,600

	\$168,900
Profits on 200,000 tons carried over the Sunbury and Erie railroad.....	60,000

	\$228,900
Interest.....	84,000

Applicable to dividends and Sinking Fund.....	\$144,900
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The officers for 1856 are—W. L. Helfenstein, President; W. Riehle, Secretary and Treasurer; and A. R. Fiske, Superintendent. The remaining Directors are—Chas. S. Boker, David Longenecker (late President), Chas. W. Hegins, Thos. Baumgardner, Jesse S. Heston, and John P. Brock.

Kennebec and Portland Railroad.

This road extends from the junction with the Atlantic and St. Lawrence railroad, at North Yarmouth; 13 miles from Portland, to Augusta, the State capital, with a branch of nine miles to Bath. From Augusta it is continued by the Somerset and Kennebec road to Kendall's Mills, whence it is designed to proceed to Skohegan.—For the first 20 miles, the Kennebec and Portland railroad, proceeds parallel to the sea shore in a north easterly direction, and thence follows the west bank of the Kennebec river to its terminus at Augusta. The company were chartered in 1846 with an authorized capital stock of \$1,000,000. The right to borrow money on bond and mortgage was granted. In the Legislative session of 1860, the towns along the line were empowered to take stock in the road to the amount of \$800,000 in all, which measure received the sanction of a large majority of their legal voters, as required. In 1847 the work was put under contract as far as Portsmouth and Bath, the superstructure to consist in part of a light rail laid upon continuous wooden string pieces, and in part upon the ordinary cross-ties. On the 4th of July, 1849, the road was opened from the junction to Bath, 23 miles, at a cost of about \$600,000. The remainder was steadily proceeded with. In December, 1852, it was completed to Gardiner, 40 miles from Yarmouth; and to Augusta on the 1st of January, in the following year.

From an early day, the company's efforts appear to have been much retarded by the want of funds, sufficient to enable them to prosecute their work expeditiously and cheaply. In 1851, a subscription of \$100,000 was obtained from the Portland, Saco and Portsmouth railroad company, the Kennebec and Portland company guaranteeing to pay annually six per cent. interest on the same.—In October, 1851 and 1852, they issued bonds for \$230,000 and \$250,000, respectively. A preferred stock, bearing six per cent. interest, was also created. In 1850, as already stated, the towns of Brunswick, Bath, Gardiner, and others on the line, subscribed \$800,000 to their stock, payable in twenty year bonds. In 1853, a contract was made with the Somerset and Kennebec company, by which the latter company's road was leased for a period of 20 years from its completion, for which the Kennebec and Portland company agreed to pay six per cent. per annum on its cost, if not exceeding \$700,000, besides keeping the line in proper repair. At the end of twenty years, the above rate to be increased by one-half of what the net earnings should be found to have exceeded the 6 per cent. annual payments, repairs, &c.

Until the opening of the road to Augusta, interest in common stock was allowed to the stockholders. The total amount paid for this purpose came to about \$118,000. Since that date no dividends have been paid.

The earnings of the road since 1st October, 1849, have been as follows:

1849-50	\$36,324
1850-51	67,067
1851-52	122,291
1852-53	168,113
1853-54	208,568
1854-55	228,747

During the last two years, nearly all the longitudinal timbers have been taken up, and replaced with the ordinary cross-ties, at an expense of over

\$40,000. The operating expenses have been higher this last year than in any previous one; yet these have not exceeded 50 per cent. of the gross earnings. The track is now in good condition, and the company have a respectable amount of rolling stock. In 1855, they sustained some losses from fires and accidents on the road. The Somerset and Kennebec line, when completed, will furnish a large business to the road.

The line occupies one of the richest and most populous sections in Maine. An active competition, however, from the river on one side, and the Androscoggin and Kennebec road on the other, has hitherto prevented the company from receiving any return on their investment, beyond the indirect advantage conferred on the community at large.

The business for the year ending Sept. 30, 1855, was—

Passengers.....	\$167,619
Freight	49,042
Mails, &c.....	12,086
Total	\$228,747
Operating expenses.....	114,106

Net earnings.....\$114,642

The rent paid the S. & K. Co., \$5,310, is included in running expenses.

GENERAL ACCOUNT.

The expenditures to Sept. 29, 1855, are as follows:

Construction acc't.....	\$2,089,354
Land damages.....	183,407
Engine acc't.....	97,108
Car acc't.....	100,781
Amount to be paid to redeem the Yarmouth road.....	202,400
Balance stock interest due to original stockholders.....	34,819
Balance interest due to preferred stockholders.....	2,288
Renewal acc't.....	40,726
Sundry accounts.....	3,041
Total.....	\$2,753,877

The sources from which the above expenditures have been derived, are as follows:

City and town loans.....	\$800,000
Bonds payable.....	14,000
Bonds of 1850.....	230,000
Bonds of 1851.....	250,000
Preferred stock.....	246,200
Add part payment on same.....	1,039
Add balance interest due.....	2,288
	249,527
Amount received of P. S. & P. R. R. Co., upon which six per cent. is guarant'd.....	100,000
Bills payable.....	158,696
Original stock assessments.....	770,379
Add stock interest due.....	34,819
	805,198

Less amount cancelled for new preferred stock.....	60,000
Preferred stock of 1851.....	120,000
Amount due to Reuel Williams for cash advanced.....	61,411
Yarmouth road.....	202,400
Sundry accounts.....	47,129
	\$2,978,363

Leaving a balance of assets of.....\$224,485
The assets consist of—\$52,850 sinking fund; \$108,000 bonds pledged and on hand; \$4,410 bills receivable; and various sums due by agents and other parties, besides stock, fuel, &c., on hand.

The officers for 1856 are—Reuel Williams, Pre-

sident; A. H. Gilman, Treasurer; and Francis Chase, Superintendent.

The New York Canals.

Report of the State Engineer and Surveyor on Canals for 1855.

The great project of uniting our Mediterranean seas with the ocean was one which attracted the attention of our wisest statesmen and most profound political economists early in the commencement of the present century. It is instructive to us to recall the remarkable predictions made at that time, and a source of just pride to every good citizen to witness at the present day the fulfillment of the ardent desires and anticipations of those great men who so worthily labored for the ascendancy of this State, and for the permanent benefit of her citizens, as well as for the future advantage of unborn States yet to become partners in this great confederacy.

A memorial of the citizens of New York, in favor of canal navigation between the Great Western lakes and the tide waters of the Hudson, was presented to the Legislature in 1816. In discussing the details of the project, the moralists assert, "that the beneficial results to arise from the completion of this navigation, can scarcely be calculated by the most sanguine of its advocates," and in enumerating the benefits to be expected from that bold and daring enterprise, while they concede "that the rivals of New York will command a considerable portion of the Western trade," they insist, also, "that she will engross more than sufficient to render her the greatest commercial city in the world."

The views they entertained of the effects upon the population and business of the State to be anticipated from the completion of this great undertaking, may be understood from the following quotation from the memorial: "The whole line of the canal will exhibit boats loaded with flour, pork, beef, pot and pearl ashes, flax seed, wheat, barley, corn, hemp, wool, flax, iron, lead, copper, salt, gypsum, coal, tar, fur, poultry, ginseng, beeswax, cheese, butter, lard, staves, lumber, and other valuable productions of our country; and also with merchandize from every part of the world.—Great manufacturing establishments will spring up, agriculture will establish its granaries and commerce its warehouses in all directions. Villages, towns, and cities will line the banks of the canal and the shores of the Hudson from Erie to New York." "The wilderness and the solitary places will become glad, and the desert will rejoice and blossom as the rose."

Have not these anticipations been fully realized, and shall the policy which has effected these wonderful transformations be discontinued at a time when the rapidly developing resources of this and other States so imperatively demand an enlargement of our principal avenues of trade?

Opposition to the system of internal improvements in this State commenced with the commencement of the first undertaking, and it has never failed to array itself against every progressive movement which has been made by the friends and supporters of the system, and often without discrimination or regard to the merit or importance of such movement.

Much of this opposition has emanated from men of narrow minds and selfish character; yet it must be admitted that the demoralizing and baneful practice of mingling party politics with the great and leading interests of the State, has done more than all other causes combined to retard the progress and increase the cost of enlarging our most important artificial water lines of trade.

This persistent opposition has had the effect of encouraging speculators and adventurers to expend large sums of money in building up some of the rival railroad lines to compete not only with our State canals in their unfinished and trammelled condition, but also with each other, while others of these lines, in a mistaken view of their proper functions, have been unwisely led into the same competition.

In their rivalry for business these lines have aimed to secure a traffic for which they are not

prepared to furnish adequate accommodations, and which, when the canal enlargement shall have been completed, can never be retained by them without a constant encroachment on the capital invested.

The fallacy so frequently uttered that canals can in no case nor under any circumstances compete with railroads in the transport of any description of property, will never be conclusively demonstrated in this State, until the enlarged Erie & Oswego canals shall have been fully completed and equipped with boats of the largest size. Then the wholesome competition between the canal forwarders for the transportation of freight, will recommence, and with a reduced tariff, the full legitimate business of the canals will be restored.

The restoration of trade to the canals will be attended with a two-fold advantage—while it will increase the revenue of the State, it will take from the railroad lines a business which, though unprofitable, has heretofore, by swelling the aggregate receipts for the year, furnished a plausible reason for further increasing the capital of such corporations by a new issue of bonds and stock.—These have generally been the ostensible purpose of affording increased facilities to accommodate a rapidly increasing business, while in point of fact a portion of such increase has been obtained by a strained effort for the carriage of that specie of property which properly belongs to the canals, and which will be retained by them, especially when the enlargement is completed. They will retain it until still greater facilities are afforded by the construction of a ship canal to unite Lake Erie with Lake Ontario, and to connect the latter, through the Oneida Lake, with the Hudson river.

This last improvement to the natural outlet of our inland seas will doubtless be accomplished at no distant period, notwithstanding the policy pursued by some of our most prominent politicians, and the arguments used by them to prove that our present Erie canal, with a little patching up will be sufficient in all time to come to accommodate the rapidly increasing commerce of the West. It will be needed in addition to the net work of railroads already completed, and the new lines which will eventually be constructed, and which if the aid of the General Government be extended to them, will reach the remotest portions of our territory, penetrating the Western wilds and terminating on the shores of the Pacific ocean, or by the southern and more advantageous route on the Gulf of California.

One of the great and paramount interests of this Republic, is to afford all proper means for facilitating the intercourse of States and Territories by cheap and rapid communications between remote portions of our widely extended domain, thereby equalizing the price of similar articles in all parts of our country, softening local prejudices and antipathies, and assimilating the habits and customs of the people, by diffusing the fashions and improvements of the metropolis over the country, while causing the healthier tone of sentiment that prevails in the rural districts to exercise its legitimate influence over that of the city. Thus the local interests, feelings and prejudices of the East, West, North and South, will be subdued and harmonized, the different parts of the confederacy brought into a closer union of brotherhood, and the bonds of the Federal Union made stronger and safer.

To attempt to give a history of the progress of internal improvements in this State, and of the extension of the channels of trade and travel beyond it, with the comparative cost, capacity and utility of the various means of transportation within our borders, as compared with those of other States and of foreign countries, would only be to recapitulate in another form some of the facts and deductions contained in the elaborate report of the late State Engineer and Surveyor for the year 1853.

In that report the distinguished author, Wm. J. McAlpine, has given a mass of statistical information, with such a complete analysis of the productive capacity of our own territory, and the trade

and travel upon our lakes, rivers, canals and railroads, as to furnish the most interesting and useful information in regard to the internal as well as the foreign commerce of our State.

A synopsis of that valuable public document will be found in the last annual report upon canals from this Department.

It is not my purpose to discuss in this report the comparative advantages of the three great lines of communication between the lakes and tide-water, assuming, as I do, that each is necessary to accommodate the district of country through which it passes, and that all are needed for the conveyance of the vast surplus products of the most fertile regions of this Continent, a great proportion of which naturally flows through the lakes, and over the extended railroad lines into this State, and seek an eastern market through the Erie canal, the New York Central and the New York and Erie railroads and their tributaries; and also, for the conveyance of a vast amount of merchandise into the interior of this State, to Canada, and the far West.

These three great channels of trade, when fully completed and equipped, will represent a capital of at least \$120,000,000, and each is entitled to and will receive a fair proportion of the foreign trade, without resorting to the extraordinary and expensive means heretofore made use of by each of the two rival railroad lines, for the purpose of obtaining more than their fair proportion of such business.

In the active competition for the trade of other Territories, our own citizens, who furnish the local business upon these railroads, so far from realizing any benefits from such cheap transportation, rather suffer an unnecessary injury, inasmuch as all productions coming from such Territories can be afforded at reduced prices here, and thus come in competition with like productions furnished from our own soil.

While the general interest demands that every reasonable facility should be extended for securing to this State the carrying trade of the great West, this should not be done to the injury of any portion of her citizens by a headstrong and ruinous competition in the management of our public lines of conveyance.

I have introduced this subject here for the purpose of showing that the only benefit arising from the warfare which had been carried on between the New York Central and the New York and Erie roads, accrue to the citizens residing beyond the limits of this State, or to those doing business at the termini of the lines within the State; while the evil effects fall upon the local business of these lines, which is taxed more than would otherwise be necessary for the purpose of sustaining the railroads in this ruinous contest.

The profits of all the railroads engaged in this active contest for business have been most injuriously affected of late years, by the attempt to combine high rates of speed with low rates of fare.

The average rate of speed on the New York Central, the New York and Erie, and the Hudson River railroads, for ordinary passenger trains when in motion, has been from twenty-six to thirty-five miles per hour; and for express trains when in motion, from thirty-two to forty miles per hour, while the charge by the latter has been less than two cents per mile for each passenger.

The average rate of speed adopted for freight trains when in motion, has been from fourteen to twenty miles per hour. The actual charges and receipts for a portion of the through passengers and freight, are difficult to ascertain, but they are believed to be below remunerating prices.

The rates of speed maintained by passenger and freight trains have much to do with the expense of operating the road.

It may be safe to assume as a minimum, that the cost of operating and maintenance will increase in the ratio of the increase of the speed of the trains; that is, if trains are run at the respective rates of twenty and forty miles per hour, the expense of the latter will be twice that of the former. This shows the necessity for a more judicious tar-

iff of prices for both passengers and freight, arranged according to the respective rates of speed that may be adopted.

The effect of such competition as has been described, is not only greatly injurious to the stock and bond holders of these corporations, but in regard to freight it seriously affects, for the time being, the trade and revenue of the canals, and, through them, the interests of every tax payer in the State.

A capital of nearly one hundred millions of dollars will be represented in the investment of the great Central and Southern lines of railroad and their tributaries, passing through the State from east to west, before the construction accounts can be permanently closed. Yet, notwithstanding this enormous outlay of capital, a considerable portion of which has never been realized in cash, nor expended either in construction or equipment, the main lines, by a wise and prudent management, may be made to yield a fair return on their capital according to the financial condition of each, and their relative advantages of location. But it must be obvious to all that, however great their business or local advantages, an obstinate perseverance in their efforts to injure each other will result in discomfiture to both in proportion to the ability of each for prosecuting this foolish warfare.

Without going into an extended investigation to show that the Erie Canal, when enlarged, will command a large portion of the carrying trade which passes through this State, it is only necessary to refer to the business of the last year to establish the fact that it is a channel which cannot be dispensed with without entailing upon the general interests of the State injuries of a serious character.

The business of our Canals, especially of the Erie and Oswego, has had more difficulties to encounter the past season than will be likely to occur again at any future period.

The struggle which has been maintained between the leading railroad lines, and the efforts of each to secure to itself the greatest amount of freight, have already been referred to. Much of this freight has been carried at prices which were not only not remunerative to the companies, but which were much lower than were necessary to command the trade.

The prices of all agricultural products have ranged high in market through the entire year, while loans could be obtained from the Banks for short periods only, to forward property ruling at such high rates.

These circumstances have had a powerful influence upon the business of the canals, and some of them are of such a nature that they cannot be continued without seriously affecting the interests of those who have been instrumental in producing them; yet, while contending with these untoward influences, the revenue of all the canals of this State has, for the last year, exceeded that of the preceding one. Such being the fact, while the Erie and Oswego canals have retained their business, although contending against such disadvantages to canal navigation, is it not evident that these canals can compete successfully with the railroads in the transportation of freight, especially when they shall have been enlarged throughout?

There is no necessity, however, for any unreasonable competition between the canals and railroads of this State; nor can any valid reason be given why it should be continued. There is business enough for all. The present capacity of the three lines is but little more than sufficient to accommodate advantageously the present business; and I will here venture the prediction that within ten years the tonnage that will seek an outlet through this State will exceed the capacity of our present artificial avenues of trade. Then the utility of the enlargement of the Erie Canal will be demonstrated, and the wisdom of its projectors and advocates acknowledged.

I have deemed it all-important to endeavor to divest the public mind of the fallacy so generally

entertained, that railroads can contend with water lines in the economy of transportation, and also to show the folly of the managers of the former, in contending for a business which, when obtained, will neither augment their profits, nor in any way improve their condition.

The following extract from the last annual reports on canals, will represent more fully the true position of the internal improvements of this State, and the influence the one has upon the other.

"To properly examine the internal improvements of this State, the canals and railroads must be considered as parts of a single system, and not as antagonistic to each other. The object of the State expenditure for the construction of her canals was chiefly to accommodate trade and commerce, and not to make a profitable investment. The object of the projectors of our railroads, on the other hand, was to receive a profitable return for their investment, while the Government in giving them chartered rights knew that such expenditures would increase the accommodation of the trade and travel.

The Canals and Railroads have each their appropriate functions to perform, and they are each of them necessary to the other; and while they confine themselves to their legitimate functions without an effort at rivalry, they add to, instead of detracting from the business of each other.

The passenger travel belongs exclusively to the Railroad, while the transport of cheap and heavy articles of freight belongs to the Canal.

Those articles which require quick transport in consequence of their perishable character, those of high value in proportion of their weight or bulk, or those which require a quick delivery to meet the contingencies of a fluctuating market, will take the most speedy transit by railroad, while the other articles will take the cheaper transport by canal.

The cheapness of the transport by canal induces a large diversion of trade through this State, which brings with it a large passenger and a light freight traffic for our railroad lines, which, except for the canals, would never reach them, while at the same time the rapidity and convenience with which our railroads enable the merchants of the interior to reach an Atlantic port have induced great numbers of them to purchase their supplies at our commercial metropolis, the major part of which are shipped, by canal, and which would have been lost to them, except for the facilities afforded by parallel railroads; and thus, while each of these works has succeeded in accomplishing its own objects, each has also contributed to the prosperity of the other, and both have largely promoted the public good."

The public good as a whole has undoubtedly been promoted, notwithstanding the imperfect and loose system on which many of our railroads have been projected, the works carried forward and the lines operated—and characterized as some have been in their management by an amount of gambling, fraud and corruption, unparalleled in any other branch of industry, and highly disgraceful to the parties concerned in it.

Who then can estimate the beneficial effects upon the future industry of this State and nation of a system of internal improvements established upon a sound basis and marked by none of those features of fraud and deception which have hitherto so frequently characterized the management of railroads in this country?

The remainder of Mr. Clarke's report is occupied with a discussion of the amount necessary to complete the enlargement, and general statistics in regard to cost, engineering, &c. The people, he considers, would as readily have voted an appropriation of twelve or fifteen millions, as nine, had they judged it necessary. The Legislature have provided by law, and contracts have been made in accordance with that enactment, that all the works shall be finished simultaneously. In case, however, it should happen that the means provided should be insufficient for that purpose,

the consequences of a suspension would be much more serious than that of 1842. The present estimates for completing the works, exclusive of engineering, land damages, and other expenses, amount to \$7,077,077. In this ten per cent. have been added for contingencies. Many of the contracts have been taken at so low rates that the contractors will be unable to execute their agreements. Twenty-four contracts have been already declared forfeited, and the work upon them re-let. The law of 1854, by requiring sureties to give bonds to a certain amount, has made provision for fulfilling the contracts. If this shall be carried out, it would seem to obviate any increased cost on that account. The present estimate submitted by Mr. Clarke, including engineering and all miscellaneous charges, will make the total cost of the enlargement \$13,131,808. Adding to the \$9,000,000 appropriation interest and premium, the sum would amount to \$10,595,834, which leaves a deficiency of \$2,535,974. According to the last census, the taxable property of the State was \$1,402,849,364, on which the tax levied amounted to \$1,573,561. An additional half-mill tax imposed for four years would produce \$2,805,693, which is about \$270,000 more than is required. Mr. Clarke considers this a much less objectionable course to be pursued than altering the Constitution, in order to obtain authority to borrow the necessary amount.

It is recommended to abolish the office of Superintendent of Repairs. These officers are usually appointed on account of political services; and as the policy of giving out the repairs by contract has been adopted, it is believed that the work can be done better and cheaper by the Division Engineers.

Much inconvenience and loss have been experienced from the present mode of valuing property condemned for public use. It is believed that at least a partial remedy for this may be found in taking this duty from the Board of Canal Commissioners altogether, and devolving it upon some person for a space of not less than three years, whose entire attention should be given to it. The awards made to be duly published in the State and one County newspaper.

The number of contracts now in progress is 564, extending over a line of 600 miles. The number of persons employed in the Engineer department, at 1st December last, was—

Division Engineers.....	3
Resident Engineers.....	12
First Assistants.....	25
Second Assistants.....	47
Levelers, Surveyors, Draftsmen and Clerks....	78
Rodmen.....	41
Tapemen and Chainmen.....	16
Axemen.....	37
Inspectors.....	42

In all..... 301

The engineering expenses of all descriptions in 1855, amounted to \$211,982, or 5.7 per cent. of general expenses. The canals are divided among three Division Engineers, to the first of whom is assigned the main line from Albany to the Oneida Lake Canal, making with branches, 307.35 miles; to the second, from the Oneida Lake to the east line of Wayne county, making with branches 312 miles; and to the third the remainder of the main line and the Genesee Valley Canal, 273 miles. The total length is 892.35 miles.

Care of Baggage on the New York Central Railroad.

In the last six months of the last year, nearly six hundred thousand trunks, carpet-bags, chests, boxes, and other articles of baggage were checked upon the New York Central railroad, and passed into the baggage cars of the several trains.—This immense number of pieces were taken on and given out at fifty-nine different stations. The details of this service are presented in the following tables:

Checked at the following Principal Stations between July 1st and Dec. 31st, 1855.

	No. of Pieces.
Albany.....	85,899
Rochester.....	45,602
Buffalo.....	40,065
Syracuse.....	37,486
Utica.....	27,064
Suspension Bridge.....	22,747
Niagara Falls.....	18,706
Rome.....	17,452
Schenectady.....	16,276
Troy.....	11,988
Canandaigua.....	7,652
Auburn.....	6,688
Geneva.....	6,619
Total No. of pieces.....	344,189
Estimated checked at forty-six other stations (small estimate).....	162,060
Estimated emigrant unchecked (small estimate).....	50,000
Delivered to the Hudson river railroad at Albany.....	15,770
Delivered to the People's Line Steamboats at Albany.....	11,604
Delivered to Boston railroad at Albany....	5,691

Grand total of pieces transported..... 589,314

We are sure that it will excite surprise when we state, that out of this immense and complicated business, comprehending property of many millions of dollars in value, and peculiarly liable from its portable character to theft at the stations and elsewhere, the road has had to pay for only \$75 worth as having been lost, and only \$297.58 worth as having been stolen. In marked contrast to this care and system of the company, is the carelessness of travellers. In the stray baggage room at Albany, there are at this moment 2,035 pieces of baggage.—*Albany Evening Journal.*

North East and South West Alabama Railroad.

From a circular recently put forth by this company, we observe that \$220,000 are yet wanting, before they feel at liberty to put the first 100 miles of the road under contract. On the upper part of the route, subscriptions have been received; but these are to be exclusively applied to the construction of that part of the road in the neighborhood. E. D. Sanford Esq., has been retained to visit the planters and others on the line, for the purpose of securing the necessary means to authorize its being put under contract. We hope to hear of his efforts being crowned with that degree of success they deserve.

Lebanon Valley Railroad.

The Reading Gazette says that over \$30,000 were paid out to the contractors on this road last pay day—the 15th ult. The work is still going forward with much energy, notwithstanding the unfavorable weather. The Editor of the Harrisburg Telegraph is assured, from the upper end of the line, "that it was more than half completed, and that by April, 1856, we shall be able to ride over it, and to reach Reading in an hour and a quarter. It is nearly a straight line, has no curves and no high grades, and not a wooden structure on the whole distance. The iron rails will be the heaviest now in use, and altogether the Lebanon Valley Railroad is intended to be a model railroad."

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	68	Tennessee and Alabama	80	246,486	679,906	In progr.	679,906	In progr.	102,016	---
Androscoggin & Kennebec	56	642,343	1,478,080	2,245,020	190,605	90,797	18	18	Memphis and Charleston	288	2,108,177	958,275	3,563,362	176,484	102,016	---	---
Androscoggin	20	91,192	232,193	343,317	29,396	12,907	20	20	Mobile and Ohio	527	2,900,000	1,319,666	3,669,991	In progr.	---	---	---
Kennebec & Portland	72	1,211,368	1,007,229	2,470,593	228,747	114,642	14	14	Miss. Central	189	642,564	none	642,564	In progr.	---	---	---
Portland, Saco, & Portsmouth	61	1,307,000	119,237	1,486,827	259,330	124,038	6	88	N.O. Jackson, and G. N.	100	---	---	---	In progr.	---	---	---
Boston, Concord, & Montreal	93	1,808,063	1,059,512	2,771,310	233,234	120,834	---	---	N.O. Opelousas & G. W.	360	1,309,428	476,143	1,825,812	In progr.	---	---	---
Cheshire	53	2,083,825	946,919	3,181,997	372,892	131,015	18	18	Vicksburg, Shreveport, & Tex.	111	1,171,750	none	1,171,750	In progr.	---	---	---
Concord	35	1,485,000	none	1,412,576	829,744	158,632	8	83	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	39 1/2	East Tennessee and Va.	16	625,425	938,593	1,033,781	In progr.	---	---	---
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	162,687	55,173	---	---	Nash. and Chattanooga	151	2,319,330	1,407,081	3,843,694	316,090	112,177	none	---
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	394,971	---	---	---	Covington & Lexington	93	---	---	---	264,973	---	20	---
Vermont Central	117	5,000,000	3,550,236	8,663,266	602,119	214,793	---	---	Lexington and Frankfort	29	431,091	159,299	635,363	90,930	34,864	---	---
Boston and Lowell	27	1,830,000	325,635	2,188,595	499,754	140,377	6	65	Lexington & Big Sandy	---	---	---	428,057	In progr.	---	---	---
Boston and Maine	83	4,074,974	150,000	4,179,535	906,760	421,561	8	79	Lexington and Danville	---	540,117	61,525	570,463	In progr.	---	---	---
Berkshire	21	600,000	none	600,000	---	42,000	7	---	Louisville and Frankfort	65	698,236	669,061	1,589,566	244,014	96,902	6	---
Boston and N.Y. Central	74	2,234,600	1,200,000	3,810,943	102,352	42,335	none	2 1/2	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.	---	---	---
Boston and Providence	56	3,160,000	350,705	3,611,821	558,671	201,778	65	65	Bellefontaine and Ind.	118	1,881,598	1,260,612	2,806,821	238,010	114,592	none	---
Boston and Worcester	68	4,500,000	587,563	4,868,370	962,804	342,139	6 1/2	84	Cleveland and Erie	95	---	---	---	---	---	---	---
Connecticut River	62	1,591,110	254,043	1,862,244	277,770	102,942	4 1/2	50	Clev., Col., and Cincin.	141	4,473,721	374,127	4,546,133	1,162,601	567,905	9	99 1/2
Eastern, Mass.	60	2,583,400	2,850,325	4,447,459	730,269	346,425	7	44 1/2	Clev., Zanesv., and Cincin.	87	---	---	---	---	---	---	---
Essex	20	299,107	469,311	747,008	61,246	none	none	---	Cleveland and Toledo	200	2,675,425	2,689,301	5,124,629	736,272	306,986	10	74 1/2
Fitchburg	67	3,640,000	324,962	3,730,965	704,633	272,716	6	72	Clev. and Mahoning	103	---	---	---	---	---	---	---
Fitchburg & Worcester	12	288,140	74,099	333,884	42,647	19,274	6	---	Clev. and Pittsburg	133	2,686,770	2,516,162	4,818,163	450,216	255,868	---	---
Lowell and Lawrence	14	200,000	140,000	303,684	46,345	23,823	6	---	Cin., Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	483,690	---	---	---
Nashua and Lowell	21	500,000	10,000	654,003	191,857	55,877	8	83	Cin., Wilm. & Zanesv.	131	1,120,450	1,131,265	2,328,459	In progr.	---	---	---
N. Bedford and Taunton	14	337,260	164,554	287,413	32,677	4,666	none	---	Col. and Xenia	55	1,484,550	140,000	1,451,733	356,365	187,518	10	82 1/2
Newburyport	87	3,015,100	314,834	3,434,164	649,566	142,800	8	82	Columbus and Xenia	54	1,418,360	311,932	1,440,447	340,781	168,949	---	---
Old Gory and Fall River	18	450,000	none	413,677	60,895	25,619	6	---	Dayton, Xen., & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---
Pittsfield & N'th Adams	77	2,232,540	1,046,626	3,207,967	275,523	56,283	none	9	Dayton and Michigan	140	1,076,620	393,011	1,185,826	In progr.	---	---	---
Vermont and Mass.	155	6,150,000	6,689,520	9,953,258	1,763,944	718,708	7	87 1/2	Easton and Hamilton	42	448,411	635,994	1,345,673	113,859	53,256	---	---
Western, Mass.	46	1,141,000	218,244	1,394,703	200,118	82,959	2 1/2	43	Little Miami	65	2,963,921	1,171,778	3,648,172	681,562	336,708	---	---
Worcester and Nashua	43	1,522,200	351,500	1,843,332	316,616	131,312	7	65	Mad River and L. Erie	205	2,451,650	2,572,932	4,446,661	---	---	---	---
Providence and Worcester	72	2,350,000	930,000	3,313,032	730,012	352,799	10	122 1/2	Central Ohio	138	1,520,927	3,485,076	4,283,445	Recently opened.	---	---	---
Hartford and N. Haven	123	1,845,610	2,090,124	4,060,869	258,685	119,611	none	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	---
Hart'd, Prov. and Fishkill	110	2,000,000	474,177	2,429,066	330,782	18,851	none	---	Pittsburg, Mayv. & Cin.	50	---	---	---	---	---	---	---
Housatonic	57	1,081,800	573,995	1,677,167	238,266	none	4	---	Sand'y, Mansf. & Newk.	127	1,350,000	2,206,357	3,562,887	828,958	164,470	none	---
Naugatuck	62	2,992,000	2,252,647	4,980,407	906,018	335,611	none	30	Scioto & Hocking Valley	135	403,975	509,050	888,558	In progr.	---	---	---
N.Y. and N. Haven	50	758,253	735,165	1,450,318	103,966	217	none	---	Springf., Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
N. Haven and N. London	60	758,253	735,165	1,450,318	103,966	217	none	---	St. Paul & St. Louis	242	2,500,000	4,530,000	---	In progr.	---	---	---
N. London, W. & Palmer	66	608,600	1,007,828	1,627,827	137,060	3,717	none	---	Chic., Log. & Chicago	255	4,196,679	1,006,125	2,080,433	In progr.	---	---	---
Norwich and Worcester	100	1,122,300	796,886	2,596,488	404,651	95,456	6	25	Evansville & Crawfordsv.	109	706,945	1,177,696	1,844,541	127,400	64,552	---	---
Buffalo, Conn. and N. Y.	92	798,439	2,897,849	3,401,868	254,770	52,030	none	---	Ind. and Cincinnati	88	1,213,723	1,442,859	2,176,641	356,012	193,142	7	60
Buffalo and N. Y. City	91	1,300,000	1,030,000	2,343,540	507,618	264,846	10	---	Indiana Central	66	608,829	1,251,387	1,669,000	321,400	186,224	47	---
Buffalo and St. Line	93	587,000	531,318	1,093,624	120,849	58,589	none	---	Ind., Clev. & Pittsburg	83	834,157	1,101,971	1,671,644	---	---	---	---
Cayuga & Susquehanna	144	8,757,891	8,933,804	12,391,363	1,763,986	603,010	none	30 1/2	Jeffersonville	66	1,014,252	694,000	---	206,544	94,318	none	---
Hudson River	86	1,876,145	828,958	2,515,261	279,520	102,657	none	26	Lafayette and Indianapolis	64	---	---	---	---	---	---	---
Long Island	534	24,154,860	14,462,749	29,528,913	6,583,581	3,162,126	8	89 1/2	Madison and Indianapolis	87	1,647,500	1,589,581	3,237,831	---	---	---	---
New York Central	464	10,030,958	25,126,669	33,439,431	5,488,998	2,627,118	none	63 1/2	New Albany and Salem	288	2,585,121	5,281,948	6,643,189	645,927	371,402	none	---
New York and Erie	133	5,710,000	8,527,595	8,127,888	942,894	154,854	none	17 1/2	Penn. and Indianapolis	73	---	858,314	---	150,000	90,000	15	---
New York and Harlem	119	1,611,527	4,622,413	6,435,685	518,527	145,733	none	---	Terre Haute and Ind.	78	924,100	456,000	1,466,321	239,992	159,323	10	---
Northern, N. Y.	37	374,920	219,694	677,754	106,764	53,380	none	---	Chicago and Rock Isl'd	182	3,141,500	2,387,155	5,214,152	In progr.	---	---	---
Oswego and Syracuse	25	610,000	140,000	888,182	231,348	76,327	5	---	Chicago and St. Louis	220	---	---	---	1,077,312	---	---	---
Rensselaer & Saratoga	54	899,900	1,053,234	1,891,993	183,959	37,666	none	---	Chic., St. Paul & P'd du Lac	178	2,300,000	1,825,000	3,625,000	In progr.	---	---	---
Saratoga and Washington	71	731,614	1,118,716	1,636,117	152,648	66,407	none	---	Galeana and Chicago	298	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	109 1/2
Saratoga & Bingham's	27	439,492	493,500	1,107,873	103,954	152,732	5	65	Illinois Central	707	1,419,440	18,001,428	17,698,092	1,632,118	---	---	---
Troy and Boston	97	1,370,428	854,768	2,040,543	393,954	152,732	5	---	Peoria and Okawvia	93	569,889	818,454	1,388,342	In progr.	---	---	---
Watertown and Rome	50	1,000,000	1,177,376	2,177,376	124,301	44,825	none	---	Ohio & Miss. (Wat. Div.)	147	1,780,295	3,292,403	4,870,658	Recently opened.	---	---	---
Bellevue and Delaware	94	1,500,000	4,763,184	1,682,486	552,456	12	---	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.	---	---	---	
Camden and Amboy	60	240,125	1,269,223	1,499,185	99,673	61,760	none	---	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.	---	---	---
Camden and Atlantic	31	3,253,925	798,596	4,066,338	824,032	404,447	10	120	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656	---	---
New Jersey Central	75	2,032,085	3,632,085	5,664,226	138,145	180,796	7	---	Mich. South'n & N. Ind.	475	6,926,900	6,319,224	11,645,208	2,410,000	875,000	10	91 1/2
Morris and Essex	62	1,165,716	351,600	1,549,622	233,596	99,377	6	---	Green Bay, M.L. & Ch.	155	764,075	442,728	1,193,765	In progr.	---	---	---
Cumberland Valley	68	1,184,500	28,411	1,212,911	---	---	---	---	Milwaukee and Miss.	200	988,665	1,827,584	2,704,695	687,940	307,682	17	83
Del. Lark & Western	109	2,865,175	1,865,597	4,140,365	In progr.	---	---	---	Milwaukee and Horicon	92	---	---	---	---	---	---	---
Erie and North East	38	150,000	750,000	---	---	---	---	---	Milwaukee & La Crosse	69	---	---	---	---	---	---	---
Harrisburg & Lancaster	28	---	---	---	---	---	---	---	Racine and Miss.	63	---	---	---	---	---	---	---
Little Schuylkill	19	2,630,555	731,492	3,287,678	3,409,192	1,977,533	---	---	Hannibal & St. Josephs	---	292,351	580,000	823,310	In progr.	---	---	---
Northern Penn.	256	12,104,820	6,965,884	17,158,495	4,321,793	2,593,915	10	87 1/2	North Missouri	18							

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible.	7	1st Jan, 1st July	N.Y.	1872	---	85
Buffalo and State Line	500,000	Do. inconvertible.	7	April, October	"	1866	---	---
Bellefontaine and Indiana	600,000	Do. convertible.	7	Jan'y, July	"	1866	90	95
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1868	90	92½
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1869	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	61	---
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	75	---
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	93	---
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.	"	1862	---	90
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.	"	1861	92½	---
Cleveland and Pittsburgh	800,000	Do. convertible.	7	Feb'y, August.	"	1860	---	---
Do. do.	1,200,000	Do. on Branches.	7	March, Sept.	"	1873	85	---
Cleveland and Toledo	525,000	Do. inconvertible.	7	Feb'y, August.	"	1863	87½	---
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October.	"	1862-72	86	---
Do. do.	1,200,000	Do. inconvertible.	7	April, October.	"	1862-72	---	---
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible.	7	March, Sept.	"	1863	65	---
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. inconvertible.	7	Feb'y, August.	"	1863	97½	100
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88½	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	85	86
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	10 April, 10 Oct.	"	1863	94	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1873	75	---
Indiana Central	600,000	Do. convertible.	7	May, Novemb.	"	1866	90	---
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	92	---
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857.	7	March, Sept.	"	1866	---	---
La Crosse and Milwaukee	350,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	65	300
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1865	76	216
Little Miami	1,500,000	Do. inconvertible.	6	2 May, 2 Nov.	"	1860	78	80
Michigan Central	1,000,000	No mortgage, convertible.	8	April, October.	Bost.	1869	98	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97½	99
Do. do.	650,000	Do. 2d do. 1858	8	April, October.	"	1863	94	95
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	89½	90
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1858-62	101	23
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	80	---
Northern Cross	1,200,000	1st mortgage, convertible.	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	90	100
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92	95
Do. do.	2,000,000	Income, convertible.	7	April, October.	"	1872	80	81
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860.	6	Jan'y, July	Phila.	1880	92	93½
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N.Y.	1861	83½	---
Steubenville and Indiana	1,500,000	Do. convertible.	7	Jan'y, July	"	1865	78	---
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	---	---
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	75	77
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	74	75

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,125,500	Do.	6	Jan'y, July	Balt.	1876	86½	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	90	90½
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107	109
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	97	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	92	94
Do. do.	4,000,000	Not conv. Sinking Fund, \$420,000	7	Feb'y, August.	"	1875	80	83½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	80	83
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85	---
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	95½	96½
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	84	83½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	64	64½
Illinois Central	17,000,000	Mortgage, inconvertible.	7	April, October.	"	1876	83½	83
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	86½	87
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	82½	---
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	81	81½
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91½	97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	81½	82
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	81½	82
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1864	86½	86½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100½	101
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	100	102
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	100	102
Reading, issued 1843	1,673,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	90	91
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	86	86½
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October.	"	1870	---	---

CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. 1857	Feb'y, May,	100	---	Milwaukee, 7 per ct. coup.	X	Divers	81
Do. 5 do. 1858-60	August	97	98	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	78
Do. 5 do. 1870-76	November	99½	100½	Philadelphia, 6 per ct. 1876-98	Jan'y, July	---	89½
Albany, 6 per ct. coup. 1871-81	X Feb'y, August.	96	97½	Pittsburgh, 6 per ct. coup.	X	Divers	74
Alleghany, 6 per ct. coup.	X Jan'y, July	64	69	Quincy, 8 per ct. coup.	1868	X	94
Baltimore, 6 per ct. 1879-90	Quarterly	97½	98	Racine, 7 per ct. coup.	1873	X	81
Boston, 5 per ct. coup.	X April, October.	98	100	St. Louis, 6 per ct. coup.	Long	X	79
Brooklyn, 6 per ct. coup.	Long	X Jan'y, July	99	Do. do. Municipal.	X	Do.	79
Cler'Pd, 7 per ct. cp. W.V. 1879	X Do. do.	100	101	Sacramento, 10 p. ct. cp. 1862-74	X	Do.	77½
Cincinnati, 6 per ct. coup.	X Divers	87½	88½	S.F. Cisco, 7 p. cp. 1865, pay. N.Y.	X	May, Novemb.	82
Chicago, 6 per ct. coup. 1873-77	X Jan'y, July	88	89	Do. 10 p. ct. cp. 1871	X	Do.	92½
Detroit, 7 per ct. cp. W.V. 1873-78	X Feb'y, August.	101	102	Do. 10 do. pay. N.Y.	X	Jan'y, July	106
Louisville, 6 per ct. cp. 1880-83	X Divers	78	79	Wheeling, 6 per ct. coup.	X	Divers	70
Memphis, 6 per ct. coup. 1882	X Jan'y, July	---	---	Zanesville, 7 do.	X	April, October	97½

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 29th, 1886.

Per ct.
Cin. & Chicago, 10 per ct. Real Estate, Butler & Meredith. 40
Indianap. & Cin., 2nd Mort. 7 per ct. 77
Cin. Wil. & Zanes. 2d Mort. 7 per ct. 60
Covington & Lexington, 2nd Mort. 7 per ct. 65
Ohio & Mississippi, 2nd Mort. 7 per ct. 44
Covington & Lexington, 10 per ct. Income 62
Little Miami, 6 per ct. Mort. 79
Cin., Ham. and Dayton, 2nd Mort. 7 per ct. 58

STOCKS.

Cin., Wiln. and Zanesv., 20.—Cin., Ham. and Dayton, 64.—
Col. & Xenia, 82½.—Cincinnati, 10.—Central Ohio, 15.
—Covington and Lexington, 20.—Dayton and Western, 20.—
Eaton and Hamilton, 30.—Fort Wayne and Southern, 10.—
Indiana Central, 47.—Indianapolis and Cincinnati, 60.—Little
Miami, 89.—Mad River and Lake Erie, 20.—Marietta and Cin.,
18.—Ohio and Mississippi, 9.—Hillsboro' and Cincinnati, 18.
—Junction (Indiana), 10.

BY HEWSON & HOLMES:

For the week ending January 20th, 1886.

BONDS.
\$7,000 Cov'g. & Lex., 7 per ct. 2nd Mortgage 64½ (incl.)
2,000 Do. do. do. 65
5,000 Little Miami, 6 per ct. due in 1883 79
3,000 Ohio & Miss. 7 per ct. 2nd Mort. 45
1,000 Indianap. & Cin. 7 per ct. Dividend 70
1,600 Columbus & Xenia, Divid. 90
1,195 Little Miami, Dividend Scrip old 88
500 Do. do. new 80
700 Col. Piqua & Ind., 7 per ct. Dom't. due 1888. 14

STOCKS.

125 Shares Central Ohio 20
304 " Ohio & Mississippi 7½
300 " " 8
200 " " 8½
111 " " 9
300 " " 9½
216 " " 10
104 " " 6
168 " " 6½
100 " Columbus & Xenia 83
106 " Little Miami 90
17 " Covington & Lexington 19½
24 " " 19½
23 " " 20
50 " Indianapolis and Cincinnati 60
100 " Mad River and Lake Erie 22
46 " Little Miami 90
200 " Dayton and Michigan 4½

Extract from the Circular of Robt. Benson & Co., per Arabia.

London, Jan. 18th, 1886.

Yesterday morning the telegraph brought the following important message from the English Ambassador at Vienna:—"The Russian Government accept the Austrian proposals as a basis for negotiation." The messages transmitted by the correspondents of the daily newspapers conveyed similar intelligence in even more explicit terms.—There is a prevailing opinion that this apparently unconditional acceptance by the Russian Government, will ultimately lead to the conclusion of peace. It is at the same time felt that great prudence and vigilance, on the part of the Allied powers, will be required to bring the negotiation to a successful issue—with a firm determination on their part to carry out that policy for which so much blood and treasure have been expended.

In the early part of the week the Money Market showed much depression. An opinion was prevalent that the Bank of England had only postponed advancing their rate of discount, and were awaiting the answer of the Russian Government to the Vienna proposition; and it has been strongly held that, for a time at least, we might look for renewed stringency, consequent upon the apparent probability of a continued drain of specie, and reduction of the reserves of the Bank of England.—Fears also were entertained of serious difficulties arising in France, from similar causes affecting the position of the Bank of France. Under the most favorable circumstances we cannot look for much amelioration of either Banking institution. At the same time, returning confidence will tend to diminish the tightness in the Money Market, and discounts will no doubt be more readily attainable.

At the date of our last circular, we quoted consols at 86¼ for money. They subsequently declined, and touched at 85½. A little rally then took place. On the afternoon of the 16th inst., extensive purchases were made by parties supposed to be well informed, and the price advanced to 87¼. They opened at a little improvement upon this price yesterday morning; and upon the intel-

ligence, to which we have before alluded, becoming generally known, rapidly advanced to 90%.—To-day we quote them at 89 $\frac{3}{4}$ ¢90 for money, and 89 $\frac{3}{4}$ ¢90 $\frac{1}{2}$ for the account.

There have been few transactions in American securities, but the same cause which has affected our own funds, has given a firmer tone to the market. We have heard of no business in State Stocks. For Railroad bonds we quote New York Central 6 per ct., 80a82; and 7 per ct., 93a95.—Erie 3d mort. bonds, which were freely offered last week at 83, are now held for an advance of 2 per cent. There are few of the Illinois Central Railroad securities for sale; and to-day there is some enquiry after them.

ROBT. BENSON & CO.

American Railroad Journal.

Saturday, February 9, 1856.

Illinois Central Railroad.

The Illinois Central railroad company hope to be able to meet all charges upon them, the present year, (except for construction), from the earnings of the road.—The following is the assumption on which this can be done.

The total upon which interest is to be paid, is—	
Construction Bonds	\$17,000,000
Free Land do.	3,000,000
Assessments (20 per cent.) on 129,256 shares of Stock	2,585,120
	\$22,585,120

The accruing interest on the funded debt will be as follows—

Interest on \$13,000,000, at 7 per cent. ..	\$910,000
Do. 4,000,000, at 6 do. ..	240,000
Do. 3,000,000, at 7 do. ..	210,000

Total interest on bonds.....\$1,360,000

The receipts, the past year, from earnings, and from the interest land fund, were as follows—

Receipts from earnings.....	\$1,532,118
Int'est land sales, and int'st in advance	349,014

Total.....\$1,881,132

The estimates of receipts for the present year are as follows—

Receipts from earnings.....	\$2,500,000
Int'est land sales, and int'st in advance	350,000

Deducting for current expenses..... 1,250,000

Will leave\$1,600,000

—for interest; leaving \$240,000 for interest on Floating Debt and Stock.

We do not think the earnings are over-estimated. All things considered, they ought to be 100 per cent. in advance of the past year. The average mileage in operation the past year was about 596. The total at the present time is 627. The company derived no considerable advantage the past year from the Terre Haute and Alton and Great Western connections. These are now formed, and will be the source of a very large income. The State of Illinois suffered severely from the drought of 1854, and had little for exportation in 1855. The tide of emigration flowing in upon the line of the road will of itself create a large traffic. The company have been necessarily employed during almost the whole year in organizing their affairs, and in placing the road in good running order. The organization for working the road is now complete, and we doubt whether there is a road in the United States, the operations of every department of which are more perfectly systematized.

The company, in fact, were not till the close of the present year in condition to show what the road was capable of doing. The earnings for Jan'y were \$133,000 against \$57,000 for 1854. For Feb., '55, \$135,000 ag't \$59,000 for Feb., '54. They ought to be 100 per cent. in advance of those of 1854 for every month of the year.

Another source of future income, but from which the company derived only a very little revenue the past year, will be the coal trade. In the central portion of the State are immense coal fields; for which the Central road and its branches are admirably located to serve as outlets. Chicago and Lake Michigan will have to be supplied over the Chicago Branch. The North-west portion of the State, with portions of Iowa and Wisconsin, will receive their supply through the Galena Branch, which connects them with their nearest coal field at La Salle. Owing to the scarcity of wood in the prairie States, coal will soon come into general use for domestic purposes,—giving to all their railroads a large traffic. A very large am't of coal, of which an abundant supply of an excellent quality exists at Duquoin, about 75 miles from Cairo, will be sent to that place for the coaling of steamers and for exportation down the river. By proper arrangements, the coal traffic can be carried on at times when the ordinary business is periodically slack, by which monthly receipts, nearly uniform in amount, may be maintained throughout the year.

The reserve means of the company for the completion of the unfinished Chicago Branch, 77 miles, are 40,744 shares of the Stock, subject to 20 per cent. assessments, and the future assessments on the entire capital of 170,000 shares. The grading of this branch is contracted for, and paid. The whole route must be completed in March, 1857.

The company, we understand, will proceed with the sale of their lands till the whole or a greater part are disposed of.

The Mammoth Steamer.

Great efforts are being made by the citizens of Boston and Portland to bring to their respective ports the great steamer now in process of construction on the Thames. The City Council of Portland has taken the matter in hand, and proposes to expend a large sum for such an improvement of their harbor as shall attract the steamer to them. Boston would undoubtedly adopt similar measures, could she count upon their being successful.

The citizens of New York, as usual, are entirely apathetic in reference to what excites so much interest among their eastern neighbors. A genuine New Yorker believes that everything in the end must come to his city from the mere force of commercial gravity. If the Mammoth steamer is to trade regularly with this country, he feels satisfied that she will, in the end, make New York her Western terminus. A merely experimental trip he regards of no value, and is quite willing that either Boston or Portland should be temporarily lionized by being the first to welcome to our shores the greatest mechanical wonder of the age.

But with all the indifference of New Yorkers, who will not, probably, raise a finger in this matter, we still think this harbor, without any improvement, offers greater attractions than any

other. The steamer could not, probably, come into the inner harbor, but there is no obstacle whatever in her coming through the Sound as far as Hell Gate. For this statement we have the authority of Prof. Bache, Superintendent of the Coast Survey. Up to that point, the Sound and the channel of the East river, have abundant water. At the Gate, an obstacle still exists in Pot rock. But this could be removed, Prof. Bache assures us, at a very trifling expense, compared with the object to be obtained. The 25,000 ton steamer could then, with perfect safety, enter the inner harbor, sail round into the North river, and in fact cruise about the harbor in almost any direction. There would be no difficulty whatever in building piers at which she could lie at all times of tide, either loaded or unloaded. A very considerable portion of the East river has a depth of channel of from 50 to 70 feet, with very bold shores. Piers run out only a short distance from the main land, would reach the requisite depth of water.

As it is, the ship could reach Hell Gate, which is not more than five or six miles from the business portion of the city. She could lie with perfect safety in the cove, a short distance above, where she could discharge her passengers into steamers and lighters, with the greatest convenience. We presume she will have to do this on her first trip, whatever port she makes. The distance at which she lies from the business portion of the city, when that distance is reduced to a few miles, is a matter of no importance. It is certain then, we think, that New York is the best port for the steamer, even without the improvements suggested. It is certainly the port to come to, if the object of the voyage be to make money. With the improvements, she may sail into the harbor, and around the Battery, as gracefully as do the Sound boats, which, up to the present time, have been regarded as the highest achievements that have yet been obtained in this peculiar kind of naval architecture.

A word more in reference to the entrance into New York Harbor through the Sound and East river. It has not been used for vessels of the largest class on account of the obstructions at the Gate, and because the entrance at Sandy Hook is a very excellent one, possessing a sufficient depth of water for any ship that ever floated. But if we are to multiply eight or ten times the largest ship which has yet been built, an entrance fortunately can, at very little cost, be made into our harbor, which shall bring in one of larger tonnage and draught than the monster now on the stocks on the banks of the Thames. The entrance, too, has many advantages over that at the Hook; and in fact, over any one that we are acquainted with. Almost all harbors and ports have a tendency to fill up from the wash of the territory contiguous; or from the action of the water upon the friable materials that compose their shores, or the islands that protect them. The Sandy Hook entrance may in time be shoaled from the former cause. It is well known that the excellence of Boston Harbor has been seriously threatened by the wasting away of the islands that have heretofore protected it from the sea. The East river entrance is not liable to be injured from any of the causes named. Both the Hudson and East rivers lie in a dense and deep fissures which have been sunk

by some convulsion of nature into the hardest kinds of rock. As the upper part of the Sound is filled by the tide coming in through Sandy Hook and Staten Island Narrows, a tremendous current sets through the East river, both upon the ebb and flow of the tide, which effectually scours the channel of any foreign matter thrown into it. Added to this is the fact that no river enters it for a distance of at least sixty miles, so that it can never receive the wash of any considerable extent of country. In East river, therefore, is a channel which at a very slight expense, may at all times of tide be made navigable for a ship drawing 30 or 35 feet of water—a channel that never can fill up or become obstructed. It is one, too, completely land locked for twenty or thirty miles, with good anchorage and numerous ports for shelter in a storm. With all these advantages it is destined to be the great entrance into the city from the sea. For this purpose it has every excellence that could be desired.

Cumberland Valley Railroad.

The business of this road for the fiscal year ending 30th Sept. 1855, was—

Passengers.....	\$63,620 27
Freight.....	77,005 41
Mails, &c.....	5,755 55

\$146,381 23

Making with \$33,954 86 on hand from previous fiscal year, \$737 81 assets sold, and \$10,000 from Harrisburg Bridge company, a total of \$192,103-53. The expenses of operating were \$79,387 27, besides \$14,173 71 for renewal of Harrisburg bridge, \$10,000 mortgage bonds, \$57,000 dividend on preferred stock, and \$321 50 for interest; leaving as cash on hand and due, at the end of the year, \$31,221 05. The following statement shows the company's

GENERAL ACCOUNT.

Cost of road and appurtenances.....	\$1,191,833
Materials on hand, 1st Oct. 1855.....	11,270
Assets.....	436
Bills receivable.....	15,000
Due for tolls.....	2,533
Cash on hand.....	28,687

\$1,249,761

First preferred stock, 7,200 shares.....	\$360,000
do. held by Co., 400 shares.....	20,000

\$380,000

Second pref'd stock, 7,050 sh's. \$352,500	
do. held by Co., 91 shares....	4,550

357,050

Unpreferred stock, 7,740 sh's....	387,000
do. held by Co., 1,700 sh's....	85,000

472,000

\$1,209,050

Due for dividends, 1st Oct., 1855—8 pr. cent. on pref'd stocks.....	28,500
Due for materials.....	12,211

\$1,249,761

The business of the road has been satisfactorily and safely conducted, and the passenger earnings have continued steadily to increase. The freight receipts, however, owing to causes too generally felt, have diminished. The road and equipment are now in good condition.

The bridge over the Susquehanna at Harrisburg has been found to require re-building, which will involve an outlay of \$100,000. This work is now progressing, and will be completed at an early date this present year. As the company are en-

tirely out of debt, the Board propose raising the means for its construction from the following sources—

Bridge fund on hand.....	\$25,000
Four hundred and ninety-one shares preferred stock on hand.....	24,550
Add 600 shares pref'd stock.....	30,000
	\$79,550

This sum, together with surplus of net earnings, accruing in 1856, it is believed will be adequate to accomplish the undertaking. The completion of the Northern Central road will add considerably to their freight earnings.

During the past year, 32,760 new cross-ties have been put down. There are yet 47,000 to be replaced, of which 25,000 will be put down the ensuing year. Twenty-nine tons of new rails have also been purchased and laid down. Additional sidings are still needed, which will call for about 30 tons this present year. Very little expense will require to be made on account of freight and passenger cars.

The officers for 1855-6 are—Frederick Watts, President; Ed. M. Biddle, Sec'y and Treas.; and A. F. Smith, Superintendent.

To Contractors.

We ask attention to the advertisement of SAM'L GILL, Esq., Superintendent of the Louisville and Frankfort Railroad, Louisville, Ky., inviting proposals for the re-building of the Masonry and Superstructure of the Bridge across the Kentucky river at Frankfort, Ky.

Pensacola and Georgia Railroad.

The annual meeting of stockholders in this road, was held at Tallahassee, on the 10th of December last. In accordance with a resolution passed by the stockholders in June last, the Board made choice of an Engineer, in the person of Wm. H. Griffin of South Carolina. The whole attention of the managers has been given to that part of the road east of Tallahassee, no subscriptions having yet been obtained west of that point; though satisfactory assurances have been held out that liberal subscriptions will be made as soon as the road shall be in progress to Tallahassee. The line has been located to the Sewanee river at Columbus, and thence to Aligator in Columbia county. The whole of this has been advertised to be let to contractors at an early day. From the Legislature several amendments of much importance to the company have been obtained. These entitle them to State aid, on the road being graded ten, instead of twenty miles, as before; to build the road into East and South Florida, and to Appalachicola Bay, in Middle Florida, and to St. Andrews Bay in West Florida. They also authorize the company to purchase the stock and franchise of the Tallahassee railroad company, and to hold stock in any other company.

About \$20,000 of additional subscription have been obtained. It is believed that this sum might have been greatly increased, but for the indisposition of the President. The present stock subscription is \$540,000, and it is expected that this will be increased \$100,000 by contractors. The estimated cost of road-bed, including bridging and cross-ties delivered, is \$480,000. The company will be entitled to 70,000 acres of lands which will be delivered as the work progresses. They have also assurances held out that their bonds

will command a ready sale in the New York market.

The contractors are to have ten miles completed by the 1st of July next and ten more by the 1st of January, 1857. The work begins at Tallahassee.

The question as to the constitutionality of county subscriptions, it is believed has been satisfactorily disposed of.

A union with the Tallahassee railroad company is strongly recommended. The latter are rapidly pushing their work forward to completion.

Tennessee and Mississippi Railroad.

This road proceeds from Memphis, Tenn., to Granada, Mississippi, on the line of the Mississippi Central railroad. From the report read to the annual meeting, on the 11th of October last, we learn that 33 of the 50 miles under contract, are ready for track-laying, while the remaining seven, teen miles will shortly be in an equally forward state. All the bridging and trestle-work on the first 40 miles, with the exception of two piers, are completed. Four depots and wood-stations have been contracted for; two of them are made payable in company's stock. About 100,000 cross-ties have been procured and a large part of them delivered. The original contract made for ties, track-laying, bridging, &c., has been rescinded by the Chief Engineer, but is now re-let.

This circumstance, together with the delay in getting iron, and the want of obtaining cars in proper time will account sufficiently for the delay in getting the work executed at as early a day as might otherwise have been expected. Should the weather continue pleasant, track-laying may now progress at the rate of a mile and a quarter per week.

The following statement will exhibit all disbursements made to the 1st of October, on certificates issued from this department. The debit shows the gross amount of work done embraced in the certificates or estimates, nearly all of which was done prior to the 1st of May. Since that time, work to the amount of about \$60,000 has been done, for which no estimates have been returned, arrangements having been made with contractors to defer payments till October or November. The credits show the amounts in cash and stock authorized to be paid by the certificates, and the per centage retained.

GENERAL CONSTRUCTION ACCOUNT.		Dr.
To graduation.....		\$127,304
To masonry, including lime and cement.....		13,498
To bridging, including workmanship and material.....		13,334
To cross-ties.....		2,600
To buildings.....		434
To water-stations.....		155
To laying track.....		13
		\$175,340

Cr.

By am't paid in cash.....	\$134,318
By am't paid in cash.....	36,612
	\$170,931
	170,931

Balance—per centage retained.... \$4,408

The Superintendent, in his report, says—

To meet payments falling due on the various items of graduation, masonry, bridging, depot building, cross-ties, laying track, duties, freight locomotives, &c., by the 1st of January, you will require about \$170,000, to provide which should receive your unremitted attention. It is in vain you expect the work to progress rapidly unless means are provided to pay for it when done. This is the difficulty, and, if the stockholders do not see it, and pay their instalments with more alacrity than

some have hitherto done, they must be content to see it move with the same languid step that marks their own apathetic indifference. At the instance of the President, last spring, I notified some of the contractors to diminish their forces, offering a proportionate extension of time on their contracts. The course was judicious, and necessary to relieve the pressure always felt in cotton growing districts during the summer months; but the necessity for its recurrence ought by all means to be avoided. There need be no want of vigor in its prosecution, and, if ample means are provided in time, there is no reason why the cars should not cross the Tallabatchie by the end of 1856; and the seven miles of grading, extending from the end of the 49th section to its south bank, might be let with this view, so soon as the results of the contemplated survey through Tallabatchie county are known. Beyond this, wisdom forbids your going at present.

Journal of Railroad Law.

STOCK SUBSCRIPTIONS.—MUNICIPAL POWERS.—CONSTITUTIONAL LAW.

It has become a matter of frequent occurrence for cities and towns to subscribe to the stock of a railroad. The legality of these subscriptions has been several times drawn in question.

We give an abstract of some decisions in various States of the Union upon this point taken from the second volume of American Railway Cases published by Little & Brown of Boston.

"The power of a State Legislature to authorize counties, cities, and towns, to subscribe for stock in companies organized for the purpose of maintaining and building works of internal improvement, has been elaborately considered by the courts of a number of States, and in every instance the decisions have sustained the action of the Legislatures. Below is a reference to most of the cases.

James Griffith *et al.*, vs. Commissioners of Crawford county, and the Ohio and Indiana Railroad Company, 20 Ohio R., 606, 625.

The Commissioners of Crawford County in the State of Ohio, were authorized by the General Assembly of Ohio to subscribe for the stock of the Ohio and Pennsylvania Railroad Company, conditioned upon a vote of a majority of the county.—A majority of the votes were in favor of the subscription, but the commissioners refused to subscribe because the road was not located in Crawford county. Afterwards the Assembly passed an act authorizing and requiring the Commissioners to change the subscription authorized to be made to said company, and to subscribe the same to the Ohio and Indiana Company. The Commissioners subscribed and issued bonds in part. The petitioners, voters in said county, prayed for an injunction against the use of the bonds issued, and also against a further issue of bonds, as well as from levying a tax to pay the amount subscribed. A temporary injunction was granted by the court of Common Pleas, and the case came before the Supreme Court on a motion to dissolve the injunction, which the Court dismissed for want of jurisdiction.

SPAULDING, J., however, in delivering the opinion of the court, adds "in making known this determination of the court, I claim the right to say, that no one can regret more than myself that the case was not presented in such a shape as to enable us to decide the second point made by complainant's counsel. Without committing this court or any member thereof other than myself,

to any particular construction of that sort of legislation which enables a majority in a county to vote the property of the minority into a joint stock company, I cannot forbear the remark, that it seems to me not only a violation of the essential principles of liberty and free government, but in direct derogation of the 4th section of the 8th article of the late constitution of Ohio: 'Private property ought and shall ever be held inviolate, but always subservient to the public welfare, provided a compensation be made to the owner.' It is an important matter to know whether the security of the citizen and the safety of his property rest in the discretion of the Legislature, or in the guaranty of the constitution." The judge further argues that though the Legislature have a right to tax the people for the ordinary expenses of the government, and to take private property for public use, they have no right to levy taxes to support stage, steamboat, or railroad transportation, and that the accidental benefit of a railroad to the community does not constitute a "public use."

The answer of HITCHCOCK, C. J., in the same case to the above *obiter dictum*, is very elaborate, and sustains the acts of the Legislature, but as the question was afterwards authoritatively decided by the court in the case below, his opinion is not here given. It is reported in the Appendix of the 20th vol. of Ohio Reports.

The Cincinnati, Wilmington, and Zanesville railroad company vs. The Commissioners of Clinton county, 21 Ohio R. (1 McCook,) 77.

The Assembly of Ohio authorized the Commissioners of Clinton county to subscribe to the stock of the plaintiff's railroad, and a majority of the electors of said county voted in favor of such subscription. The Commissioners made the subscription in accordance with the act, but afterwards refused to issue the bonds of the county in payment thereof.

The railroad company prayed for a mandamus, and the Commissioners demurred upon the ground that the act was unconstitutional.

The points relied upon in support of the demurrer were, 1st that the act was not passed into a law by the General Assembly, but was made to depend for its effect upon a vote of the people of the county; and that this involved an attempt on the part of that body, to delegate legislative power. 2d, That the power exercised did not legitimately fall within the definition of legislative authority; and 3d, That the act was opposed to certain express provisions of the constitution.

The court decided 1st, That the judiciary had the right to declare void legislative enactments, either because they did not fall within the general grant of power to that body, or because they were expressly prohibited by some provision of the constitution. 2d, That the Assembly cannot delegate legislative power to any person or body. 3d, That the law in question was of the same character as the law for instance, which leaves to the citizens of every township to decide upon the erection of a town house, and that where a law was perfect, final, and decisive in all its parts, and a discretion given which related only to its execution, there was no delegation of legislative power, and no objection to its validity. 4th, That the State might construct works of internal improvement, or aid in their construction by subscribing

to the stock of corporations created for that purpose, and levy taxes therefor: and that the Legislature might authorize counties and towns to aid by similar subscriptions such works; but only such as the State itself might construct. 5th, The court decided the distinction between the right of eminent domain and the right of taxation to be, that while in each private property is taken, and in each compensation is made as required by the constitution, yet in the former it is made in money, and in the latter it consists in the protection of government, and the increased value of the property taxed; that the act did not conflict with the constitution, and that though "laws of this character involved a gross abuse of rights," the court could not exercise a veto power over the Legislature. See also the Steubenville and Indiana Railroad vs. The Trustees of North Township Harrison county, 21 Ohio R., (1 McCook) 105 and Cass vs. Dillon, 22 Id. (1 Worden) 607.

We shall refer to some further cases on this point in our next number.

Mr. Robert Stevenson on the Railways of Great Britain.

Below we give the substance of an address delivered to the Institute of Civil Engineers, by their President, Mr. Robert Stevenson upon the subject of the Railways of Great Britain.

Mr. Stevenson, after a complimentary allusion to the eloquent addresses of his predecessors, observed that he would apply himself to the great question of British railways, which were described as spreading like a net work, over Great Britain and Ireland to the extent of 8,054 miles completed; thus in length they exceeded the ten chief rivers of Europe united, and more than enough of single rails was laid to make a belt of iron around the globe.

The cost of these lines had been £286,000,000—equal to one-third of the amount of the national debt. Already, in two short years there have been spent more than one-fourth of £286,000,000 in the war in which England was engaged; yet how small were the material advantages obtained by the war in comparison with the results secured by railways.

The extent of the railway works was remarkable, they had penetrated the earth with tunnels to the extent of more than fifty miles; there were eleven miles of viaduct in the vicinity of the metropolis alone. The earthwork measured 550,000,000 cubic yards. St. Paul's in comparison with the mountain this earth would rear, would be but as a pigmy beside a giant, for it would form a pyramid a mile and a half in height, with a base larger than St. James's Park.

Eighty millions of train miles were run annually on the railways; 5,000 engines and 150,000 vehicles composed the working stock; the engines in a straight line, would extend from London to Chatham; the vehicles from London to Aberdeen; and the companies employed 90,400 officers and servants, while the engines consumed annually 2,000,000 tons of coals; so that in every minute of time 4 tons of coal flashed into steam 20 tons of water—an amount sufficient for the supply of the domestic and other wants of the town of Liverpool. The coal consumed was almost equal to the whole amount exported to foreign countries and to one-half of the annual consumption of London.

In 1854 111,000,000 of passengers were conveyed on railways; each passenger traveling an average of 12 miles. The old coaches carried an average of 10 passengers, and for the conveyance of 300,000 passengers a day, 12 miles each, there would have been required at least 10,000 coaches and 120,000 horses.

The receipts of the railways in 1854 amounted to £20,215,000 and there was no instance on record in which the receipts of a railway had not

been of continuous growth, even where portions of its traffic had been abstracted by competition or new lines.

The wear and tear was great; 20,000 tons of iron required to be replaced annually; and 26,000,000 sleepers annually perished; 300,000 trees were annually felled to make good the loss of sleepers; and 300,000 could be grown on little less than 5,000 acres of forest land. The President considered at some length how these annual depreciations should be met. The principle of a renewal fund was questionable. After a certain period in the history of every railroad, deterioration reached an annual average, and as that annual depreciation became a charge as fixed and certain as the cost of fuel or the salaries of officers, it should be admitted as an annual charge against receipts.

As regarded fares, the interest of the companies and of the public were identical; companies must regulate fares by consideration of the circumstances which produced the largest revenue, and the circumstances which produced the largest revenue, was those which induced the greatest number of individuals to travel. Nothing was so profitable as passenger traffic, as it cost less in every way than goods, and an average train would carry 200 passengers. The cost of running a train was overstated at 1s. 3d. per mile, and 100 passengers at $\frac{1}{2}$ d. per mile produced 5s. 2 $\frac{1}{2}$ d. But this argument did not imply that in all cases fares should be fixed at a *Minimum*. *Minimum* fares were most profitable on short routes; but the public were too much occupied to be tempted by *minimum* fares to undertake long journeys. High rates of speed and increased comforts were then required, and these might be charged for. Every case, therefore, should be treated in consideration of its local circumstances.

The postal facilities afforded by railways were very great. But for their existence "Mr. Rowland Hill's" plan never could have been skillfully carried out. Railways afforded the means of carrying bulk, which would have been fatal to the old mail coaches. Every Friday night, at present, when the weekly papers were transmitted, eight or ten vans were now required for Post-office bags on the North-Western Railway, and this use of eight or ten vans implied, at the least, the employment of 14 or 15 mail coaches to Birmingham; and the expenses of 14 or 15 mail coaches to Birmingham could never have been sustained by a penny postage. For this great blessing, therefore, the nation had to thank the railways. They were the great engines for the diffusion of knowledge. Government could never have carried *The Times*, of its present size, on the same terms, by the old mail coach. The Parliamentary blue-books never could have been printed; for, except by canal or wagon, they could not have been distributed, and if they could not have been circulated they would have been useless. Nevertheless, the Post-office did not appear to treat railways with all the consideration they were entitled to expect. Great services were required, and in return, it had been contended that no profit should be allowed to the railway companies, except as carriers and workers of the line. Railway companies were, therefore, indifferent to postal traffic; which was shown to be a serious disadvantage to the public. At present the Post-office competed with railways as carriers of book parcels, a principle which must be extended still further, but not without injustice and hardship to the railways.

Parliamentary legislation for railways was full of incongruities and absurdities, which were graphically described and illustrated. The acts of Parliament which railways had been forced to obtain, had cost the public £14,000,000 sterling.—But this was shown to be the exclusive fault of Parliament itself, and of the system it enforced. The legislation of Parliament had made: railways pay seventy millions of money to land-owners for land and property; yet almost every estate traversed by a railway had been greatly improved in value. Parliament had taxed the companies in favor of the land owners, for what was called "se-

verance." Claims for compensation for "severance" were based upon theories which were wholly ideal and imaginary. No one had ever been able to show a practical loss by "severance," and the claim was often made as "customary," where it was even admitted that no ground for it existed. The remedy which suggested itself for this state of things was one which Parliament was not likely to grant. A competent tribunal was wanted and Parliament was incompetent. Neither its practical experience, its time, nor its system was adapted for railway legislation. If a mixed commission could be organized, to consist of practical men of acknowledged legal, commercial, and mechanical ability, there might be some chance of railway business being efficiently conducted.—But it was admitted that there was little hope of any such concession.

Railway management was next considered, and shown to be completely anomalous. Parliament had legislated for railways as toll-taking companies; but every direction was obliged to embark in enterprises foreign to the Parliamentary objects of the railway itself. This produced serious dilemmas.

As long as dividends were kept up the directors were popular, however illegal their acts; but the moment dividends fell, the directors, however energetic, wise, or prudent, were visited by the shareholders and the public with all the penalties of having exceeded the letter of the law.—Men whose reputations were at stake, were consequently unwilling to incur the risk of becoming railway directors; and the most enlightened managers and shareholders were revolving in their own minds how the dilemma could be escaped. It was suggested that the advantage might be taken of the Limited Liability act, or of some analogous measure, to enable a limited number of men of business to take lines of railway from shareholders or leases, subject to certain conditions and terms. A few of these lessees would then constitute themselves managers, and being free from apprehensions on account of shareholders, of external interference, or of personal liabilities, they would be able fully to work the line and enter into those enterprises necessary for its development and essential to its prosperity. A large profit would accrue to those who took the line, and managed it with vigor and economy; while shareholders would derive great advantages from the certainty of receiving fixed dividends, and from the enhancement of the value of their property, and practical security would be afforded to the public, while their best interests would be consulted.

The electric telegraph—that offspring and indispensable companion of railways—was next considered. Seven thousand two hundred miles of telegraph, or 36,000 miles of wires, were laid down at least. Three thousand people were continually employed, and more than 1,000,000 public messages were annually flashed along this "silent highway." To the working railways the telegraph had become essential. The needle was capable of indicating at every station whether the line was clear, or blocked, or if accident had anywhere occurred. The telegraph could, therefore, do the work of additional rails by imparting instantaneous information to the officers, and enabling them to augment the traffic over those portions of the line to which their duty might apply. It also enabled large saving to be effected in rolling stock, by affording the means of supplying such stock to any station at which it was needed from some other station where it had accumulated and was not wanted. The mode in which this system was worked was described, and its simplicity was commended. As a perpetual current was passing through the wires, the guard or engineer had only to break the train wire in case of accident, and the officers at the nearest station were instantaneously apprized that something was wrong and that assistance was needed. Some statistics were given to show that the business of the Electric Telegraph Company had increased fifty-fold in seven years.

Railway accidents occurred to passengers in the first half of 1854, in the proportion of one accident to every 7,195,343 travelers. Ladies and gentlemen could scarcely "sit at home at ease" with the impunity with which it appeared that they could travel by railway. How frequent, comparatively, were the accidents in the street; how fearful the misadventures to those "who go down to the sea in ships." Yet Parliament had seen fit to legislate expressly for accidents by railway, without legislating in the same way for accidents from other sorts of locomotion. This was unfair to railways, and ill-calculated to afford protection to the public where it was most needed. Lord Campbell's Act, also, measured men's lives by a class standard. The family of a high public functionary would get large compensation, while the family of the poor working man would get nothing. The practical tendency of this law was to retard the adoption of low fares. Railway managers were compelled to consider not only what they might gain, but what they might lose; and the larger the number of passengers, the greater the risk of accident to some of them. The companies were, practically, obliged to insure the life of every person who traveled on their line, without being able to apportion the premiums to the risks incurred.

The results of railways were astounding—90,000 men were employed directly, and upwards of 40,000 collaterally; 130,000 men, with their wives and families, represented a population of 590,000 souls; so that one in 50 of the entire population of the kingdom might be said to be dependent upon railways. The annual receipts of railways now reached £20,000,000, or nearly half the amount of the ordinary revenue of the State. If railway intercourse were suspended, the same amount of traffic could not be carried on under a cost of £60,000,000 per annum; so that £40,000,000 a year were saved by railways. To the public "time is money," and in point of time a further saving was effected; for on every journey averaging 12 miles in length, an hour was saved to 111,000,000 passengers per annum, which was equal to 38,000 years in the life of a man, working eight hours a day; and allowing an average of three shillings per diem for his work, this additional saving was £2,000,000 a year. The moral results of railways were equally remarkable; railways were equalizing the value of land throughout the kingdom by bringing distant properties practically nearer to the centre of consumption, and by facilitating the transit of manures; thus enabling poor lands to compete with superior soils. The stimulus afforded to national industry was exemplified by the progress of the boiler-plate manufacture; and the increased comforts afforded to the people were illustrated by the extraordinary progress of the fish trade, and the development of the inland coal traffic.

It was observed that, before railways existed, internal communication was restricted by physical circumstances; the canal traffic was dependent on the supply of water at the summit levels, and upon the vicissitudes of seasons of either drouth or frost. Railway communication was free from all these difficulties, and every obstacle that nature had opposed, science had hitherto effectually surmounted.

The address concluded with some words of practical application. The duty devolved on civil engineers of improving and perfecting this vast system. Every farthing saved on the train mileage of the kingdom was £80,000 a year gained to railroad companies. There was, therefore, ample field for economical appliances, and therefore no economical arrangement, however trifling, was to be neglected. Nothing would afford the President greater satisfaction than that from his observations some sound practical improvement should result to a system with which his name, in consequence of his father's works, had been so largely associated; for, however extensive his own connection with railways, all he had known and all he had himself done, was due to the parent whose memory he cherished and revered.

Terre Haute and Richmond Railroad.**SEVENTH ANNUAL REPORT.**

It is with much gratification that we are enabled to present so favorable an exhibit of the present condition of the road, in its finances, equipment, and future prospects, as is shown by the annexed reports of the Secretary and Acting Superintendent.

Notwithstanding the great deficiency in the crop of 1854, which operated against our receipts from freight, and diminished the local traffic through the greater part of the past season, the gross receipts of the present show an increase over those of the preceding year of nearly twenty per cent. With the bountiful crop of 1855, and the increased railroad communications south and west, we may, with confidence, look forward to an active and heavy traffic the ensuing year.

On the fourth day of July last, the Illinois division of the Ohio and Mississippi railroad was opened from St. Louis, Mo., to Vincennes, Ind., connecting at the latter place with the Evansville and Crawfordsville, and at Terre Haute with the Terre Haute and Richmond railroad. On the 16th of July, the three roads commenced running trains in close connection from St. Louis to Indianapolis. We are at the present time, running two express trains daily, in connection with the above-named roads, without change of cars or baggage at Terre Haute—forming by these the shortest and quickest route between the Atlantic cities and St. Louis. Our local traffic is accommodated by a third train.

In addition to the increased business thrown on our road by the connections stated, we are deriving an important amount of business from the Terre Haute and Alton railroad, (which in a few weeks more, will be opened through to Alton, giving us thereby another route to St. Louis) and its connections with the Chicago branch of the Illinois Central and the Great Western Railroads, a direct railway connection is made from Indianapolis, the capital of our State, to Springfield, the capital of the State of Illinois, and with the many lines of railways diverging from these two places.

To meet the demands of increasing business, we will require four additional locomotives—two for passengers and two for freight; to keep the road-bed and track in good order, (the true economy of all railroads,) will require an increased expenditure in renewing cross ties, culverts, &c.; all of which will be requisite to keep our stock and track up to a safe and efficient standard. These can be made without increasing our construction account or resorting to a loan; the surplus fund and prospective increase of business will, we anticipate, be ample to meet these demands.

While the number of trains have been increased, they have been run with great regularity. No injury has been sustained by passengers. Two accidents to employees have occurred from causes purely accidental, while in discharge of their duty, happily of a nature comparatively slight.

According to the Secretary's report, the income of the company for the year ending 31st December last, was—

Passengers.....	\$180,193 66
Freight	91,833 46
Mails, &c.	15,485 42
	<hr/> \$287,512 54
Operating expenses.....	97,809 78
	<hr/> \$189,702 76
Net earnings.....	
Int'rst on bonds and loans.....	\$35,291 13
Taxes	6,084 31
Dividend in July (5 per ct.) ..	47,440 00
Do. Jan'y do.	48,740 00
	<hr/> 137,555 44
Surplus	<hr/> \$52,147 32

During the year, the sum of \$36,844 78 has been spent on construction acc't for locomotives, cars, fencing, sidings, &c. The cash in Treasury, on December 31st, was \$50,401 70.

GENERAL ACCOUNT.

Construction	\$1,478,525 91
Union depot and track	25,640 78
	<hr/> \$1,502,166 69
Evansville and Crawfordsville R. R.	
Stock	20,650 00
Due from other roads.....	4,112 06
Mail service.....	1,825 00
Treasurer	50,401 70
	<hr/> \$1,579,155 44
Capital stock.....	\$974,800 00
Bonds, 7 per cent.	422,000 00
	<hr/> \$1,396,800 00
Bills payable.....	28,121 04
Dividends unpaid.....	964 50
Dividend Jan'y, 1856.	48,740 00
Surplus account.....	104,529 90
	<hr/> \$1,579,155 44

The increase of gross receipts in 1855 over those of 1854, was \$47,519; increase of net receipts, \$30,379. Number of passengers carried, 120,463.

The stock has been increased and the bonded debt diminished, by the conversion of \$34,000 of the latter into capital, during the year. Stock has also been sold to the amount of \$16,700, making a total increase to this account of \$50,700.

The rolling stock consists of 14 locomotives, 12 passenger, 6 baggage and express, and 217 other cars of various kinds. Additional Passenger and House cars are now being built. Two first class engines have been received during the year.

Sam'l Crawford of Terre Haute is President for 1856; Edwin J. Peck of Indianapolis, Vice President; Chas. Wood, Secretary and General Agent; John Scott, Treasurer; C. R. Peddle, Superintendent of Machinery; and John Hice, Superintendent of Track. The remaining Directors are—Messrs. C. Rose, D. Deming, J. Crawford, A. McGregor, W. H. Thornburgh, Jas. Farrington, and H. Ross.

Boston and Worcester Railroad.

The annual report of the operations of the Boston and Worcester Railroad for the year ending the 30th of November last shows that the amount of income received, was \$1,008,004 90, it being an increase over that of the last year, of \$55,109 92. Of this amount \$529,185 were received from passengers; \$444,981 from freight transportation; and \$33,938 for mail transportation, and from rents and other miscellaneous income.

The working expenses of the year amounted to \$603,643, it being an increase of \$9,014 over the expenses of the last year; net income, after deducting interest and working expenses, \$391,264, being an increase \$49,122 over the net income of the preceding year.

The amount of capital paid in is \$4,500,000.—The aggregate of bond and floating debt, \$655,428. Bonds and notes receivable with collateral, and other cash assets, \$478,266. Balance of debt over cash assets, \$177,163. Balance of interest paid in 1855, \$13,200.

The cost of road, lands, buildings, and equipments as shown by the books Dec. 1, 1855, was \$4,865,439. Cost of iron and materials for repairs, wood, &c., on hand for the use of the road, \$203,396. Dividends declared 1855, 6% per cent, amounting to \$292,500. Reserved for depreciation of road beyond repairs, \$23,630. Reserved income \$111,781.

There has been a regular increase in the business and income of this road not only in the last year, but in several preceding years. This has been more uniform in the passenger receipts, than in those of the freight department. The income from passengers has increased from year to year in the last six years to an annual average of more than \$33,000. The increase in the gross in-

come for the last four years has exceeded an average of \$66,000 a year. The increase of working expenses, however, has more than kept pace with that of income, until the last year. This is owing, not to any deficiency in the state of the road, or to any other new object of expenditure, but to the increased rates of wages, and the increased cost of fuel. This former branch of expenditure has probably reached its maximum for the present. The other will doubtless soon find a remedy in the substitution of coal and coke for the running of engines, in place of wood.

Pennsylvania Railroad.

The annual meeting of this corporation was held in Philadelphia on the 4th inst. From the annual report read, it appears that 136 miles of second track have been finished and put into use, 51 miles of this being east, and 85 miles west of Altoona. There are 80 miles upon the Eastern, and 31 miles upon the Western division remaining to be laid. A considerable part of this will be done this present year. The branch road to Indiana will be ready in a few months.

There are now in use upon the road 118 locomotives, an increase of three over the previous year; 44 wide passenger cars; 24 narrow do.; 28 emigrant do.; 14 baggage do. with mail apartments; 9 baggage cars without mail apartments; 1,170 8 wheeled house freight cars; 109 4 wheeled do.; 102 8 wheeled lumber and iron trucks; 92 4 wheeled coal cars.

The number of passengers conveyed between Harrisburg and Pittsburg was equivalent to 147,480 passing over the whole length of the road.—There is a slight decrease from the business of the previous year. It is attributed by the report to the completion of the Baltimore and Ohio railroad.

The emigrant travel had also fallen off in consequence of the decrease in foreign emigration.

The earnings during the year from first-class passengers, after deducting tolls paid other roads, were \$1,062,370 67
And for previous year..... 1,057,843 41

Increase.....\$5,527 26

The increase is owing to the reduced amount of tolls consequent upon the avoidance of the Portage railroad used in the early part of the year 1854.

The earnings from freight in 1855 were \$2,805,305 89, showing an increase over the previous year of \$778,694 34, or 38 4.10 per cent. Deducting \$511,583 11 paid for tolls on roads over which the cars of the Pennsylvania Railroad run, there will remain \$2,293,722 78, for the Pennsylvania road, from Harrisburg to Pittsburg, against \$1,643,090 44 the year previous.

The through tonnage for 1855, amounted to 171,972 tons, and the local tonnage to 193,034 tons; exhibiting an increase over the year 1855, in the former item, of 78,180 tons, and in the latter of 50,102 tons. The total tonnage moved during the year was 365,006 tons; excess over previous year, 128,282 tons, or 54 2-10 per cent.—This increase is attributed chiefly to the removal of the tax on coal and lumber, which the report says would have remained in their native mines and forests but for this exemption. The through tonnage was also increased by the withdrawal of the transporters from the main line.

A contract that had been made with these transporters and the purchase of cars, &c., from them, were referred to.

The total receipts into the Treasury up to January 1st, 1856, from stockholders, loans, business of road, balance of interest payable to stockholders, and surplus profits, after cancelling interest charged to construction, were \$25,064,767 42.

Of this sum there has been paid for estate, construction, and incidental expenses for a single track \$10,801,916 41.

The actual business of the road, during the year 1855, was \$3,108,653 52. Deducting tolls,

&c., leaves the business proper of the road \$3,538,333 27, equal to \$14,267 47 per mile. The cost of conducting the business of the road, including tonnage tax, was \$1,709,055 73, leaving the profits of the year \$1,829,277 54.

The report refers to the importance of a terminus on the Delaware river. An application has been made to the Legislature for the requisite authority to secure one, and in the meantime an arrangement has been made with the city of Philadelphia for the use of Dock street wharf.

The condition of the Western railroads to which assistance has been rendered by the company, is not considered flattering. The Ohio and Pennsylvania railroad is instanced as an exception.

A considerable portion of the report is devoted to the consideration of the question of repealing the three mill tonnage tax and the sale of the main line.

The document concludes with some remarks upon the high character and the services rendered by the company, as a Director, by Mr. John Yarow, who had died since the last annual meeting of the company.

An amendment to the charter, passed in May last, changing the time of the annual meeting to the first Monday in March, and authorizing an increase to their capital, until the latter should amount to 40,000 shares—was accepted. The following resolution was also adopted unanimously:

Resolved, That the Board of Directors be directed to investigate the affairs of the Springfield, Mt. Vernon, and Pittsburg railroad company, with power to appropriate a sum not exceeding \$60,000 to that company to enable them to complete the road, if the Board should deem it expedient so to do, subject to the approval of the stockholders.

Finances of Wisconsin.

According to the report of the Treasurer of that State, the amount paid into the Treasury, during the year ending 31st Dec. last, was..\$506,973 90

Viz: On account of General School fund.....	\$259,420 84
On account of principal school fund..	96,898 38
On account of principal University fund.....	7,562 45
On account of income of school.....	131,032 30
On account of income of University fund.....	12,261 43
Balance in Treasury Jan. 1, 1855, on account of the various funds.....	22,267 09

From those reports, it appears that the disbursements for the period, were as follows:

Viz: Account of General fund.....	\$234,102 36
Account of principal of school fund [including loans].....	93,352 53
Account of Principal of University fund [including loans].....	2,750 55
Account of income of School fund [apportionment].....	140,064 57
Account of income of University fund [paid State University].....	1,644 72

Total disbursements.....\$486,714 74

Balance in the Treasury up to the first day of Jan'y, 1856, on account of all funds.....	\$42,626 26
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The estimated receipts and expenditures for 1856, are as follows:

State tax levied and equalized under act of 1855.....	\$350,000 00
Bank tax [estimated].....	30,000 00
Rail and plank road tax [estimated]..	11,000 00
Miscellaneous resources [estimated]..	21,416 64

Total.....	\$412,476 54
Deduct amt. estimated to be drawn..	274,044 50

Estimated surplus in the Treas'y Jan. 1, 1857.....	\$138,432 04
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On the condition of the banking interests, the Governor, in his annual Message, says:

Information derived from the Bank Comptroller, enables me to state the following facts connected with the Bank Department, viz: It appears that the whole number of banks in operation on the 1st day of January, was thirty-two, with an aggregate capital of \$1,983,000. The number in process for closing were four. The securities deposited for the redemption of circulating notes are as follows, viz: Stocks, \$1,215,000; specie, \$28,893 75; making total amount of securities aside from individual bonds, \$1,243,898 75. Total amount of circulating notes outstanding on Jan. 1st, was \$1,153,534, of which \$477,063 was issued in the year 1856, and during which time the sum of \$261,121 was returned for cancellation. The amount of State tax due and collected from banks during the same period was \$23,970 83. Those which have closed business, it is gratifying to state, have ample means deposited with the Comptroller to redeem their notes at par on presentation, clearly indicating that the law under which they are established, was well devised.

Railways of Great Britain.

It appears from the published traffic returns of railways in the united kingdom for the year 1855, that the receipts amounted to £20,243,315 on 7,700 miles of railway. The receipts for the year 1854 amounted to £18,541,855, showing an increase of £1,701,460. In addition to the public traffic returns, there are other traffic receipts on several new and old railways, which are not published either weekly or monthly, and for which an estimate of the traffic for the latter half of the year had to be made. The total length of those lines is 548 miles, and the amount of traffic upon them for the year about £880,000. This sum added to the above shows the total receipts on railways in the united kingdom for last year to have been £21,123,815, on 8,240 miles of railway, being at the rate of £2,567 per mile. The cost on construction, working stock, and so forth, amounted to £291,903,000, being at the rate of £35,425 per mile. The total receipts on railways in 1854, including those on the lines of companies who do not publish their traffic returns weekly or monthly, amounted to £20,000,525 on 8,026 miles of railway, showing an increase of £1,122,790, or 5.61 per cent in the receipts, and 2.64 per cent in the mileage. The increase of traffic in 1854 over 1853, was £2,080,000, or about 11 per cent. Nothing can be more satisfactory than the increase of traffic on railways, and were it not for the unwarrantable increase of expenditure on capital account, the railways, on the whole, would now be paying about 6 per cent per annum instead of about 3½ per cent, as at present, which is in fact an increase upon the average of former years of at least half per cent. Had the capital intrusted to railway directors been judiciously expended on railways in the united kingdom, and had their interests been involved in the successful result of dividend paying lines, as in France, instead of in the outlay of capital, there would probably be no better property now than railways. The following shows the progressive nature of the traffic:—the increase of traffic on railways in the united kingdom in the year 1843 over that of the preceding year, amounted to £500,874; in 1844, to £768,337; in 1845, to £1,058,342; in 1846, to £1,020,650; in 1847, to £1,285,797; in 1848, to £1,109,335; in 1849, to £980,808; in 1850, to £1,744,161; in 1851, to £1,809,923; in 1852, to £520,400; in 1853, to £2,040,220; in 1854, to £2,080,000; in 1855, to £1,122,790, notwithstanding the depression of trade. The traffic receipts, in fact, increased year after year from 1842, when they were about \$3,542,000 to £21,122,000 in 1855. The expenditure on capital account also increased from £53,000,000 in July, 1842, to £292,000,000 in July, 1855—the increase in the traffic for the year being £16,780,000, and in the capital expended £239,000,000. The average cost of the railways per mile was in 1842, £34,690; in 1843, £36,360; in 1844, £35,670; in 1845, £35,070; in 1846, £31,860; in

1847, £31,790; in 1848, £34,284; in 1849, £35,214; in 1850, £35,229; in 1851, £35,058; in 1852, £34,630; in 1853, £35,101; in 1854, £35,014; and in 1855, £35,425: so that, notwithstanding the construction of thousands of miles of comparatively cheap lines, the average cost per mile has not been decreased. The traffic receipts per mile per annum averaged in 1842, £3,118 per mile; in 1843, £3,085; in 1844, £3,278; 1845, £3,469; in 1846, £3,305; in 1847, £2,870; in 1848, £2,556; in 1849, £2,302; in 1850, £2,227; in 1851, £2,283; in 1852, £2,238; in 1853, £2,471; in 1854, £2,604; and in 1855, £2,668 per mile. From this it appears that by closing the capital account and attending to the natural increase of traffic, the augmented receipts would, at the end of a few years, admit of respectable dividends on railways generally, but unfortunately for the shareholders, the closing of capital accounts is looked upon as an impossibility by railway directors and others connected, with railway companies.—*London Times*.

Finances of Louisiana.

The recent message of Governor Herbert shows the receipts and expenditures of that State, for the fiscal year ending 31st December, 1855, to have been as follows:

Balance in the Treasury on the 1st of Jan'y, 1855, as per report.....	\$743,398
Am'ts of receipts from 1st of Jan'y, to the 31st of Dec., 1855, as per annex'd statement.....	1,577,096
	\$2,320,494
Am't of expenditures during same period, as per annexed statement.....	1,683,098

Balance in the Treasury, Dec. 31st, '55, subject to draft on each of the following funds.....	\$632,395
General funds.....	\$183,889
Mill tax fund.....	103,242
Poll tax fund.....	39,809
Intern'l improve'm't tax fund.....	5,176
Internal improvement fund.....	17,003
Levee and drainage fund.....	252,561
Road and levee fund.....	30,713
	\$632,395

New President of the Ohio and Pennsylvania Railroad.

The Ohio and Pennsylvania railroad company has secured the services of one of the ablest business men of this or any community, in electing George W. Cass, Esq., its President. He has just that practical capacity, experience and prudence necessary for such a position, and under his management we have no doubt that important and direct route between Pittsburg and the northwest will prosper. Mr. Cass has been long and favorably known here and in other parts of the country; has been extensively engaged in business; and was for the last year President of Adam's Express Company. His election as President of this railroad company will doubtless give general satisfaction to the stockholders, and secure for the road the confidence of the public.

Gen. Robinson retires from the management after long and diligent service in completing and conducting the affairs of a road that has added much to the prosperity of our city, and of the wide and rich region of country through which it runs. It is a matter of congratulation that he is succeeded by a gentleman so abundantly qualified for the task he has undertaken.—*Pittsburg Post*.

Tennessee.

In the House, the bill authorizing the Governor to endorse the bonds of the East Tennessee and Georgia, and the Nashville and Chattanooga railroad companies, to the amount of \$150,000 each, to aid in building a railroad from Cleveland to Chattanooga, and also to endorse the bonds of the East Tennessee and Virginia railroad company to the amount of \$200,000, passed third reading—ayes 35, noes 29.

Alabama--A Governor at a Discount.

The Legislature of Alabama recently passed bills, extending the time of payment for a former loan of \$400,000 to the Mobile and Ohio railroad. Also loaning \$300,000 to the Memphis and Ohio, and \$200,000 to the Alabama and Tennessee railroads. These bills were all vetoed by the Governor, and were severally passed over his head by constitutional majorities. These loans will be of great use to their recipients.

Lehigh Valley Railroad.

An election for officers of the Lehigh Valley railroad, was held at Easton, on the 4th inst., with the following result: Wm. W. Longstreth was chosen President; John H. Hutchinson, Secretary and Treasurer; and John T. Johnson, of N. York, Wm. H. Gatzmer, of Philadelphia, E. A. Packer, of Philadelphia, Asa Packer, of Mauch Chunk, and David Barnett, of Easton, Directors.

Sandusky and Mansfield Railroad.

We learn from the Register, that on the 16th ult., the election of Directors for the ensuing year resulted in the unanimous choice of the following persons:

Wm. K. Bond, Cincinnati; G. B. Wright, Newark; Elias Fasset, New York; H. H. Hunter, Lancaster; H. P. Warden, Mt. Vernon; Earl Bill, Sandusky; J. W. Sprague, Huron; Robt. McComb, Mansfield.

The Directors, at a meeting held next evening made choice of the following officers:

W. K. Bond, President; G. B. Wright, Vice President; J. W. Sprague Secretary; Earl Bill Treasurer.

Central Ohio Railroad.

The completion of the tunnel at Cambridge, on the Central Ohio railroad, has been publicly announced, and the trains will commence passing through it immediately. The passenger and freight trains, henceforth, will pass over the road without experiencing those unavoidable delays to which they were previously subjected.

Westchester and Philadelphia Railroad.

At the recent election of directors of this road, for the current year, the following gentlemen were chosen:

President—Christopher Fallon, Esq.

Directors—Lewis Miller, Thos. Pratt, and H. J. Brooke, Delaware county; Dr. W. Worthington, J. Lacey Darlington, and N. Mendenhall, Chester county; John Fallon, Saml. Sharpless, and Richard Vaux, Philadelphia.

Notice to Contractors.

LOUISVILLE AND FRANKFORT RAILROAD,
SUPERINTENDENT'S OFFICE,
Louisville, Ky., Jan'y 30th, 1856.

PROPOSITIONS are requested for the rebuilding of the masonry and superstructure of the bridge across the Kentucky river, at Frankfort, Ky. The superstructure will be near four hundred and fifty feet in length and the depth of water in the river near thirty feet.

Parties offering design must accompany same with detailed drawings.

Persons desirous of making propositions will please communicate immediately with the undersigned, at Louisville, Ky.

SAMUEL GILL,
Supt. L. and F. R. R.

RAILROAD IRON.

Winterhoff, Piper & Co.,

82 BROAD STREET,

1,000 TONS Guest & Co., 50 lbs., to arrive from London in New York.
500 TONS Guest & Co., 56 lbs., Erie pattern, per ship Exline now on the voyage from Bristol to New Orleans.

Illinois Central R. R. Co.

FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the South. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands is carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When

required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, Ill.

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IMPROVED ENGINE and SIGNAL OIL,

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KEEP on hand, and manufacture to order, a general assortment of instruments for Engineers' and Surveyors' use—including Levels, Transits, Levelling Rods, Compasses, Chains, Drawing Instruments, Scales, Tape Lines, &c. Repairing and Jobbing promptly attended to.

Railroad Iron.

1,200 TONS, delivered at New Orleans, within the month of February. Apply to

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28th January, 1856.

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NOTICE TO

Railroad Contractors.

Memphis, Clarksville, and Louisville Railroad.

THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

Maps, profiles, and plans can be seen at the office of the Company in CLARKSVILLE, or inquiries made of the undersigned.

W. B. MUNFORD, Pres't M. C., & L. R. R.
CLARKSVILLE, Tenn., Jan'y 16th, 1856.

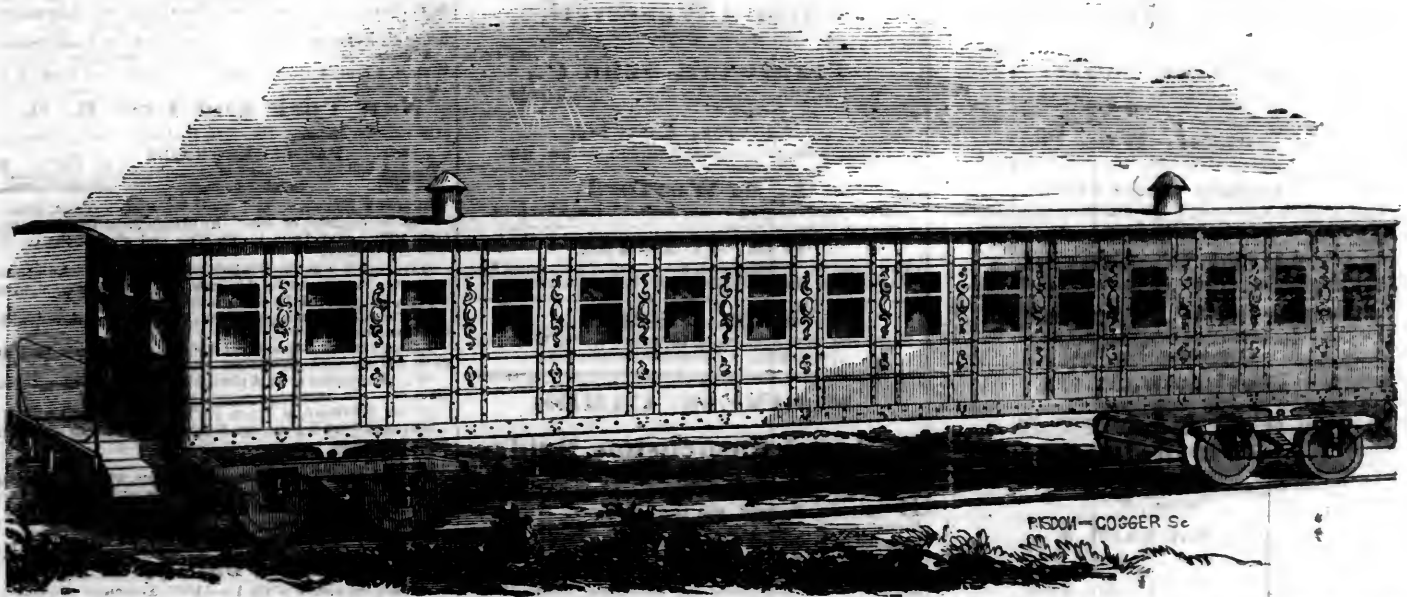
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FOR SALE.

THE PROVIDENCE & WORCESTER R. R. CO. offer for sale TWO LOCOMOTIVE ENGINES, in good order and in daily use. Weight of Engines twenty tons each, with 14 by 18 inch cylinders. Drivers five feet diameter. For further particulars inquire of the undersigned, at PROVIDENCE.

JOHN B. WINSLOW, Superintendent.
PROVIDENCE, Jan'y 10th, 1856.

LA MOTHE'S PATENT IRON RAILROAD CAR.



WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

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1717

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GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies through out the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they undergo no annealing process which gives them a deeper and harder chill than those of any other manufacture.

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Bridges for railroad crossings from two hundred to three
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Lord & Wright,

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matter from the water before it enters the boiler, while at the
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The apparatus occupies but little space, is simple in construction
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Testimony can be furnished of its successful operation for
several months during which it has been in use here, and for
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Drawings and full descriptions will be furnished to parties
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D. R. MARTIN, Pres't Oc'n Bk, N. Y.
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CORNELIUS W. LAWRENCE, Esq., N. Y.
DANIEL & Co., Bank's, Philad
SAMUEL WILLETS, Pres't of Am. Exchange Bank, N. Y.

New York and Erie R. R.

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U. S. Railroad Directory for 1856,

to contain the names of the Presidents, Directors, and Officers of every Railroad in the United States, as far as the same can be ascertained; also a general alphabetical list of the roads, and lists arranged according to States, showing their termini and lengths. 1 vol. 8vo. of about 200 pages. Price one dollar. In press and will be published soon.

Orders may be addressed to **B. HOMANS,**
Office Bankers' Magazine,
No. 162 Pearl st.,
New York.

Feb'y 9th, 1856.

416

New York.

To Engine Drivers and Mechanics.

FIFTEEN to twenty Locomotive Drivers and Mechanics of good character, experience, and steady habits, will find permanent places and liberal compensation on the Mobile and Ohio Railroad at Whistler, five miles from Mobile City.

JOHN CHILDE,
Engineer and Sup't.

842

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

OHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.
REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.

The Tables are 24 in number, printed in clear, bold type on sheets of tinted paper, 25x16 inches. Sold in separate sheets, at 25c. each, or the whole handsomely bound in cloth in one volume for \$7.50, by JOSEPH HUYTT, 139 Chestnut st., Phila.; Wm. MINIFIN, Baltimore, Md.; ESTWISLE & SON, Alexandria, Va.; McCLELLAN & Co., Toronto, C. W., and by all book-sellers.

Also for sale at this office.

3847

Four First Class Locomotive Engines for Sale.

1. Cylinders 15½x22, Drivers 5½ feet.
2. Do. 15 x20. Do. 5 feet.
1. Do. 15½x22. Do. 4½ feet.

all of which have 4 wheels connected with centre bearing trucks; wrought in frames and pedestals; copper fines; lifting link valve motion.

H. & F. BLANDY.

ZANESVILLE, Ohio, August 11th, 1855.

33

Brass Cocks.

McNAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

They would also especially call the attention of all who use **GLOBE VALVES** to their recently **PATENTED IMPROVED VALVES** which can be easily re-ground without being removed from the pipes.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No 7.]

SATURDAY, FEBRUARY 16, 1856.

[WHOLE No. 1,035, VOL. XXIX.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

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New York, Saturday, February 16, 1856.

Great Western Railroad of Illinois.

This road originally formed one of the leading projects in that system, which the State, some fifteen years ago, proposed to construct. It fell with the State system. A portion of the line from Springfield to the Illinois river having been partially graded, was purchased from the State by a private company who completed the road between these points. The objects of the company gradually increased so as to embrace the whole line. For this purpose their powers were enlarged, and their corporate name changed to the one they now bear. Under the new organization, the entire distance, 147 miles, between the Illinois river and the Illinois Central railroad, has been opened for traffic. That portion between the Central and the point of junction with the Toledo, Wabash, and St. Louis road, is so far advanced as to render its completion certain in May or June next; so that by that time a continuous and direct line of railroad between Toledo and the Illinois river, a distance of about 480 miles, will be finished. To complete the connections necessary to give the above line its highest value, a road must be built from the Illinois river to the Mississippi, at Quincy, a distance of 37 miles. One-half of this distance is already se-

cured in the road just opened from Quincy to the Central Military Tract railroad. The balance will probably be immediately constructed by the Quincy interest. This city is to be the most important terminus of the Hannibal and St. Joseph road, which is at last rapidly advancing in its construction. With the liberal aid extended by the State of Missouri, there can be no doubt of the speedy completion of this road. When opened, a direct line will be formed between the Western extremity of Lake Erie and the Missouri river, a distance of 680 miles. When their general direction and mutual dependence are considered, all three of these great roads merely constitute one line. This mutuality of interest has led the Toledo, Wabash, and St. Louis, and the Great Western to agree upon articles of consolidation, which are soon to be carried into effect. The success of one is involved in that of the other, and whatever may be said of one is applicable to both. The article in our last week's issue in reference to the former, is, therefore, to a considerable extent applicable to the road under discussion.

The Great Western, unfortunately for its credit, has labored under the serious disadvantage of the want of suitable connections. In fact, the work of construction was commenced on the wrong end of the line. The whole road had, consequently, to be finished before any portion of it could come into profitable use; as the trade of the whole section traversed seeks an outlet by one of the lakes. Could the construction have been commenced at Danville, with the Toledo extension completed, there is little doubt that the successive sections would have been immediately productive, as they came into use. As it was, the company had to make an outlay equal to the entire cost of the road, before showing earnings at all commensurate with the amount expended.

When completed, the whole road of 184 miles will cost about \$4,500,000, or \$24,000 per mile. Its route is through the central portion and the capital of the State; and through one of the most, if not the most fertile, productive, and best settled portions of it. Its route agrees with the general direction of such produce on its line as seeks a market route by way of Lake Erie. It will form the shortest route from Springfield, east, to all the

great Atlantic cities. Springfield is a very important town, and is capable of supplying a large passenger and goods traffic. When its Western connections shall have been completed to the Missouri river, as they will be within about two years, there will be hardly any road in the West better situated to command a large share of the long and emigrant travel.

The road has an ample belt on both sides of its line from which to draw its local traffic. The directness of its route, and its coincidence with the general direction of the trade and travel of the section traversed, will be a sufficient protection of its earnings from competing lines. In addition to the ordinary sources of income, it is admirably situated for a heavy coal trade; striking, as it does, the great Wabash coal field near its eastern terminus. The excellence of this coal is universally admitted. It is from this field that Chicago is to be supplied over the Great Western and Illinois Central. As remarked in our last number, coal is soon to be fuel for ordinary use throughout Illinois. The transportation of coal is soon to become a very profitable business to the above company, for which its position is exceedingly well adapted.

With regard to the probable extent of the local business of the road, the best idea can be formed from the amount of population and production along its line. The extent of these will compare very favorably with any Western line. The company in their report gave the following comparative statement of the resources of the Great Western and Rock Island roads, taken from the census of 1850.

	Gt. West'n.	R. Island.
Population.....	167,000	123,735
Production of Wool, lbs....	476,246	227,517
" Wheat, bush.	973,049	1,621,956
" Corn, do.....	19,097,049	4,201,590
" Rye & Oats.....	1,848,678	1,471,915
Number of Horses & Mules.	61,427	28,025
" Neat cattle.....	198,806	106,800
" Sheep.....	221,935	87,065
" Swine.....	456,136	99,733

The gross receipts of the Rock Island and Chicago for the first six months of its operation were \$711,638; expenses and interest \$140,768; net earnings \$270,894. The Great Western company anticipate an equally favorable result.

The road will receive a large *through* business from several important Southern connections,—particularly from the two branches of the Illinois Central and the Chicago and St. Louis roads. It will be through these and the Terre Haute and Alton that connections will be formed with St. Louis and Southern Illinois.

The total cost of the road is estimated at 4,488,735, which will be made up as follows:—

Capital stock.....	\$2,000,000
10 per cent. 1st mortgage bonds.....	1,000,000
7 per cent. 1st mortg. bonds on Eastern Division, and 2nd mortg. bonds on Western Division.....	1,350,000
Amount available as additional valuation by the agreement for consolidation with the Toledo, Illinois, and St. Louis Railroad	414,680

\$4,764,680

—showing an excess of money applicable to construction of \$275,945.

The whole road will be completed before, or simultaneously with that of the Toledo, Illinois, and St. Louis.

Ohio and Pennsylvania Railroad.

SOLOMON W. ROBERTS, Esq., Chief Engineer and General Superintendent of the Ohio and Pennsylvania railroad, has resigned as Superintendent, and his resignation has been accepted by the Board of Directors. Mr. Roberts has ceased to have any connection with the Transportation Department of the company, but is still acting as Chief Engineer of the unfinished work now in progress.

D. N. COURTNEY, Esq., Master of Transportation, is now acting-Superintendent, and persons having business with the Transportation Department will communicate with him.

Boston and Providence Railroad.

The following resolutions were unanimously adopted by the stockholders, at their last annual meeting:

Resolved, That the Directors be authorized to issue bonds sufficient to pay the floating debt and that bonds now issued becoming due in a few years and all bonds now outstanding, be extended to a period not exceeding twenty years—bearing interest at six per cent, payable half-yearly.

Resolved, That this corporation will form a sinking fund by appropriating from the earnings of the road semi-annually such sum (not less than half of one per cent on the capital) as with its accumulation will be sufficient to pay the bonded debt heretofore or now authorized, *at maturity*, said bonds to be held in trust and pledged as security for the payment of the same, and that this vote be considered as a contract with the holders of said bonds, that the directors be instructed to take such measures as may be necessary to carry into effect the provisions of this vote.

On motion of Mr. Richardson, the construction account was directed to be closed, until it should be opened by a vote of stockholders at an annual meeting.

Resolved, That the Directors be directed to increase the fare of commutation passengers, at the general rate of at least 50 per cent; and that unless where it is plainly contrary to the interests of the road, the prices be proportioned to the distances of the stations.

Resolved, That it is expedient to advance the rate of transient fares 20 per cent.

Resolved, In the opinion of this meeting that a decided general advance should be made in the rates of carrying freight.

Resolved, That in the opinion of this meeting, this corporation is not receiving sufficient compensation for the work done for the Taunton Branch

and Stoughton Branch railroads, and that the contracts with those roads require revision.

A vote was passed not to allow of free passes except by authority of the Directors.

The following Board of Directors was elected: Wm. Appleton, George R. Russell, George W. Hallett, C. H. Warren, Joseph Ginnell, John Barstow, Sam'l T. Dana.

Connellsville Railroad.

We learn that the Commissioners of Fayette Co., Pa., have agreed to subscribe \$100,000 stock, to the Pittsburg and Connellsville railroad, the company giving ample security against losses. It is said that this sum, together with \$2,100,000 individual and corporate subscriptions heretofore made, and the \$1,000,000 of Baltimore bonds, now secured, will amount to \$3,400,000 available means at the disposal of the company.

Hamilton and Ft. Dover Railroad.

We are pleased to learn that the Directors of this company at a full meeting of the Board, held at the office yesterday, accepted the tender of the well known contractors, Messrs. Moore and Pierson for the construction of the whole line.—The contractors are favorably known in connection with the building of the Great Western, and we have no doubt they will speedily have the work of the new line fairly under way.—*Spectator*.

Alleghany Valley Railroad.

From the annual report of this corporation, made for the year ending January 31st, we learn that the first 24½ miles, extending from Pittsburg to Kiskininitas river, were opened on the 23d of October last; and the remaining distance to Kittanning, 20 miles, on the 23d ult. During the months of December and January, a mixed train for freight and passengers was kept in operation. The gross earnings in December were \$2,000; and in Jan'y, \$4,205. Complaint is made as to the want of proper facilities at Pittsburg, in order to reach the business portion of the city, and form connections with the wharves and the other railroads centering in that city. A line which is considered favorable, was recommended by a Committee of the City Councils, but the latter body refused to act on their recommendation. With this drawback, however, the earnings of the road are considered quite satisfactory, indicating results greater than expected, when it shall have been extended into that productive section of country above Kittanning. That part already completed forms the first division; and on this all the company's efforts have hitherto been expended, with the exception of surveys, location, &c. The second division extends from Kittanning to Brookville, 44 miles.—The estimated cost of this part is \$1,655,000, towards which they possess means to the amount of \$649,000, consisting nearly altogether county subscriptions in cash and bonds. If from these be deducted \$129,000 for interest and discount, and \$160,000 of present liabilities, there will be left applicable to the above object \$360,000, which shows a deficiency of \$1,295,000, or \$1,480,000 if rolling stock be included. To obtain this sum it is proposed to mortgage the whole line between Pittsburg and Brookville at \$20,000 per mile, which would yield \$1,760,000. Deducting from this \$400,000, the amount of the present mortgage, and \$272,000 for interest and discount, would leave \$1,088,000, to which might be added 15 per cent. of stock on graduation and road structure,

to be taken by contractors—thus making a total of \$1,251,200, and leaving a deficit of \$178,800. It is the opinion of the Board that this sum ought to be made up by subscription before active operations are commenced. In the present state of money matters, however, it is considered unadvisable to offer their securities for sale. The bonds of those counties and towns have never been in the market, and they would consequently be less saleable than in other circumstances. If additional subscriptions cannot be obtained, it is recommended to finish the road to the mouth of the Mahoning, 10 miles farther, from the bonds already issued that are unsold. The opening of these ten miles would add very considerably to the company's receipts.

The interest on the bonds of the city of Pittsburg and Alleghany county have been duly paid; as also those of the company already negotiated.

With regard to the remaining divisions of the road, beyond pointing out the importance of the whole enterprise, little is stated. From the end of the second division to where it will connect with the Sunbury and Erie road, is a distance of 44 miles. Much of this will pass through a section of country containing very extensive coal deposits. It is also remarkably favorable for construction, no tunnels nor very extensive cuts being required. It is believed that this division would cost not over \$1,500,000. Large subscriptions by individuals interested in the extensive forests and coal lands of that district, may justly be expected. In connection with the Sunbury and Erie road, a route will thus be opened to the eastward with grades not exceeding 26.4 feet to the mile. With such an advantage, it is considered that the company might even compete with the Pennsylvania road in the trade between Pittsburg and Harrisburg. With New York through Easton, the most direct route will certainly be afforded.

GENERAL ACCOUNT.

To capital stock subscribed by corporations, viz:

Alleghany county.....	15,000 shares,	\$750,000
City of Pittsburg.....	8,000 "	400,000
Armstrong county.....	3,000 "	150,000
Jefferson county.....	1,000 "	90,000

Total.....	27,000 "	\$1,390,000
Taken by contractors...	2,119 "	105,950
" individuals...	3,302 "	165,100

Total	\$1,661,050
Deduct unpd individual subscribers..	23,182

Total am't of cap'l stock paid in..	\$1,637,867
Retained percentage due contractors, in stock	93,251
Bills payable	158,229
Acc'ts payable.....	36,084
Mort. bonds sold.....	55,000
Passenger and freight earnings.....	6,782
	\$1,988,317

Surveys, right of way, and land damages.....	\$75,451
Grading and masonry	596,675
Superstructure	435,110
Bridging.....	36,301
Rolling stock.....	63,351
Salaries	35,654
Interest and discount.....	223,799
Commissions and charges.....	24,015
Bond account.....	397,478
Miscellaneous.....	100,481

\$1,988,317

Pittsburg Bonds.

The city of Pittsburg and the county of Allegheny have issued bonds to several of the railroads leading from Pittsburg in payment of subscriptions made to the capital stock of these companies, the companies assuming the charge of the payment of interest on said bonds.

It has been a question with many capitalists whether the city and county would promptly pay this interest in case of default on the part of any of these railroad companies to do so. In consequence of an apprehension of this kind the price of the coupon bonds of the city of Pittsburg and the county of Allegheny has ruled much below the actual value of the securities.

But this question has just been brought to a test. About four weeks ago the Pittsburg and Steubenville railroad company admitted its inability to raise the money to pay the interest on the city bonds issued to that company, which became due on the 1st Jan'y, inst.

On being made aware of the state of the affairs of the company, the city councils were immediately convened and promptly made provisions for the interest, the amount of which was immediately forwarded to the agents in the city of New York.

The interest of the county bonds becomes due to-morrow, the 15th inst., in New York city, and has also been provided for by the commissioners of the county. The above facts demonstrate beyond question the value of the securities issued by the city and county to our railroad companies. The city and county have themselves taken charge of the payment of the interest of their bonds issued to the Steubenville Railroad company, and, in so doing, have shown clearly what are the real sentiments of the people of this community is regard to maintaining untarnished their public faith and credit.

We believe when the above facts come to be known by the capitalists of this and other communities, the price of our city and county bonds will rapidly advance from the present low prices.—*Pittsburg Com. Journal.*

Northern Central Railroad.

The annual report of this corporation was read at the stockholders' meeting in Baltimore, on the 1st instant. The report presents a statement of the company's business for the year ending 31st December last. It will be remembered that in December, 1854, the companies owning the present line were consolidated; but the system did not go into operation till July, last year. At that time, the net earnings for 1855 were estimated at \$261,888. From the report now made the year's business is shown to have been—

Gross earnings	\$558,427
Working expenses	276,245
Net profits	\$282,182
To which add for interest and dividends on investments in the Wrightsville, York, and Gettysburg R. R., &c.	14,335
Total	\$296,517

The net earnings are about 50½ per cent. of the gross.

With these resources, the company have been able to discharge all their current obligations, including an annuity of \$90,000 to the State, \$23,030 for interest on a loan of the Baltimore and Susquehanna Railroad Company, and \$64,787 for interest on other loans. A floating debt of over \$100,000 has also been discharged. The last consisted of unpaid damages on account of the Fourth of July accident in 1854 (amounting in all to \$28,858), debts to sinking fund, and one of above \$11,000 to the Pennsylvania Railroad Company. At the same time, a debt of \$20,000 due them by the Wrightsville Company has remained unpaid. The Northern Central Company accordingly are now

free from floating debt to any amount. Besides liquidating the above, they have, also, during the year, expended \$41,500 for the purchase of cars of various descriptions. Among these are some which were the property of private transporters, the managers considering it advantageous to do away with all private transportation for the future. The road has been kept in good repair, and as economically operated as any other work of the kind in the country.

The supplies of iron and cross-ties on hand for repairs are valued at \$62,000, to which are to be added machinery, tools, stock, &c., valued at \$25,000 more. The capital stock consists of 37,200 fifty dollar shares, making \$1,860,000. Had the Board not been encumbered with the debts of the Baltimore and Susquehanna company, it will be seen that they could easily have declared a dividend of three to four per cent. upon the capital. There is every ground for the shareholders to expect a fair return on their investments in future.

The following extract from the report embraces information of much interest to Baltimore and some other parts of the South, in relation to the anthracite coal trade:—

The mines of the Lorberr Valley and the Swatara in the county of Schuylkill, in Pennsylvania, are connected by lateral roads with Pine Grove at distances ranging from seven to fourteen miles from that point. Pine Grove is situated on the Dauphin road at the distance of forty-one miles from Harrisburg, and one hundred and twenty-five from Baltimore. The mines, therefore, are from one hundred and thirty-two to one hundred and thirty-nine miles from this city. They furnish coal in great abundance and of the most approved qualities. As much of the anthracite used in Baltimore has for the most part been brought from the Pottsville region, either by canals to Havre de Grace and thence through the Chesapeake by a circuitous route to this city or by way of Philadelphia upon a line of railroad to that city not less than 92 miles, and much of it over 100, and thence transported to Baltimore, it became very apparent, when the Dauphin railroad was opened some months ago, that a profitable business might be conducted in the supply of these coals to our city by the direct railroad communication presented by the Northern Central railway.

This consideration led to applications from several of our citizens during the year to this company for an increase in the means of transportation necessary to the enlarged prosecution of this enterprise, and the Company were thus induced to add two hundred cars to their stock, which were placed upon the road in the months of November and December. From the want of a complete organization of this business and the proper amount of capital to carry it on in an effective and steady course of trade, it is not yet sufficiently developed to enable the Board to offer to the stockholders at this time even an approximate estimate of what it is likely hereafter to produce.

It is computed that at the present time the demand for anthracite in this city and in the country within the range of a supply from the road, is not less than three hundred thousand tons per annum, and that this is continually on the increase with the growth of the manufacturing industry and population of the region. A train of fifty cars a day, steadily employed for three hundred days in the year, would deliver about 70,000 tons, and give a net revenue to the company of about \$40,000. The stockholders on this basis may make their own calculation of the probable advantages the company derive in the advancement and increase of the trade which is now springing up with this, the first of the coal fields with which the Northern Central railway is brought into connection.

Whatever benefit may be derived from this source it is but the index to the great trade which awaits our city when the predominant objects of

the road are accomplished. Eighteen miles above Dauphin the Lykens Valley railroad has its termination at Millersburg. From Millersburg to the Treverton road—the outlet of the Mahoney fields, the distance is fifteen miles. From Treverton to the Shamokin, at Sunbury, is about ten miles. These three points above Dauphin are each the chosen and preferred depots of the respective coal fields of which they form the termination upon the Susquehanna river. These depots are distant from Baltimore 110 miles to Lykens Valley, 125 to Treverton, and 135 to Sunbury. The fields with which they are connected are singularly rich both in the quality and the quantity of their products. There are already millions of capital expended upon them, and they are in the possession of companies anxiously awaiting the progress of our road, with every preparation now made to deliver as much coal as the commercial enterprize of Baltimore may undertake to export. In fact it is a result which will be entirely at the disposal of this city. Our citizens may, if they choose to devote themselves to this acquisition, establish a coal export on the Patapsco equal to that on the Delaware, which has constituted the most conspicuous element in the growth and wealth of the city of Philadelphia.

These Susquehanna Coal Fields compare favorably with the Schuylkill region when that was in its most productive state. The variety, the abundance, and the excellence of their coals,—in every respect equal those of the Schuylkill. And now, whilst clothed with their native forest and with their minerals above the water level, accessible for many years to come without the aid of expensive machinery, the mining of this district is much less costly than in the long worked collieries of Schuylkill, now stripped of timber, and dependent for this indispensable article upon supplies brought from a distance.

What, therefore, the Schuylkill region was in the beginning to Philadelphia, the Susquehanna now is to Baltimore. What the former is this day to our neighbor city, the latter may be to our own, if Baltimore be true to that renown for liberal enterprize which she has won in past times, and which alone will conduct her to a great prosperity in the future.

The possessors of the collieries look to Baltimore as their appropriate mart, and will be disappointed if they should be obliged to seek alliance with more distant friends. The Chesapeake is at least as favorable a vent for export as the Delaware. For Southern demand, (which is daily extending and increasing in value) it is much to be preferred. And, indeed, in the whole review of this subject, there is scarcely room to doubt that the depot at Canton must, upon the completion of the road, progressively exhibit from year to year the rapid growth of a coal trade little short of that now carried on in the environs of Philadelphia.

Impressed with the importance of the above the Board have been making every effort to have the road completed at as early a day as possible. To secure the means, their only resource was an issue of bonds which, after some negotiations, the contractors agreed to take in payment of work on the annexed conditions:

1. That the contractors undertake to construct the unfinished portions of the road between tide-water and Sunbury, for the amount of \$4,340,000 in bonds.
2. To complete that part between Canton and the intersection of the Lykens Valley road at Millersburg, (with the exception of the bridge across the Susquehanna near Dauphin, and of the tunnel on the Canton division,) by the first day of September next, for which they are to receive one million of dollars in bonds.
3. To complete the remaining portions of the work for the residue of the \$2,340,000 in bonds, or in such equivalent in money as the parties may agree upon, if the Company, in the mean time, should deem it preferable to raise the money themselves.

Most of this work is to be commenced and finished at dates suiting the company's convenience. The work on no part will be delayed by them longer than is required to obtain means sufficient to urge it forward. It is the obvious interest both of the coal proprietors and the citizens of Baltimore to see it opened to Sunbury at an early day, and the active co-operation of both parties is counted on for that purpose. The bonds stipulated to be delivered are of an issue not to exceed \$2,500,000 in all, bearing six per cent. interest, and payable, July, 1885. A sinking fund of one per cent. per annum is to be created for liquidating them at maturity. Immediately after this contract was executed, several sections of the road were let, and the work is now vigorously going on. Not more than \$50,000 will be required to meet the interest in this issue the first year. The coal trade from the Pine Grove region alone, it is believed, will fully meet that amount. At all events, the results of last year's business prove that no danger as to meeting this amount can possibly exist.

The report concludes thus—

The stockholders will see in the statement of the operations of the year, that, quite independent of any new resource, the present revenues of the company are altogether sufficient to meet the new obligations without impairing its ability to sustain the old.

When the road shall be completed, we have the utmost confidence that it will commend itself to the good opinion of the communities of Maryland and Pennsylvania by the distribution of benefits to the commerce of each, which have been heretofore most inadequately reckoned by the larger number of our own citizens. The extension to Sunbury will fill up the only vacant section in a continuous line of railroad from Baltimore to the Lakes—a line, from its inherent advantages, destined to become one of the most attractive and popular routes of travel in the United States. It will be subservient to the necessities and conveniences of larger masses of population essentially dependent upon it, than any other road passing through rural districts of the same extent. It will be affected less by competition of rival lines than any other road of the same amount of business. It will present the shortest line from tide-water to the Lakes of all the roads which connect them. We have already evidence, in the exhibition of the amount of passenger travel upon detached portions of this line, and in the interest expressed in large districts of New York and Pennsylvania, for the speedy accomplishment of this work, and the value of our enterprise, and the best grounds to justify the sanguine expectations we have formed.

Taking all the permanent obligations of the company estimated upon the old and the new engagements, and allowing, besides, a-half a million for contingencies, and then adding this amount to the capital stock, we shall have the total outlay or cost of the road and its appurtenances represented by something under \$7,500,000. A revenue of \$500,000 would yield six per cent. upon this amount, and leave \$50,000 a year for the sinking fund. The income of the road at the present time, when the chief sources of trade and travel are not yet touched, is but little short of three-fifths of this sum. We shall not be charged, by any one acquainted with the country which the road is now about to penetrate, with extravagance, in the expression of the opinion that the completion to Sunbury will double the present revenue in the first year after opening the connection.

Most of the stockholders and friends of the road are familiar with the topics brought into view in this report, and the prospects before us cannot but inspire them with a double confidence in the value of the interest they hold in the company, as well as in the certainty of the benefits it will confer upon the city.

The Board could wish that this confidence were more liberally diffused throughout this community, and that the citizens of Baltimore generally could realize the true value of the labors which now occupy the thoughts and the time of the company.

Providence and Worcester Railroad.

The annual meeting of this corporation was held on the 4th inst., at Providence. The committee who had examined the annual report, confirmed its correctness, but added:

"However gratifying it may have been to show by the report that the increased receipts for the year were \$25,198 72 in gross earnings, it will appear by examination of the annual report that the increased expenses exceeded the increased receipts by more than \$20,000, an item of no small amount."

Information was asked as to the sum of \$29,000 charged as "miscellaneous" in the expenses, and a committee of three appointed to obtain it from the Treasurer. They returned with a statement of items which appeared generally satisfactory. Mr. Joel W. White submitted a series of resolutions for the appointment of a committee to join one from other railroads to meet in connection, to devise measures for raising the price of freight and passage to a point that will make railroad stock remunerative; and with a recommendation that that convention should apply to the Legislature to restrict the speed of railroad transit. The latter provision was strongly opposed, and eventually the matter was left in the hands of the Directors. A Board of Directors was then balloted for, which resulted in the re-election of 13 members of the old board, with five new members. The meeting was fully attended, and the proceedings on the whole harmonious.

Railway Statistics.

Some years have elapsed since men of sagacity and foresight predicted the speedy advent of a railway heptarchy, and it is now proposed to amalgamate all the lines under a single directory.—Rival companies, each desirous of monopoly, have so stimulated competition that, in spite of an annually growing traffic, dividends have fallen to an unremunerating scale, while, to execute extension lines, a pernicious system of preference shares has been generally introduced. Cases of gross, and even corrupt, mismanagement have been proved; and, in some instances, truth has been concealed from shareholders by the payment of profits out of capital. When it is considered that the total amount of money authorised to be raised by railway companies, by shares and on loan, to the end of the year 1854, amounted to £368,106,386, of which £286,068,794 have been raised, and that the balance of £82,037,542 is nearly all absorbed at the present date, except where new projects have been projected, the gigantic magnitude of these undertakings must forcibly strike the most cursory reflector. At the end of 1854 the total length of roads authorised by Parliament amounted to 13,983 miles; but of this, 117 miles were abandoned by subsequent acts, or by warrants under the authority of the Commissioners of Railways, and, consequently, there remain 12,806 miles for which the Parliamentary powers which were obtained have not been repealed. Of these, 8,054 miles were open at the end of 1854; and 4,752, which have received the authority of Parliament, remained to be opened since that date. These figures exhibit the actual dimensions of this comparatively modern system of transit and locomotion.

The benefits arising to the whole community from the substitution of iron for earth roads are too palpable to require comment, for you may now travel for less per mile in a first-class carriage than you paid a post-boy in the times that are past, and fly over forty miles where you crawled over eight. It might have been presumed that an enlightened government would never have thrown any impediment in the way of such truly national undertakings, or permitted the projectors to be mulcted

in enormous sums of money before they placed a brick or dug a turf; yet it appears from the Return to the Order of the House of Commons, moved for by Mr. Haddfield, (paper 460,) and printed 6th August, 1855, that the preliminary expenses paid by 160 companies amounted to £14,086,110 14s. 5½d.; while 45 companies have not given in any return.

The details of railway statistics are very curious and interesting, and as the following figures are taken from the Parliamentary Report, every dependence may be placed on their fidelity. Of the 8,054 miles open for traffic at the close of last year, there were in England, 6,114 miles; in Scotland, 1,043; in Ireland, 897. In England, 5,261 miles were constructed on the principle of the narrow gauge, 647 on that of the broad gauge, and 206 on the mixed; in Scotland, the narrow gauge alone exists; in Ireland, with the exception of 8 miles, the Irish gauge is used.

In the three kingdoms there are 114 companies, having single lines extending over 1,962 miles, but several of these may be expected to become double in due season.

In 1854, on the lines opened for traffic, 90,400 persons were employed, being an average of 11.50 individuals per mile; and there were 2,410 persons.

The total number of passengers conveyed on railways, in 1854, amounted to 111,206,707, and the total receipts from all sources of traffic amounted to £26,215,724. The number of passengers conveyed per mile, was 14,160. This refers to the three kingdoms.

The passenger traffic on the English lines alone is put down at 92,346,149, or at the rate of 15,487 persons per mile; and the receipts from them yielded £7,896,402, or £1,324 per mile. The proportion of each class is thus distinguished:—first, 13.3 per cent.; second, 36 per cent.; third, 50.7 per cent.

In Scotland, the passengers numbered, in 1854, 11,949,888, or 11,725 persons per mile, and the receipts were £742 per mile. In Scotland, 1st class, 11.3 per cent.; second, 15.9; third, 72.8; a very different scale of proportion from that which obtains in England.

In Ireland, the number of passengers amounted to 6,911,170, the ratio per mile being 7,985 individuals. Of these 13.3 per cent. were first-class; 39.8 per cent., second; and 46.8, third; a small number were not apportioned.

"As regards the returns of Great Britain and Ireland, of the 111,206,707 conveyed, it appears that 14,517,461 were first-class passengers, 37,930,655 second class, and 58,732,048 third class, there being 26,543 not apportioned into classes; and of the £9,174,945 received from passengers, £2,738,458 was derived from first-class passengers, £3,264,545 from second class, and £2,999,466 from third class passengers; a sum of £172,478 not being apportioned into classes. Although the relative proportions of each class of traffic have not varied much, yet a slight increase may be observed in the proportionate receipts for third class traffic, and a slight decrease in the proportionate receipts for second class traffic."

The goods traffic is an important item in railway receipts, not only as a source of income to the several companies, but as indicating, in this channel of transit, the progress or decline of internal trade. The whole amount received through this department in 1854, was £11,040,779. Comparing the years 1853 and 1854, the increase of the latter over the former was 16 per cent.; the same results appear in Scotland, while the increase has been 20 per cent. In 1849, the revenue from the goods traffic was only £5,528,606; and it is gratifying to remark, that while railway lines have increased in length since that date 4.06 per cent., the goods traffic has increased 99.67 per cent.—the receipts per mile having been £2,115 in 1849, and £2,576 in 1854. Another point is worthy of note. In '49 the passenger traffic yielded 53.17, and the goods traffic 46.83, in each £100 received, but these relative proportions were reversed in the year 1854, for the receipts from passengers declined to 45.34

per cent., while those from goods rose to 54.66 per cent.

The working expenses on railways average 45 per cent. on the gross receipts, the proportion being in England 45 per cent., 43 per cent. in Scotland, and 46 per cent. in Ireland. This expenditure is subdivided under the following heads:

	Per cent.
Maintenance of way in England and	
Ireland.....	14.5
" Scotland.....	15.9
" Ireland.....	14.6
Cost of locomotive power in England and	
Wales, including expense of rolling	
stock.....	39.7
" Scotland.....	42.9
" Ireland.....	44.3
Traffic charges in England and Wales.....	26.1
" Scotland.....	20.5
" Ireland.....	23.4
Miscellaneous expenses in Engl'd, police,	
watchmen, &c.....	11.6
" Scotland.....	16.
" Ireland.....	14.6
The rates and Government duty in Eng-	
land.....	8.1
" Scotland.....	4.7
" Ireland.....	2.6
(There is no passenger traffic in Ireld.)	
Expenditure per mile by trains run in	
England.....	31.28d.
" Scotland.....	28.42d.
" Ireland.....	29.18d.
Receipts in England per mile.....	68.82d.
" Scotland.....	59.33d.
" Ireland.....	61.19d.

One of the most important points in these statistics is the rate of profit which results from railway enterprise as a whole; and here must be distinguished the dividends on the whole of the ordinary share of capital from those on preference shares and loans. The former stand thus in the subjoined years:

1849.....	1.88	1852.....	2.40
1850.....	1.83	1853.....	3.05
1851.....	2.44	1854.....	3.39

The preference shares yield an average dividend of 5 per cent. The money loaned has produced 4.27 per cent.

No accidents are more frightful to contemplate than those which happen on railways; but, when facts are calmly pondered over by the light of experience, the traveling public may dismiss their fears. Compared to the loss of life or injury to persons by the old system of coaching, safety on the iron road becomes almost absolute; and the loss of life in a single emigrant ship far exceeds all the destruction caused in a year on all the lines. In England alone, in 1854, the railways carried 92,346,149 passengers, and the total number killed was only 180 persons. Of these, only nine met their death by causes beyond their own control.—Thirteen passengers were killed or wounded by their own indiscretion. The remainder were servants of the companies, or of contractors, who perished or were injured either unavoidably or from their own imprudence, and trespassers killed or hurt while rashly crossing or walking on the rails. For every million of passengers conveyed, the percentage of those killed or injured in the three kingdoms, in 1854, amounts in England to .09 killed, and 3.08 injured; in Scotland—killed, 0.16, injured, 2.51; in Ireland—killed, .14, injured, .57. These figures ought to disarm the timid traveler of undue fears; but, of course, they ought not to relax railway vigilance.

As to a very recent proposition to amalgamate all the existing companies, and thus put an end to the competition of rival lines, it is obvious that such a plan would place the public at the mercy of the directors, and perhaps create a power to be wielded at Parliamentary elections incompatible with our free Constitution. But assuredly some remedy must be sought for the evils of a system which has absorbed as much capital as amounts to about one-half of the National Debt. Much evil has been already inflicted of a permanent

character, now irremediable, and original subscribers may never be placed on the same footing as those who came later into the enterprise and hold preference shares. On the other hand, much future evil may be avoided by more stringent regulations for enforcing personal instead of dividend responsibility.—*London Ill. News.*

Cleveland and Mahoning Railroad.

ANNUAL REPORT.

At the last annual election of Directors, the work of construction had been suspended so far as the consent of contractors could be obtained for that course, and only a few, who were unwilling to dismiss their force, remained in the field.

The Board elected at that time, immediately addressed themselves to the task of providing the means for completing the work.

In April, we had secured a subscription for about \$600,000 of our first mortgage bonds, a considerable increase of stock subscriptions and some subscriptions to second mortgage bonds, making together an amount sufficient to meet the estimates for the completion of the road to Youngstown.—Notice was immediately given to all the contractors in the employ of the company, to resume their work.

A portion of them failing to do this promptly, in May and June all such work was re-let, and such dates fixed by contract, for the completion of the various sections, as would have enabled us to finish the track laying and open the road before winter. The Chief Engineer was instructed to leave no means untried to accomplish this result. Our disappointment we attributed to the character of the season. We believe the Engineer corps have faithfully endeavored to meet the wishes of the Board, and the Directors have co-operated, at all times, with their personal attention, in endeavoring to hasten the work. But a large part of the line from Cleveland to Warren, is through a clay soil, and the perpetual rains that have visited us ever since June have prevented the completion of a few heavy cuts, and rendered it impossible to open the road to that point before winter, as we had hoped.

The condition of the work, at this time, is as follows:—With slight exceptions of trimming and unimportant work on other sections, the grading is finished, except sections 21 and 23, which are now being urged as rapidly as possible, and will be finished before the weather will permit much further progress with the track laying. The iron is purchased, paid for and delivered on the line, and over thirty miles of track are laid, and the ties for the balance of the distance delivered. Four engines and about forty cars are on the track, and we only need a few weeks of good weather to enable us to open the road. When first interrupted by cold weather, it was the intention of the Board to prosecute the track laying without interruption, and to open the line during the winter. But since the 20th of December the winter has been as peculiar as the summer, and the deep snows and cold weather have interfered so much with laying a safe track, that we have reluctantly come to the conclusion that in extra expense and injury to the iron, we shall lose materially by pursuing this policy, and we do not now advise making any attempt to open the line, until the frost is out of the ground in the spring.

Considerable acquisitions of real estate have been made during the year. At Niles, a spacious depot ground, twelve hundred feet long by three hundred feet wide, has been donated to the company. At Braceville, a depot ground of the same size, has been donated to the company. At Aurora, a depot ground of nearly the same size, has been in most part donated. In Mantua and Solon, the precise location of depot grounds has not been determined upon, but will probably cost the company but very little. In Cleveland, considerable additional purchases of harbor property have been made, and a contract entered into for docking one thousand feet of river front, for the handling and shipping of coal.

The North-western railroad company, we are in-

formed, expect to open the eastern division of their road during the coming season. The great importance of this road completing, in connection with our line, a new and superior railway route from the lakes to the eastern cities, becomes daily more apparent. It is destined to become one of the leading thoroughfares of the country.

A company has been organized to construct a railroad from the Niles station, on our road southward, through an extensive coal field lying south of Niles. This road will be completed during the summer, and will throw a large amount of traffic upon our line.

The coal business in the Mahoning Valley continues rapidly to develop, as well as the markets on the lake. The business of the road may be expected to reach seven hundred tons per day, before the close of the present season, if we shall prove able to put the track to Crab creek, with the equipment and docks in condition to transact this amount of traffic.

The company held, as you are aware, at the date of the last report, a voting majority of the stock of the Pennsylvania and Ohio canal. There are many reasons why this stock should be controlled by this company, and for the double purpose of perpetuating the connection and making (if possible) a still more complete security for the mortgage debt of the company. Five hundred thousand dollars of this stock has been transferred to the "Pennsylvania company for insurances on lives, and granting annuities" under a trust created by resolutions of this Board, which are herewith submitted.

By contract with the purchasers of a portion of the bonds, a sinking fund has been created of thirty-five thousand dollars per annum, for the payment of the mortgage debt. The resolutions defining its nature and conditions, are submitted.

Embarrassment has sometimes been felt from the difficulty of securing a meeting of the Board, on short notice. We, therefore, recommend an increase of the number of Directors to eleven, and that the increase be made chiefly, if not entirely, from residents of Cleveland, to the end that at all times a quorum of the Board, or an Executive Committee can be assembled without delay.

At a meeting of the stockholders, held at the company's office in Cleveland, Jan'y 23, 1856, the following persons were elected Directors for the ensuing year, to wit:

Jacob Perkins, David Tod, Charles Smith, Frederick Kinsman, Dudley Baldwin, Robert W. Cunningham, James Magee.

The following resolution was adopted, to wit:

Resolved, That in the opinion of the stockholders present at this meeting, it is expedient to increase the number of Directors to eleven, and that for the purpose of procuring a full representation of the stock, and determining upon the propriety of that measure, in the manner prescribed by law, an adjourned meeting of the stockholders be held at the office of the company in Cleveland, on the 20th day of February next, at three o'clock, P. M.

At a meeting of the Board of Directors, the following officers were elected, to wit:

Jacob Perkins, President; Reuben Hitchcock, Vice President; Charles L. Rhodes, Secretary and Treasurer, *pro tem.*

A series of resolutions was also adopted, pledging the company's entire income, after the road shall be opened, to be applied towards the following objects:

1st. For the payment of the necessary expenses of maintaining and operating the road, maintaining and improving its equipment and managing its affairs.

2d. For the payment of the interest account of the company.

3d. For the creation of a sinking fund of \$35,000 per annum, payable \$17,500 semi-annually on the first days of January and July, to a Trustee to be appointed by the Board of Directors.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,638,100	2,973,700	6,019,929	470,647	6	65		Tennessee and Alabama	30	246,486		679,906	In progr.			
Androscog. & Kennebec	55	642,343	1,473,080	2,245,020	190,608	90,797	none	18	Tennessee and Mississ.		170,931		175,840				
Androscoggin	20	91,192	232,193	343,317	29,396	12,807	none	20	Memphis and Charleston	288	2,103,177	958,275	3,563,362	176,484	102,016		
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600	259,330	124,038	none	14	Mobile and Ohio	527	2,300,000	1,310,066	3,660,991	In progr.			
Portl., Saco, & Portsm'th	51	1,367,000	119,237	1,486,237	233,234	120,834	none	88	Miss. Central	188	642,534	none	628,303	In progr.			
Boston, Conic. & M'treal	93	1,508,093	1,059,512	2,771,310	372,592	131,015	none	18	N.O., Opelousas & G.W.	350	1,309,428	476,143	1,825,812	In progr.			
Oheashire	53	2,083,825	946,919	3,181,997	329,744	158,432	82 1/2		Vicksburg, Shrevep. & Tex.	111	1,117,760	none	1,079,895	In progr.			
Concord	35	1,485,000	none	1,412,576	370,529	138,299	2 1/2	40	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Northern, N. H.	81	2,768,400	none	3,016,633	162,687	55,173	none		East Tennessee and Va.	16	628,425	938,593	1,033,781	In progr.			
Conn't & Passumps. Riv.	62	1,048,145	787,608	1,780,062	489,754	140,377	6	65	Nash. and Chattanooga	151	2,319,330	1,497,081	3,843,694	316,090	112,177	none	20
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	820,119	214,793	none		Covington & Lexington	93	431,091	169,299	635,363	90,900	34,804		
Vermont Central	117	5,000,000	3,550,236	8,463,366	489,754	140,377	6	65	Lexington and Big Sandy		540,117	61,525	428,057	In progr.			
Boston and Lowell	27	1,830,000	325,635	4,179,535	908,790	421,501	7	78	Lexington and Danville	65	698,236	699,061	1,589,596	244,014	96,902	6	
Boston and Maine	53	4,078,974	150,000	600,000	102,352	42,335	none	2 1/2	Atlantic & Gt. Western	254	808,939	77,294	613,231	In progr.			
Berkshire	21	600,000	none	3,310,948	558,671	201,578	none	65	Cleveland and Ind.	118	1,851,598	1,200,612	2,806,821	238,010	114,592	none	
Boston and N.Y. Central	74	2,234,000	1,200,000	3,611,821	558,671	201,578	none	65	Clev., Col. and Cin.	98	4,473,721	374,127	4,546,133	1,162,601	557,906	9	101 1/2
Boston and Providence	65	3,160,000	350,706	4,865,489	1,008,004	404,461	6 1/2	84	Clev., Zanesv. and Cin.	141			5,124,629	736,272	896,980	10	79 1/2
Boston and Worcester	68	4,500,000	655,428	1,802,244	737,770	102,942	4 1/2	50	Clev. and Mahoning	200	2,675,425	2,659,301	5,124,629	736,272	896,980	10	79 1/2
Connecticut River	52	1,591,110	254,043	4,447,459	330,266	346,425	7	44 1/2	Clev. and Pittsburg	133	2,686,770	2,516,162	4,818,153	450,215	255,808		65 1/2
Eastern, Mass.	60	2,583,400	2,850,325	4,447,459	330,266	346,425	7	44 1/2	Cin., Hamilt. & Dayton	60	2,100,000	1,464,364	2,961,978	453,620			61
Essex	20	299,107	409,311	747,008	51,246	none	none		Cin., Wm. & Zanesv.	131	1,120,450	1,181,265	2,326,459				82 1/2
Fitchburg	67	3,540,000	334,992	3,730,965	704,638	272,716	6	72 1/2	Col. and Xenia	55	1,484,560	149,000	1,481,733	356,356	187,518	10	85
Fitchburg and Worcester	14	233,140	74,099	333,884	50,135	23,823	6	83	Columbus and Xenia	54	1,413,350	311,032	1,440,447	340,781	168,949		
Lowell and Lawrence	12	200,000	140,000	963,665	191,857	55,877	8		Dayton, Xen. & Beipre	63	437,838	422,668	860,496				
Nashua and Lowell	21	600,000	16,000	684,608	198,491	56,533	6 1/2		Dayton and Michigan	140	1,076,092	393,011	1,185,826				
N. Bedford and Taunton	21	500,000	none	533,953	257,413	32,677	4,666	none	Eaton and Hamilton	42	448,411	835,994	1,345,573	113,859	53,250		30
Newburyport	14	137,260	154,554	3,434,164	649,556	142,800	6	82	Little Miami	65	2,963,921	1,171,785	3,043,172	681,502	539,708		90
Old Colly and Fall River	57	3,015,106	314,834	413,677	50,896	25,519	6	11 1/2	Mad River and L. Erie	205	2,461,650	2,572,932	4,446,661				20
Pittsfield & N'th Adams	77	450,000	1,046,626	3,207,867	275,523	56,383	none	11 1/2	Central Ohio	138	1,520,927	3,485,076	4,283,443				
Vermont and Mass.	155	5,150,000	5,689,520	1,763,944	718,703	7	87 1/2	Ohio and Penn.	187	2,461,700	3,219,090	1,111,626					
Western, Mass.	46	1,141,000	218,244	1,394,703	209,115	82,950	2 1/2	4	Pittsbg., Mass. & N.Y.	60	1,350,000	2,206,387	3,432,882				
Worcester and Nashua	42	1,522,200	861,500	1,843,332	316,616	131,312	7	65	Sandv. Manst. & Newk.	135	403,976	599,090	888,858				
Hartford and N. Haven	73	2,350,000	939,000	3,313,932	730,012	352,799	10	122	Scioto & Hoeking Valley	113	1,000,000	950,000					
Hartd. Prov. and Fishkill	123	1,845,610	2,090,124	4,060,869	330,792	18,351	none		Springf., Mt. Vernon & P.	222	2,500,000	4,530,000					
Housatonic	67	1,081,800	573,995	1,677,167	338,266	none	4		Tol. Wash. & St. Louis	242	2,500,000	4,530,000					
Naugatuck	57	2,992,000	2,262,647	4,980,407	906,018	336,611	none	30	Cin., Log. and Chicago	255	4,196,679	1,060,125	2,090,433				10
N.Y. and N. Haven	50	738,253	735,165	1,450,318	137,060	3,717	none	25	Evansville & Crawfordsv.	109	704,945	1,177,596	1,844,541	127,400	64,562		
N. Haven and N. London	60	508,600	1,007,826	1,527,827	304,651	95,456	6		Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60
N. London, W. & Palmer	66	2,122,800	796,886	2,596,488	123,147	60,752	none		Indiana Central	66	608,829	1,261,387	1,609,090	321,400	186,224		20
Norwich and Worcester	100	1,452,762	1,402,244	2,597,063	254,770	52,830	none		Ind., Clev. & Pittsburg	83	834,167	1,101,971	1,671,644				
Buffalo, Conn. and N.Y.	92	798,439	2,587,819	3,401,808	607,618	264,355	10		Jeffersonville	60	1,014,252	694,000		206,544	94,318		
Buffalo and N. Y. City	81	1,300,000	1,030,000	2,343,549	120,849	68,689	none	35	Lafayette and Indianapolis	64	1,647,500	1,589,881	3,237,381				
Buffalo and St. Line	144	3,757,891	893,804	12,391,363	279,520	102,657	33 1/2		Madison and Indianapolis	37	1,647,500	1,589,881	3,237,381				
Cayuga & Susquehanna	86	1,875,148	626,958	2,515,267	653,583	182,126	8	93 1/2	New Albany and Salem	288	2,535,121	6,281,448	6,643,189	645,827	371,402	none	10
Hudson River	584	24,154,880	14,462,742	32,623,913	6,488,993	2,627,118	none	22	Pera and Indianapolis	73		858,314		150,000	90,000	none	15
Long Island	464	10,023,958	2,326,696	33,439,431	942,394	154,854	none	65	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	95
New York Central	119	1,611,627	4,622,413	5,435,565	145,732	145,732	none		Chicago and Rock Is'd	182	3,141,500	2,387,155	5,214,152				
New York and Erie	137	3,749,200	219,594	677,754	121,348	76,327	6		Chicago and St. Louis	220			1,077,312				
New York and Harlem	55	610,000	140,000	888,182	183,959	37,666	none		Chic., St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000				
Northern, N. Y.	24	899,900	1,053,234	1,891,993	Recently opened.	none	none		Galena and C'd du Lac	298	4,334,800	1,189,304	5,806,263	1,506,710	942,231	17	113
Oswego and Syracuse	71	731,614	1,118,761	1,636,117	162,645	96,407	none		Illinois Central	707	1,419,440	18,001,426	17,098,099	5,321,118			97 1/2
Rensselaer & Saratoga	27	439,492	498,500	1,107,573	393,954	152,752	6	65	Peoria and Oquawka	63	569,889	818,454	1,388,342				
Saratoga and Washington	97	1,370,428	854,768	2,040,543	124,301	44,825	none		Ohio & Miss. (West. Div.)	147	1,780,295	2,292,403	4,870,586				
Saratoga & Binghamton	54	1,500,000	1,177,376	4,703,184	1,682,486	552,450	12		Terre Haute and Alton	173	2,251,420	1,256,000	3,537,424				
Troy and Boston	60	240,125	1,269,223	1,499,185	824,082	440,447	10	120	Detroit and Milwaukee	185	838,000	1,128,994	1,966,969				
Watertown and Rome	31	3,253,925	798,696	4,306,338	5,066,226	378,145	10		Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656		95
Belvidere and Delaware	94	1,500,000	1,177,376	4,703,184	1,682,486	552,450	12		Mich. South & N. Ind.	475	6,928,900	6,319,224	11,945,208	2,410,000	875,000	10	95 1/2
Camden and Amboy	60	240,125	1,269,223	1,499,185	824,082	440,447	10		Green Bay, Mil. & Ch.	165	764,075	442,726	1,193,765				
Camden and Atlantic	35	3,253,925	798,696	4,306,338	5,066,226	378,145	10		Milwaukee and Miss.	200	988,665	1,827,584	2,704,693	687,940	307,632	17	86 1/2
New Jersey Central	71	731,614	1,118,761	1,636,117	162,645	96,407	none		Milwaukee & Water'n	72	354,861	132,000	514,238				
Morris and Essex	62	1,155,715	351,500	1,549,622	233,096	99,377	6		Milwaukee and Horicon	92			31,000				
Cumberland Valley	66	1,099,500	12,211	1,191,835	146,381	66,994	none		Milwaukee & La Crosse	69							
Del. Lack. & Western	109	2,965,175	1,865,897	4,140,365	In progr.		10		Racine and Miss.	68							
Erie and North East	20	600,000	150,000	750,000					Hambal & St. Josephs		292,351	580,000	823,810				
Philad. & Sunbury	33	600,000	1,200,000	1,548,612	89,535	53,335	none		North Missouri	13	1,138,208	384,294	1,093,336				
Little Schuylkill	28								Pacific	130	2,803,692	3,903,174	6,463,726	100,000	In progr.		
Northern Penn.	19	2,530,855	731,492	3,287,678					St. Louis and Iron Mt.	40	445,170		186,115				
Pennsylvania	256	12,385,525	7,519,096	10,801,916	3,533,353	1,829,217	6	80	Panama	40	3,743,900		6,561,862	628,550	416,750	9 1/2	105

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866		
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	96
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	90	92½
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divors	"	1861-64	77	
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	70	75
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867		93
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		90
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861		92½
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860		93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873		85
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863		87½
Ohio and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	86	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	86	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	65	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	95	100
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90	91
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61		92
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	90
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76	
Little Miami	1,500,000	Do. inconv.	6½	2 May, 2 Nov.	"	1883	78	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	98	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	99	100½
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97½	99
Do. do.	650,000	Do. 2d do. 1856	8	April, October	"	1863	94	95
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	101	
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	80	81
Northern Cross	1,000,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,200,000	Do. do.	7	Feb'y, August	"	1867	90	100
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92	95
Do. do.	1,750,000	Income, convertible	7	April, October	"	1872	80	81
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	92	95
Scioto and Hooking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N.Y.	1861		83½
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		78
Terre Haute and Indianapolis	800,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	75	77
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	76	77

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,125,000	Do.	6	Jan'y, July	Balt.	1875	86½	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92	92½
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107½	108
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	97½	99
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	96½	96½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	89	89½
Do. do.	4,251,000	Convertible, Inscription	7	Feb'y, August	"	1871	82	82½
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85½	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	90	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	83½	84
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	86½	87
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	88½	88½
Do. (Free Land)	3,000,000	Mfg 345,000 acrs.-priv. 7 shars	7	March, Sept.	"	1860	88	89
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92½	
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	83	83½
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92½	95
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83	84½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	87	87½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	101½	101½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	103	105
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	103	105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	90	91
Do. do. 1849	3,489,000	Do. inconvertible	6	April, October	"	1870	86	86½

CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Aaskd p. ct.	CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Aaskd p. ct.
New York 7 per ct. 1857	Feb'y, May	100		Milwaukee, 7 per ct. coup.	X	81	81½
Do. 5 do. 1858-60	August and	97		Do. under these impressions	X	78	78
Do. 5 do. 1870-75	November	100		Philadelphia, 6 per ct. R.R. X	Jan'y, July	90	90½
Albany, 6 per ct. coup. 1871-81	X Feb'y, August	96	97½	Pittsburgh, 6 per ct. coup.	X	76	77½
Allegheny, 6 per ct. coup.	X Jan'y, July	64	69	Quincy, 8 per ct. coup.	X	84	84
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup.	X	81	85
Boston, 5 per ct. coup.	X April, October	98	100	St. Louis, 6 per ct. coup.	X	79	80
Brooklyn, 6 per ct. coup.	X Jan'y, July	99		Do. do. Municipal	X	79	80
Clev'rd, 7 per ct. cp. W.W. 1879	X Do. do.	99	100½	Sacramento, 10 p. ct. cp. 1862-74	X	78	80
Cincinnati, 6 per ct. coup.	X Divers	88	89	S.F. & C. 7 p. ct. cp. 1865, pay N.Y. X	May, Novemb.	82	
Chicago, 6 per ct. coup.	X Jan'y, July	88	89	Do. 10 p. ct. cp. 1871 X	Do. do.	92½	93
Detroit, 7 per ct. cp. W.W. 1872-78	X Feb'y, August	101	102	Do. 10 do. cp. pay N.Y. X	Jan'y, July	98	105
Louisville, 6 per ct. cp. 1880-83	X Divers	78½	79½	Wheeling, 6 per ct. coup.	X	70	
Memphis, 6 per ct. coup. 1882	X Jan'y, July	72½		Zanesville, 7 do.	X April, October	97½	

Cincinnati Stock Sales,
By KIRK & CHEEVER.

For the week ending February 5th, 1856.

BONDS.	Per ct.
Marietta & Cincinnati, 7 per cent. 1st Mort.	70
Cin. & Chicago, 10 per ct. Ral Estate, Butler & Meredith	77½
Indianapolis & Cin., 2nd Mort. 7 per ct.	77½
Cin., Wil. & Zanes 2d Mort 7 per ct.	60
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	45
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	80
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	88

STOCKS.	Per ct.
Cin., Wil. and Zanesv., 20.—Cin., Ham. and Dayton, 63.—	
Col. & Xenia, 82½.—Cincinnati & Chic., 9½.—Central Ohio, 15.	
—Covington and Lexington, 20.—Dayton and Western, 20.—	
Eaton and Hamilton, 30.—Fort Wayne and Southern, 10.	
Indiana Central, 10.—Indianapolis and Cincinnati, 60.—Little	
Miami, 89.—Mad River and Lake Erie, 19.—Marietta and Cin.,	
17.—Ohio and Mississippi, 5½.—Hillsboro' and Cincinnati, 17.	
—Junction (Indiana), 10.	

By HEWSON & HOLMES.

For the week ending February 6th, 1856.

BONDS.	Per ct.
\$5,000 Covington & Lex., 10 per ct. Income	62 (int.)
2,000 Ohio & Miss. 7 per ct. 2nd Mort.	43
5,000 Covington & Lex., 7 per ct. 2nd Mortgage	65
2,000 Do. do.	67½
1,000 Hillsboro' and Cin., 7 per ct. 1st Mort.	50
3,000 Little Miami, 6 per ct. due in 1883	81
2,000 City of Mayaville, 6 per cent.	40
1,500 Marietta & Cin., 7 per ct. Domestic	50
3,102.50 Little Miami, Divid. Scrip. Dec'ber issue	60
1,400 Do. do. June do.	90

STOCKS.	Per ct.
200 Shares Ohio & Mississippi	6½
100 " "	6½
319 " "	6
300 " "	6½
212 " "	5½
40 " Covington & Lexington	19½
2 " "	15
50 " Little Miami	80
4 " "	89
46 " Cincinnati, Hamilton, & Dayton	62½
25 " "	62
61 " Peru and Indianapolis	15
14 " Columbus & Xenia	85
85 " Indianapolis and Cincinnati	60½
112 " Cin. & Chicago	9½
180 " "	9½
22 " Dayton & Western	25

Marle & Kan's Money Circular for the
European Steamer of the 13th Inst.

[TRANSLATED EXTRACT.]

New York, Feb'y 11, 1855.

Since our previous advices of the 5th inst., an extraordinary activity has prevailed at the Stock Exchange, accompanied by the most important rise that we have had to record for months past. On the 6th the market was still held in check by the advance in the rate of Sterling Exchange, and the unexpected renewal of Specie shipment. This circumstance is doubtless only temporary, being mainly caused by the obstructions to the exports of produce, in consequence of the extremely cold weather, which has interrupted, for six weeks past the navigation of the great rivers, and many of the most important harbors. But, on the 7th, news was received of the final passage of the *Texas Indemnity Bill*, by which the Treasury of the United States will disburse about \$7,750,000 in Gold in the course of ninety days, five-sixths of which will be distributed over New York, Philadelphia, and Baltimore, at about the same time; the Government began also to pay out in coin the \$3,000,000 of the *Mexican Indemnity*, the greater part of which will be remitted to England—the balance remaining here. And finally the advices per *Persia* were received on the 9th, with Liverpool dates to the 26th of January, confirming the proposals of an early peace, and reporting a further rise of ¾ per cent in Consols.

These different circumstances have inspired a general feeling of confidence on all points, and render the prospects of an easy Money market almost a certainty, for several months to come; and under these impressions, speculation has been extremely active. Thus far, the advance has been chiefly confined to Railroad Stock; but on City Securities and Bonds not dealt in at the Stock Exchange, there has been as yet no corresponding movement.

State Stocks firm, at an advance, Missouri and Virginia active at 1 per cent. rise, and Louisianas are 2 per cent up. City Bonds are more firmly held, with moderate sales. Sacramento and Sa

Francisco 10 per cent. in better demand. Railroad Bonds are higher, with a very active movement in Illinois Centrals; Chicago and Rock Island Bonds have advanced 2 per cent; Erie 3d Mortgage, $3\frac{1}{2}$; Erie, 1875, $1\frac{1}{2}$; Erie, '71, 2; Illinois Central Construction, $5\frac{1}{4}$; Freedland Bonds, 2; Gothen Branch, 1 per cent. Bonds not current at the Stock Exchange—The only transaction of note is the negotiation of \$250,000 Peoria and Oquawka 1st mortgage Bonds. Galena and Chicago 2d mortgage Bonds have advanced $1\frac{1}{2}$ per cent.—Railroad Shares—A general upward movement, with a brisk speculation. Chicago and Rock Island has advanced $5\frac{1}{2}$; Cleveland, Columbus, and Cincinnati, 2; Cleveland and Toledo, 4; Erie, $3\frac{3}{4}$; Galena and Chicago, 2 per cent; Harlem Preferred, 3; Hudson River, 2; Illinois Central, 3; Michigan Central, $4\frac{1}{2}$; Michigan Southern, 6; Milwaukee and Mississippi, 1; New York Central, 4; Panama, $3\frac{1}{2}$; Reading 2 per cent. Money is very abundant—rates generally lower. Loans on call 7a6, chiefly at 7. First class paper 8 per cent.—Names less current at 10. Exchanges in good demand. Sterling very active, at 108 $\frac{7}{8}$ 109. Continental Exchanges firm, but in less active request. Paris, 5.20a5.21 $\frac{1}{4}$.

MARIE & KANZ.

Extract from the Circular of Robt. Benson & Co., per Persia.

LONDON, Jan. 25th, 1856.

No further reliable information has been received, since the date of our last circular, respecting the important question of peace. We may, however, at any moment receive Telegraphic news of the next steps being accomplished, namely, the signing of the preliminaries by the representatives of the different Governments. The public continues to manifest increased confidence in the probability of peace being established. The various rumors regarding the favorable progress of the negotiations have strengthened this feeling, and in particular the report of an armistice between the belligerent powers having been agreed to. Under these influences, Consols, which we quoted last week at 89 $\frac{3}{4}$ a90, have gradually improved up to yesterday, when, after touching 91, they closed 90 $\frac{3}{4}$ a $\frac{1}{2}$. To-day there has been a slight fall, and we now quote them at 90 $\frac{1}{4}$ a $\frac{3}{8}$ for money, and 90 $\frac{1}{2}$ a $\frac{5}{8}$ for the account. This fall is attributed to the natural reaction after a considerable rise, and to increased demand for money particularly on the Stock Exchange, during yesterday and to day, caused chiefly by arrangements for the payment of the last instalment of the Turkish loan due this day.

Loans on Government Securities range from 5 to 6 per cent, and on other securities from 6 to 7. Money in Lombard street is, however, a little easier, and discounts are reported to have been done a shade below the Bank rates. The last returns of the Bank of England, comprising those for the week ending 12th inst., showed a decrease in the Bullion of £119,758. It is not supposed that any material change has taken place in the stock of Bullion this week. It is not now expected that the Court of Directors will have occasion to make any advance in the rate of discount.

The animation and consequent rise in our own Funds have caused a considerable improvement in the market for American Securities. Of State Stocks, Maryland Sterling are in demand at 90 ex-dividend; and on Virginia Sterling a rise of 3 per cent, and on Pennsylvania 6 Bonds a rise of 2 per cent, has taken place. For Railroad Securities there has been an active demand, and especially for those of the Illinois Central. Considerable transactions have taken place in the Freedland Bonds at 82 $\frac{1}{2}$, and even as high as 84 has been paid for them. The 7 per cent. Construction Bonds we quote at 77a79; and the shares could not probably get under 1 discount. Pennsylvania 1st mortgage Bonds have changed hands at 90, but this is an extreme price, and we quote them at 87a89. Second mortgage sterling bonds have been done at 88a90; and New York Central 7 Bonds at 96.

ROBT. BENSON & CO.

The New Brunswick Railways.

The St. John, N. B., *Morning News* congratulates its readers that the mission of the Attorney General to England has been highly successful, in that he has arranged with Messrs. Baring Brothers for all the money required for the construction of the proposed railroads in the Province. The *News* says the monetary negotiations were completed before the "peace" news reached England, and in the teeth of a pinching money market.

American Railroad Journal.

Saturday, February 16, 1856.

Catawissa, Williamsport, and Erie Railroad.

The report of this company for 1855, shows that this work is doing a largely increased business. In July, 1854, it was opened to the town of Catawissa, on the North Branch of the Susquehanna; in September, to Milton, on the West Branch; and in December following, by means of the Sunbury and Erie road, a connection was formed with Williamsport and the country to the North-west. For 1854, the business, deducting amounts paid to the Little Schuylkill and the Sunbury and Erie companies, was \$38,353. For 1855, it amounted to the following:—

Passengers	\$109,985
Freight	109,268
Total	\$219,253

This sum is independent of the quotas paid the above two connecting corporations, which amounted to \$59,802. The operating expenses of all descriptions were \$166,803, leaving as net profits for the year \$52,450. The number of miles run by passenger trains was 130,662; and by freight trains, 84,358. Number of passengers carried, 99,788, making the average distance travelled over 60 miles. The total freight carried was 55,158 tons.

The net profits so far have been applied to completing the road, as it had to be put into operation at first in a very imperfect condition.

By arrangements made with the L. S. and S. & E. companies, the engines and cars of the C. W. & E. company pass all the distance from Port Clinton on the Reading road to Williamsport, 119 miles. The great north-west U. S. mail also passes over this route. The length of this line is 63 $\frac{1}{2}$ miles, and its cost represented by the following—

First and only mortgage bonds.....	\$1,500,000
Income bonds.....	240,000
Capital stock	1,700,000
Total	\$3,440,000

—To which is to be added a floating debt of about \$200,000 chiefly incurred in the purchase of rolling stock. Forty miles of the most difficult portion of the road have been graded for a double track. The necessary wood and water stations have been provided, with depots and an equipment of 12 locomotives, 152 eight wheeled freight cars, 11 passenger and baggage cars, &c.

The earnings for 1856 are estimated at \$300,000, which will be sufficient to pay expenses and interest on all their debts. A large business will come from the Lackawanna and Bloomsburg road which connects with the Catawissa at Rupert. The construction of the Tyrone road, furnishing much the shortest avenue from New York to the river cities of the West, will also add greatly to their business. But their great source of business will be the Sunbury and Erie, which is steadily

progressing, and will doubtless reach its western terminus at no very distant day.

The company own a large and valuable tract of coal lands, which when worked will add to their prosperity. Other beds also lie on their line, and arrangements are being made for working some of these.

Most of the freight carried so far is local. The channel to the North-west has not yet been sufficiently long opened to attract to it any very considerable business to Western New York or the Canadas.

The report concludes thus:

But, viewed in reference to its local business alone, in the immense quantities of lumber prepared for market at Williamsport; the iron manufactured by the great establishments at Danville, Bloomsburg, and other places on our route; in the raw materials required, and in the agricultural and other products needed by all manufacturing communities, this company perceives constantly increasing and inexhaustible sources of income, which it must always enjoy without a rival.

Under the circumstances, then, of the present position and brilliant prospects of the company, it remains for me briefly to urge upon all interested, the importance of providing means for relieving it at once from the small floating debt by which it is embarrassed, (for the security of which amount, if funded, its present rolling stock would be amply sufficient,) so that the future earnings of the company may be applied to their legitimate objects.

Boston and Worcester Railroad.

The following Board of Directors was unanimously elected at the annual meeting of stockholders, on the 7th inst:

Thomas Hopkinson, Daniel Denny, Nathaniel Hammond, Benjamin F. White, William Parker, Isaac Emory, Geo. Morey, Emory Washbourn of Worcester; and Israel Lombard.

A resolution expressing that while rates had been diminished, expenses had increased, and requesting the Board to increase the former so as to yield an increased yearly income of \$150,000, putting season tickets 25 per cent. higher, ordinary passenger fares up to three cents per mile, and freight charges at remunerative rates—was adopted, after some discussion by the meeting.

Pittsburg and Steubenville Railroad.

According to the fifth annual report of this company, the cost of this work, up to Jan. 1st, 1856, has been—

For grading masonry, and superstructure in Pennsylvania.....	\$835,524
For grading, masonry, and superstructure in Virginia.....	191,730
For engineering expenses in Virginia and Pennsylvania.....	42,910

Total expenditures on construction.. \$1,070,164

In addition to the above, there has been expended for engines and cars the sum of \$19,260.

The estimated cost of the work requiring to be done, to complete the road from river to river is—

To complete grading and masonry.....	\$112,720
" arching tunnels.....	25,000
" bridge superstructures.....	15,000
" 36 miles of track.....	360,000

Total..... \$512,720

Making for construction an entire outlay of \$1,582,884, or about \$285,000 above the original estimates. This excess is accounted for by the circumstance that all the bridging and 8 miles of grading have been prepared for a double track.—

Besides this, the delays arising from the want of funds, necessarily cause an increased outlay. The actual cost per mile, however, will not exceed \$40,000, which is stated to be not over one half the cost of the same length of the Pennsylvania road next to Pittsburg. The loss on sales of bonds, interest, land damages, and some other expenses are not included in the above; and when ascertained will probably increase the amount about one-fourth. As only \$153,000 are required to prepare the roadway for the superstructure, it will be seen that if means are forthcoming the road may easily be completed for use before the next season of low water on the Ohio.

Nearly all the President's report is taken up with a discussion of the financial difficulties of the company. Various causes impeded the action of the Board in pushing forward the enterprise early in the season. A committee had been appointed to examine into the company's finances. This occupied their time and attention till the early part of March, the result showing \$2,100 and one thousand dollar bond constituted their whole untrammelled stock, for commencing work. Some county bonds, however, were recalled and sold; and on a pledge of some others a loan of \$20,000 was obtained. These hypothecated bonds have since been paid off; as also nearly all the bills outstanding against the company, at the close of 1854, then amounting to \$224,853. From the city of Pittsburg there have been received \$116,000 in bonds; and from the county, \$353,155, making a total of \$469,155. Several of these which had been pledged in banks as collateral securities have been sold at prices considerably below par value.

On the present Board's entering upon their duties, they found that there would be a large deficiency in the means provided for executing the trust assigned to them. The first step accordingly, by virtue of authority granted them, was to mortgage the road, for \$800,000, which was considered amply sufficient to complete the work. In the then existing condition of the money market; however, the sale of these was found to be an impracticable task. The public had become alarmed, in consequence of the investigation, and refused to touch their securities. The most untiring efforts were made both at home and abroad, but without success, except a few partial subscriptions made on the Continent, conditioned upon a full subscription of the whole mortgage.

In July, application was made to the City Councils of Pittsburg for their advice and assistance. After due deliberation, they refused further aid, on the ground of the want of due authority.—The Board were consequently under the necessity of obtaining further loans on pledge of their bonds as security. After much difficulty, \$70,000 were raised, and this sum has since been increased. The contractors were then enabled to proceed with operations. The rates on which these sums were obtained are considered to have been unusually satisfactory, being considerably below nine per cent per annum. Since last March, the average monthly expenditure on construction has been more than \$37,000. That the work, though laboring under embarrassments, will be finished, and prove productive is considered as beyond dispute.

In accordance with a recommendation in the report, the stockholders passed a resolution, urging

the Directors to lease the road to such parties as will complete it in the shortest time and on the most favorable terms—subject to the stockholders' approbation, at a special meeting to be called for that purpose.

The following is an abstract of the company's GENERAL ACCOUNT.

Engineering instruments and furniture..	\$42,333
Grading and bridging.....	799,877
Stations and real estate.....	90,256
Right of way and land damages.....	27,196
App'n road in Virginia.....	192,274
Superstructure in Pennsylvania.....	56,084
Discount, exchange, commissions, interest &c.....	298,449
Coupons.....	46,162
Equipment.....	20,147
Collateral security account.....	213,000
Bank of Pittsburg in trust.....	80,000
Miscellaneous accounts.....	53,424
	<hr/>
	\$1,919,002
Capital paid in—City of Pittsburg.....	\$550,000
County of Alleghany.....	500,000
Individuals.....	149,000
Debts to contractors in stock.....	53,784
cash.....	64,170
Bills payable.....	111,327
Chartiers Valley Railroad Company.....	60,000
Mortgage bonds sold.....	\$50,000
collateral.....	293,000
	<hr/>
	343,000
Accounts payable.....	87,721
	<hr/>
	\$1,919,002

North Carolina Railroad.

This road, we learn, has at length been completed, and cars are daily running through from Goldsborough to Charlotte. The opening of this road will no doubt open new sources of wealth to the gallant old North State.

Milwaukee and Mississippi Railroad.

The seventh annual report, being for the year ending 31st December last, has just been published, and shows their affairs to be in a highly satisfactory condition. In April last, a contract was executed for completing the road from Madison, its present terminus, to the Mississippi, by November, 1856. The road is to be first class in every respect. The length of this extension is about 100 miles; and for its construction, including right of way, fencing, cattle-guards, and an expenditure of \$100,000 on buildings, the company are to pay \$2,014,500, as follows: \$1,230,000 in company's bonds, \$250,000 in mortgages of stockholders taken in payment of stock, \$100,000 in cash, and \$434,500 in stock of the company—all taken at par. But for the unfavorable character of the season, 22 miles, extending from Madison to Mozanian, would have been put in operation last December. The chairs, rails, &c., have been delivered some time, and this section will certainly be completed to that point in May next. In October last, the company received 2,200 tons of rails in Milwaukee; and 7,800 tons additional, all weighing 58 lbs. to the yard, have been purchased, and will be delivered at the opening of navigation.—This will suffice to lay the road to its western terminus at Prairie du Chien. The requisite chairs, spikes, &c., have also been purchased. The work thus far has been satisfactorily carried on, and no doubt is entertained of its completion in the time specified.

The company had previously made two issues of mortgage bonds to the amount of \$1,250,000, maturing in 1861-2, and '3. As the late contract

required \$1,230,000 additional, it was feared that the execution of another mortgage would embarrass their affairs; and it was accordingly resolved to make a new issue to the amount of \$2,500,000 sufficient to pay their contract and the first and second mortgages. This was done in May last, the bonds bearing eight per cent. interest, payable semi-annually, and being made redeemable in 1877. At the same time, \$50,000 per annum from the earnings were by resolution set apart as a Sinking Fund, to be employed exclusively in re-purchasing the mortgage bonds, when these can be obtained at par or under. This appropriation will be sufficient to pay the principal at maturity, and though drawing rather heavily upon present profits, the measure meets the approbation of stockholders and Eastern capitalists.

Of the above new issue \$650,000 were, in June last, prepared and paid to the contractors, and \$600,000 more will be sold or delivered to the same parties, this present year. The remaining \$1,250,000 will be issued as fast as necessary to redeem the other issues. This is secured by a first mortgage on 63 miles between the Wisconsin and Mississippi rivers, and on the remainder is made subject to the payment of the bonds referred to. Fifty thousand dollars, being the first appropriation to the Sinking Fund, were paid last Dec. to the United States Trust Co.

The total stock payments, at 31st December last, were \$1,826,428 81, and the funded debt amounted to \$2,400,000, as follows:

10 per ct. mortgage bonds payable 1861.	\$74,000
8 " " " 1862.	526,000
8 " " " 1863.	650,000
7 construction " 1859.	500,000
8 Sink. Fund " 1877.	650,000
Total.....	<hr/>
	\$2,400,000

Of the construction bonds \$38,500 are on hand, and \$12,000 have been already converted into stock.

The total expenditures for all purposes amount to \$3,578,757 80, of which \$635,242 80 have been expended on that part of the line west of Madison, besides \$20,379 12 for right of way from Janesville to Monroe, and for depot grounds at those places.

The estimated cost to complete the main line to Prairie du Chien, and the line of the Southern Wisconsin road, to Monroe, according to the contracts, let is.....\$2,179,258 00 and the resources are as follows:

Uncollected stock subscriptions, including amt. unpaid on 2,828 shares of stock held by the company.....	\$822,461 19
Farm mortgages unsold.....	401,300 00
Construction bonds do.....	38,500 00
Stock charged to contractors for which the company hold securities.....	200,000 00
Cash on hand, proceeds of bonds sold on account of contractors.....	255,165 79
Sinking fund 8 per cent. bonds.....	600,000 00
Milwaukee City Bonds.....	300,000 00
Add ties paid for right of way purchased beyond Madison, to be refunded by contractors.....	35,000 00
Add first mortgage bonds which may be issued on line of Southern Wisconsin road between Janesville and Monroe at the rate of \$10,000 per mile.....	350,000 00
	<hr/>
	\$3,002,426 98

Total expenditure to 31st Dec. last, on main line

and Southern Wisconsin road, including the eight miles now operated from Milton to Janesville.....\$3,578,757
Amount required to complete main line to Prairie du Chien and S. W. R. to Monroe 2,179,258

Total.....\$5,758,015
Additional equipments contracted for, in anticipation of the completion of the road..... 241,985

Total cost of road.....\$6,000,000

Miles.
Length of main line.....195
" line of S. W. to Monroe..... 44
" side tracks..... 30

Total.....268

Average cost of road, including side tracks, equipment, depot grounds and buildings, and all other expenditures, \$22,400 per mile.

The earnings for the first year after the completion to Prairie du Chien, are estimated at \$1,500,000. To these are to be added those of the Southern Wisconsin road which will not be less than \$200,000. Taking the whole, however, at only \$1,500,000, and allowing for working expenses 50 per cent, which is 10 per cent more than the actual cost thus far, the net profits would still reach \$750,000, or twelve and a half per cent. on a cost of \$6,000,000. Considering that a large amount of this cost is represented by bonds bearing eight per cent or less, it will be seen that the dividends can be increased in a corresponding degree.

The gross and net earnings for 1854 were \$458,846 and \$307,652 respectively. The business for 1855 was—

Passengers.....\$208,100 13
Freight..... 483,743 81

\$691,843 94

Showing an increase of gross earnings of \$234,976 16 over the previous year; though no additional length of road was operated. The working expenses were \$273,797 06; leaving as net profits \$417,443 73, or 60 per cent of gross receipts.

On the 30th of June last, the directors declared a cash dividend of five per cent, from the earnings of the six previous months, and on the 9th inst. a further dividend of five per cent, payable in cash, and seven per cent in stock, making a total of seventeen per cent. for the year ending 31st Dec. last.

Net earnings for the year.....\$417,443 73
Less interest on funded debt.....\$156,675 00
Less July dividend..... 42,547 02
Less Jan'y do. 5 per ct. cash..... 47,791 90
Less Jan'y do. 7 per cent stock, \$50,000 of which represents the sum deposited to credit of sinking fund..... 66,908 66

313,922 58

Surplus for the year.....\$103,521 15
To which add surplus set apart for the previous year of..... 64,043 65

Making a surplus fund at this time of.....\$167,564 80

—Which has this day been set apart and appropriated by the Directors to the relaying the track as may be required, to meet contingencies and the payment of the construction bonds payable in 1859.

The branch from Milton to Janesville, about

eight miles, was built in 1852, and has proved to be a very productive work. Since its opening, the people along the line of the Southern Wisconsin road have expressed a strong desire to have it extended to the Mississippi, offering to contribute liberally to such an object. As the creation of any floating debt was contrary to the Directors' policy, though recognizing the importance of the work, they did not see fit to divert the funds for the construction of the main line from that object. Last year, however, they gave assurance that on a sufficient subscription, they would undertake to build 35 miles from Janesville to Monroe. Since then, the City of Milwaukee has issued bonds to the amount of \$300,000, and from other sources \$362,700 of subscription has been obtained. The work has accordingly been commenced. Estimated cost for all purposes, \$800,000. To meet the deficiency an issue of first mortgage bonds will be made. Nearly all the right of way has been obtained. At Janesville the road will connect with the Chicago, St. Paul, and Fond du Lac road, which is to be at half the expense of bridging the Rock river at this place. Whether the line shall be extended from Monroe to Dubuque depends upon the action which will be taken by those residing along the route. The productiveness of this section of the State is inferior to no other, and its prospects of being a paying enterprise are of the highest character, in addition to the business drawn by it to the main line.

Since previous report, the Lake Shore road has been opened to Chicago; the Milwaukee and Watertown road, to Watertown; and the Milwaukee and La Crosse, to Horicon. All these must contribute an important passenger business to the road. In addition to these, the Detroit and Milwaukee line, now in progress, is expected to be completed within eighteen months. A connection with Grand Haven will then be formed by a line of first class steamers, capable of making the run within five hours. By this route and the Great Western Railroad in Canada, the distance between Milwaukee and Buffalo will be reduced to 616 miles, or 100 miles shorter than by any other route to the eastward.

Should the Beloit and Madison road be extended to Madison, it cannot compete with the present route for freight. With regard to passengers the M. & M. and the Chicago, St. Paul, and Fond du Lac furnish a line between Madison and Chicago, 20 miles shorter than the proposed extension could supply. The Chicago, St. Paul, and Fond du Lac road will be opened to Janesville this present season. The competition thus necessarily created by so many lines, is not apprehended to be of any injurious character. It is believed that Milwaukee must still continue the great point of export for the great staples of Wisconsin. On the future prospects of the road we quote from the report:

"The earnings have far exceeded our expectations, and must be satisfactory to all interested in the road, when it is considered, that they are derived from a local business merely, on a road extending but about eighty miles west of Lake Michigan, and with no through connections. In fact, this road, thus far, controls but little more than the business of that region of country which was formerly transacted at Milwaukee before the construction of your road. Thus far, it has derived no benefit from the rapidly increasing business and travel between the East and the Upper Mississippi, and until the last six months it had no

railroad connections with the East. The Chicago and Galena road, connecting Lake Michigan with the Mississippi, has heretofore entirely controlled the business between the East and Minnesota, and Northern Iowa and Western Wisconsin.

Your road when completed to Prairie du Chien, with a line of steamers running in connection therewith to St. Paul, must inevitably control the great bulk of the freight and passenger traffic between the Upper Mississippi and the East. It will furnish the shortest and cheapest route between the Upper Mississippi and the Lakes and will be the outlet for the products of a vast region of country, which is now increasing faster in wealth and population than any portion of the United States.

It will not only prove one of the best paying roads in the west, but will secure and maintain for all time, and against all competition, the business of the most important mineral and agricultural portions of Wisconsin, and to Minnesota and Northern Iowa it will prove the shortest and cheapest route, in their business intercourse with the Eastern States. Those who have not visited the country drained by the Upper Mississippi and its tributaries, and seen the great change which the last few years have worked in Minnesota, Northern Iowa, and Wisconsin, can form no estimate of the future wealth and population of this extended region of country. Possessing a rich soil—a healthy climate—abundance of water, stone and timber, it presents to the farmer, the laborer and mechanic, a more inviting field for enterprise than any other portion of our wide extended country. The completion of your road, in furnishing another and the best thoroughfare to this region of country, will contribute materially to its prosperity; and in return, its products on their way to the Eastern markets, will swell the revenues of your road."

Railroads have added 450,000 (nearly 300 per cent) to the population of the State within little more than five years.

From the Superintendent's report we learn that the road has been operated during the year with scarcely the loss of a single trip. Though wood trains have been moving constantly upon the road but one slight collision has occurred, and that with no serious injury. Over 146,000 passengers have been carried, without loss of life or limb.—Attempts were made by some midnight prowlers to destroy some of the trains; but steps were at once taken to seize the guilty parties, which was done before the perpetration of mischief. An effectual check has been put upon all such depredations for the future. A line of telegraph has also been put up, and offices opened at nearly all the stations.

Over 30 acres of ground have been already procured at Prairie du Chien, and 20 more can be had if desirable. Several depot buildings and grounds adjoining have been enlarged. By next spring the line will be fenced from Milwaukee to Madison.—Nearly all of it is ballasted, about a foot and a half in depth. On the 175 miles between Waukesha and Prairie du Chien in particular, no road can be operated with greater safety and economy. The earnings have largely exceeded the estimates.

From its western terminus to St. Paul and St. Anthony, the country is rapidly filling up, promising a business, as soon as the road is completed, which will be fully up to its capacity.

The present equipment consists of 25 locomotives, 10 passenger, 4 baggage, and 343 freight and other cars. The company have contracted for 13 additional locomotives and 200 box cars, which will be sufficient for this year.

The total stock subscriptions are \$2,648,900,

represented by 26,489 shares of which 2,373 are held by the city of Milwaukee, 2,828 by the company, and the remainder by individuals. The payments on this have been—

City of Milwaukee in cash and bonds.....	\$236,900
Individuals in cash.....	651,338
" mortgages.....	738,200
Contractors.....	200,000

Total.....\$1,826,438

The debts and bills payable of all kinds are \$67,889; and the balance of income account \$282,215. The expenditures have been as follows:

Construction, on main line east of Madison.....	\$2,169,111
Janesville branch.....	93,955
West of Madison.....	665,622
Equipment.....	473,898
Real estate, depot grounds.....	177,399
Woodlands and personal property.....	8,773
Debts and bills receivable, including stock to contractors.....	256,483
Farm mortgages.....	401,350
Sinking fund, cash on hand and deposited.....	305,166

Total.....\$4,541,756

The officers for 1856 are—John Catlin, President; Geo. H. Walker, Vice President; Edward H. Brodhead, Engineer and Superintendent; Wm. Taintor, Secretary; Anson Elred, Treasurer; and John J. Hill, Register. The other Directors are—W. A. Barstow, H. L. Dousman, Nelson Dewey, Jas. Goodrich, A. E. Ray, E. D. Clinton, E. B. Wolcott, E. D. Holton, A. Finch, H. Crocker, S. C. Hall, and Stephen, H. Alden. The last annual meeting was held on the 12th inst.

Journal of Railroad Law.

STOCK SUBSCRIPTIONS.—MUNICIPAL POWERS.—CONSTITUTIONAL LAW.

(Continued from page 90.)

McTalbot vs. Dent, 9 B. Monroe, 526, the Legislature of Kentucky authorized the city of Louisville to subscribe for stock in the Louisville and Frankfort Railroad Company, with the consent of a majority of the voters of the city, and to levy an annual tax for four years upon the personal and real estate, and further provided that every person paying any part of said tax should be entitled to his *pro rata* share of said stock. The case arose upon a prayer for a prohibition, forbidding Dent, the collector, to proceed further in coercing the tax assessed on Talbot's property for payment of this subscription.

The Court in overruling the prayer for prohibition, decided that the provision giving to the taxpayer stock in return for the amount of tax imposed upon him, did not invalidate the tax; that the city might have contributed without a special act; that the question of subscription was one of expediency, and that the judiciary would not interfere except in flagrant case of excess of power. See also Cheaney vs. Hooser, 9 B. Monroe, 330, and Justices of Clarke County Court vs. The Paris, Winchester, and Kentucky River Turnpike Co., 11 ib. 143.

In Slack vs. The Maysville and Lexington R. R. Company, the Legislature of Kentucky authorized certain cities and counties to subscribe for the stock of said railroad. The railroad company were authorized to call the meeting and take the vote of the electors, and the mayors of the cities and the courts of the counties were required to make the subscriptions, if the majority of the

electors gave their votes for the subscription. And the counties and cities were authorized to raise the amount by them subscribed, as the same should be called for by the railroad company, by levying a tax; provided the persons taxed should be entitled to receive stock in the railroad company in proportion to the amount of their tax. The case arose upon the prayer of certain tax-payers, praying for an injunction against the collection of the tax levied.

The Court sustained their decision in Talbot vs. Dent, and in Justices of Clarke vs. The Paris, Winchester, and Kentucky River Turnpike Company, and also decided that it was no objection to the validity of a vote for imposing a railroad tax, that the power was given to the company to designate the time of taking the vote, instead of the County Court. Judge Hise gave an extended dissenting opinion.

In Sharpless vs. The Mayor, &c. of Philadelphia, 21 Penn. (9 Harris) 149, the plaintiffs filed a bill in equity for themselves and such tax-payers in the city of Philadelphia, as agreeing to contribute to the expenses of the suit, should become parties thereto, averring that the said city were about to subscribe for stock in the Philadelphia, Easton, and Water Gap Railroad Company, and also for stock in the Hempfield Railroad Company, and to issue the bonds of the city in payment; that said subscriptions were without any authority of law; and prayed for an injunction to restrain the subscription. The city, admitting the averment of intention to subscribe, answered that they were authorized to make the said subscriptions by special acts of the Assembly, and the case was heard on bill and answer. By the acts of the Legislature the question was not submitted to the popular vote; but left to the discretion of the City Council.

Each of the judges delivered a separate opinion, two dissenting, which are not reported. The opinion of the majority of the Court is summed up by the Court as follows:—

1. In determining whether an act of the Legislature is constitutional or not, we must look to the body of the Constitution itself, for reasons. The general principles of justice, liberty, and right, not contained or expressed in that instrument, are not proper elements of a judicial decision upon it.

2. If such act be within the general grant of legislative power, that is if it be in its character and essence a law, and if it be not forbidden expressly or impliedly, either by the State or Federal Constitution, it is valid.

3. To make it void, it must be clearly not an exercise of legislative authority, or else be forbidden so plainly as to leave the case free from all doubt.

4. An Act of Assembly, authorizing a subscription by a city to the stock of a railroad corporation, is not forbidden by art. 1, § 13, of the State Constitution; that section not being a restriction upon the legislative authority of the two houses, but a bestowal of privileges upon the separate branches.

5. Such an act does not impair the obligations of any existing contract, nor does it attempt the impossibility of creating a contract, but merely authorizes two corporations to make one if they shall see proper.

6. This is not such an injury to the plaintiffs'

lands, goods, or persons, that they are entitled to a judicial remedy for it, agreeably to § 11 of art. 9. It is no injury at all, except on the gratuitous assumption that it is forbidden in some other part of the Constitution.

7. It does not violate the right of acquiring, possessing, and protecting property, secured by § 1 of art. 9. The right of property is not so absolute but that it may be taxed for public benefit.

8. This is not a taking of private property for public use, without compensation, contrary to § 10 of art. 9. When property is not seized, and directly appropriated to public use, though it be subjected in the hands of the owner to greater burdens than it was before, it is not taken.

9. It cannot be said that the plaintiffs will be deprived of their property, in violation of § 9 of art. 9. The settled meaning of the word *deprive*, as there used, is the same as that of the word *take* in § 10.

10. An Act of Assembly to authorize the taking of private property for private use, would be unconstitutional, because it would not be legislation, but a mere decree between private parties. But this is no taking in any sense, for any purpose or for any uses.

11. The plaintiffs have no ground of complaint against the acts of Assembly now in question, except because they authorize the creation of a public debt, of which they may be required hereafter to pay a part in the shape of taxes. By taxation alone can any harm ever come to them.

12. If it be within the scope of legislative power, with the consent of the local authorities, to permit the assessment of a local tax, for the purpose of assisting the corporation to build a railroad bearing to the tax-payers the relation which these railroads do, then the laws complained of are unobjectionable.

13. Taxation is a legislative right and duty, which must be exercised by the General Assembly, or under authority of laws passed by them.

14. The power of the Assembly with reference to taxation, is limited only by their own discretion. For the abuse of it, members are accountable only to their constituents.

15. By taxation is meant a certain mode of raising revenue for a public purpose, in which the community that pays it has an interest. The right of the State to lay taxes has no greater extent than this.

16. An act of the Legislature authorizing contributions to be levied for a mere private purpose, or for a purpose which, though it be public, is one in which the people from whom they are exacted, have no interest, would not be a law, but a sentence commanding the periodical payment of a certain sum by one portion or class of people to another. The power to make such order is not legislative, but judicial, and was not given to the Assembly by the general grant of legislative authority.

17. But to make a tax law unconstitutional on this ground, it must be apparent at first blush, that the community taxed can have no possible interest in the purpose to which their money is to be applied. And this is more especially true, if it be a local tax, and if the local authorities have themselves laid the tax in pursuance of an act of Assembly.

18. If, therefore, the making of a railroad, be a mere private affair, or if the people of Philadelphia have manifestly no interest in the railroads which run to and towards the city from Easton and from Wheeling, then these laws are unconstitutional.

19. But railroads are not private affairs. They are public improvements, and it is the right and duty of the State to advance the commerce, and promote the welfare of the people, by making or causing them to be made at the public expense.

20. If the State declines to make a desirable public improvement, she may permit it to be done by a company, and the fact that it is done by a private corporation, does not take away its character as a public work.

21. The right of the company by which it is made, to be compensated for the expense of constructing it, by making tolls for its use, though it gives the corporation an interest in it, does not extinguish the interest of the public, nor make the work a private one; because, to say nothing of other advantages, the public can pay the toll, and still carry and travel on it very much cheaper than without it.

22. The State may, therefore, rightfully aid in the execution of such public works, by delegating to the corporation the right of eminent domain, as she always does, or by an exertion of the taxing power as she has done very often.

23. The right of the Legislature, with the consent of the local authorities, to tax a particular city for a local improvement, is as clear as the right to lay a general tax for any purpose whatsoever.

24. The State having the constitutional power to create a State debt, by a subscription in behalf of the whole people to the stock of a private corporation, engaged in making a public work, it follows from what has been before said, that she may authorize a city or district to do the same thing, provided such city or district has a special interest in the work to be so aided.

25. This is not a case in which we can determine, as a matter of law, that the city has no interest in the proposed railroad. That this is true as a matter of fact, has not even been asserted in the argument.

26. The Legislature and the Councils have decided that the city has an interest large enough to justify the subscription; we cannot gainsay this, without declaring all interest to be flatly impossible, and to do that would be absurd.

27. Finally; the authorities of the city, in accordance with the charter, and with certain laws supplementary thereto, are about to create a public debt for a public purpose in which the city has an interest. It will be as valid and binding as if it had been legally contracted to accomplish any other public purpose for the benefit of the city.

See also *Moers vs. The City of Reading*, 21 Penn. 188; *Comm. vs. McWilliams*, 1 Jones, 61; *McClenahan vs. Curwin*, 3 Yeates, 362.

We shall conclude this subject in our next.

New Orleans and Jackson Railroad.

Col. Sam Redus brings us intelligence from Jackson, that contracts have been taken for grading the New Orleans, Jackson, and Great Northern R. R., from Brookhaven to Jackson, with the exception of five miles of the distance, and arrangements are being made to let that also. Of the distance let out, Cocke, Bradford & Co. take twenty miles, Thompson and others fifteen miles, and another company takes fifteen miles, commencing at Brookhaven. One hundred and fifty or two hundred hands will commence work on the road south-east of this place, sometime in March next.—*Gal. Mess.*, 18th ult.

Pennsylvania Railroad.

According to the Treasurer's statement, there has been received in payment from shareholders in the capital stock of the company, up to January, 1, 1856.....\$12,355,525
And from loans.....7,519,096
And from the business of the road...4,161,362
Balance of interest payable to stockholders.....78,930
Surplus profits, after cancelling interest charged to construction.....949,853

\$25,064,767

Which has been expended as follows:

Graduation and masonry, including the superstructure of bridges, single track.....\$7,177,322
Superstructure, including iron rails, chairs, cross-ties, ballast, stationery, printing, and incidentals. 7,753,813
Engineering, including rod, chain and axe-men, instruments, and office furniture.....409,376
Land damages, fencing, and real estate on line of road.....461,403

Total cost of single track.....\$10,801,916
Real estate, Philadelphia...\$672,043
Less am't of mortgage...302,391

Leaving paid.....\$369,652
Paid on real estate, Pittsburgh.....353,000

\$722,652

Graduation and superstructure of second track.....3,150,626
Machine shops, engine houses, and shop machinery.....\$681,180

Repair shops, machinery, &c., at West Philadelphia.....58,621
Station and warehouses....777,906
Foremen's houses.....81,912
Water stations.....93,395
Locomotives.....1,068,716
Freight cars.....787,754

Passenger cars, including cost of one-half Columbia railroad line.....202,520
Road and hand cars.....33,637

3,785,653

Telegraph line.....22,642
Subscriptions to Western railroads, and stock dividends from same.....1,502,200

Transportation expenses, including tolls paid to other roads, rents, office expenses, interest on notes, bonds, coupons, and company's stock, &c....3,478,901

Profits of road, after payment of interest on stock and debts, and other expenses.....682,460

4,161,362

Bonds of municipal and other corporations.....17,452
Bills and notes receivable..357,812
Balance in hands of Treasurer and agents.....542,448

917,712

\$25,064,707

The actual business of the road during the year, as reported by the Superintendent is \$108,653 52

more than the receipts at the Treasury; this amount is included in uncollected bills in the hands of agents, which are greater this year than last, owing to the increased freight business of the road at its close.

The total earnings of the Co. during '55, were.....\$4,270,015

From which deduct tolls, &c., paid for the use of other roads, as follows, viz:

For Columbia railroad.....\$453,557
For Harrisburg and Lancaster railroad.....227,166
For Northern Central railroad, Balt. to Harrisb'g, on freight only.....41,248
For Philadelphia city rail'd..6,720

731,682

Leaving business proper of Pennsylvania railroad.....\$3,538,333
Equal to \$14,267 47-100 per mile.

The cost of conducting the business of the road for the year, including tonnage tax, is.....\$1,709,055

Leaving the profit of the year....\$1,829,277

We extract the following from the report:

As the amount chargeable to conducting the business of the road does not include a material item for renewal of iron rails, and as the business will not probably increase hereafter, largely beyond a proportionate increase of capital, it is proper under these circumstances, that this allowance should now be made. It is not safe to estimate the durability of iron longer than ten years under a heavy traffic. This would give the annual loss of iron, equal to about 3,500 tons, for a single track and sidings, with a double track over the mountain, which is all that is properly chargeable to the year's business. Allowing twenty dollars per ton for re-rolling this iron, and six dollars for its transportation to and from the mill, we have \$91,000 as chargeable to the business of the road. The expenditures for cross-ties has been but \$9,127 31, while the annual decay may be estimated at \$28,000, or \$19,000 more than the account charged. These two items amount to \$110,000. The superstructure of bridges, in consequence of the destruction of two of them by fire, is charged with its full annual average deterioration. The road-bed itself, the largest item in the original cost of the work, will improve in permanency each year for some time.

The practice of the company in relation to its running equipment, is to preserve the number of cars and locomotives charged to construction account in complete efficiency; thus, if a car or locomotive is destroyed, or has become old and worthless, a new one is substituted in its place, and its cost charged to expense account. This practice will, of course, bring the charges for motive power, as our machinery advances in age, somewhat greater per ton transported than it is at present; but it seems to be the surest method of keeping the accounts from complication. If the company had been declaring dividends of its profits it would be prudent to carry a portion of the revenues of the year to a reserved fund. To cover this depreciation, we think that \$40,000 on the running machinery, in addition to the sum of \$110,000 already mentioned, will be sufficient. Deducting these from the net earnings of the road given above, we have \$1,679,277 54 as the clear profits of the road, equal to 8 4-10 per cent. upon the whole debt and capital of the company. The profits of the company during the year, as shown by the Treasurer's report, after deducting \$611,512 37 interest paid to shareholders, and \$477,371 50 on the indebtedness of the company, together with all other expenses, was \$682,460 67, exclusive of \$108,653 52 of increase in uncollected freight accounts, making the whole profits, after allowing \$17,099 91, the amount of warrants issued by the Superintendent, which had not been presented to the Treasurer, when the accounts were closed for the year, \$774,014 28. This will leave, after

\$150,000 to a reserved fund, 3 1-10 per cent. upon the capital, in addition to six per cent. paid to the stockholders. The whole surplus profits of the company are something less than one million of dollars, a sum sufficient to meet any possible loss upon subscriptions to Western railroads.

Clinton Line Railroad.

At a meeting of the stockholders in this road, on the 22d ult., the following gentlemen were chosen as Directors for the ensuing year, viz:

H. N. Day, Aug. Ellsworth, J. C. Dow, H. A. Miller, J. S. Tilden, C. Taft, B. Bidwell.

At a meeting of the Board succeeding, H. N. Day was re-elected President.

At a meeting of the citizens of Hudson held on the day following, in order to raise a subscription of \$100,000, a committee of twelve was appointed, and over \$40,000 taken on the spot.

The present indications are that the work will be resumed as soon as the spring opens, and pushed on rapidly to completion.

Notice to Contractors.



LOUISVILLE AND FRANKFORT RAILROAD,
SUPERINTENDENT'S OFFICE,
Louisville, Ky., Jan'y 30th, 1856.

PROPOSITIONS are requested for the rebuilding of the masonry and superstructure of the bridge across the Kentucky river, at Frankfort, Ky. The superstructure will be near four hundred and fifty feet in length, and the depth of water in the river near thirty feet.

Parties offering designs must accompany same with detailed drawings.

Persons desirous of making propositions will please communicate immediately with the undersigned, at Louisville, Ky.

SAMUEL GILL,
Supt. L. and F. R. R.

416

Pittsburg & Steubenville R.R.

SEALED PROPOSALS will be received at the office of the Company in Pittsburgh until the 21st inst. for the lease of this road for and during the period of twenty years, under the terms authorized and approved by the Councils of the City of Pittsburgh, the Commissioners of Alleghany county, and the Board of Directors of this Company. The party leasing to take the assets and Mortgage Bonds of the Company, and finish the road and pay all the liabilities of said Company.

An act is now before the Legislature granting corporate privileges to any party leasing same, under the provisions of the General Railroad Law of this State.

For any information required, address the Company at Pittsburgh.

ISAAC JONES,
Pittsburgh, Feb'y 7th, 1856. 17 Pres't

Railroad Iron.

600 TONS "Erie" pattern, 68 lbs. per lineal yard, now in yard. For sale by

VOSE, LIVINGSTON, & CO.,
No. 9 South William st., N. Y.

New Book for Engineers.

Pocket Book

FOR

Railroad and Civil Engin'rs.

Containing new, exact, and concise methods for laying out Railroad Curves, Switches, Angles, and Crossings; the staking out of work, levelling; the calculations of cuttings and embankments, earthwork, &c.

By OLIVER BYRNE.

EXTRACT FROM PREFACE.

1. The laying out of railroad curves by ordinate tables of whole numbers.
2. How to drive side stakes exactly, without trial and error.
3. When the cross sections of cuttings and embankments are irregular, a rule is given to find exactly, the height of equivalent level cross sectional areas.
4. A general earthwork table without supposing the side slopes to meet under the centre of the road.
5. The proper curving of wheels of railroad cars, and the true rise of the outer rail on curves.

C. SHEPARD & CO., Publishers, 162 Fulton st., N. Y.

N.B.—Price \$1.50, and sent by mail free of postage.

The above book is got up in the most convenient style for Engineers, being in tucks, and containing blank paper for drawings with a drawing pencil attached. 3m7

Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These Lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the South ern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands is carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will probably, have increased their value four or five-fold. When

required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, Ill.

OIL. OIL. PEASE'S IMPROVED ENGINE and SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF MACHINERY & BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be SUPERIOR for Burning, and TWENTY FIVE per cent. more DURABLE than Sperm Oil, for Lubricating, and the only Oil that is in all cases RELIABLE, that will keep bearings COOL, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The *Scientific American* and *Manufacturer's Journal*, after testing this Oil, pronounce it SUPERIOR to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO

Reliable orders filled for any part of the United States or Europe.

Engineers' and Surveying INSTRUMENTS.

F. W. & R. KING,

226 BALTIMORE ST.,

BALTIMORE, MD.,

KEEP on hand, and manufacture to order, a general assortment of instruments for Engineers' and Surveyors' use—including Levels, Transits, Leveling Rods, Compasses, Chains, Drawing Instruments, Scales, Tape Lines, &c. Repairing and Jobbing promptly attended to.

Railroad Iron.

1,200 TONS, delivered at New Orleans, within the month of February. Apply to

THEODORE DEHON,

10 WALL ST., NEW YORK.

28th January, 1856. 415

SCIENTIFIC WORKS,

PUBLISHED BY

D. APPLETON & CO.,

346 and 348 BROADWAY, NEW YORK.

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Henck's Field Book for Railroad Engineers\$1.75
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Lyell's Principles of Geology, 1 vol. 8vo.\$2.25
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Templeton's Mechanic's, Millwright, and Engineer's Pocket Companion\$1.00
Ure's Dictionary of Arts, Manufactures, and Mines, 2 vols, 8vo. new edition\$5.00

D. APPLETON & Co. have on sale all the important English Engineering Works. 617

NOTICE TO

Railroad Contractors.

Memphis, Clarksville, and Louisville Railroad. THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

Maps, profiles, and plans can be seen at the office of the Company in CLARKSVILLE, or inquiries made of the undersigned.

W. B. MUNFORD, Pres't M. C. & L. R. R.
CLARKSVILLE, Tenn., Jan'y 16th, 1856. 614

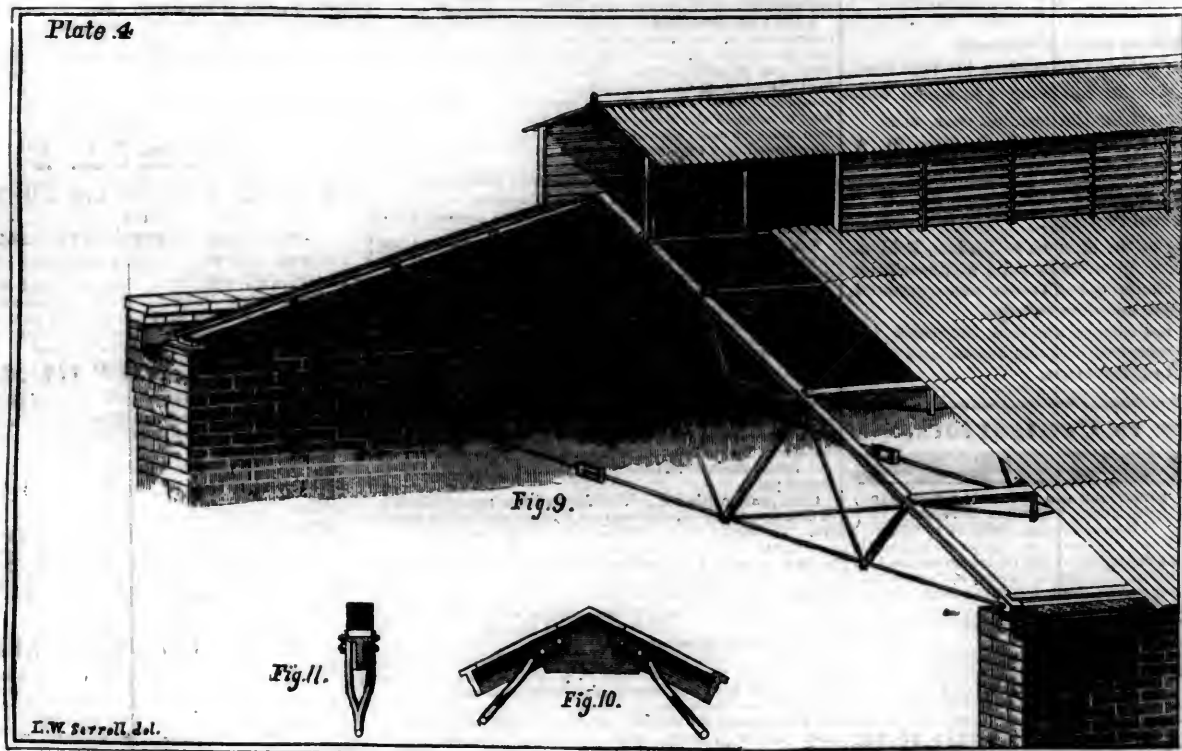
LOCOMOTIVE ENGINES FOR SALE.

THE PROVIDENCE & WORCESTER R. R. CO. offer for sale two LOCOMOTIVE ENGINES, in good order and in daily use. Weight of Engines twenty tons each, with 14 by 18 inch cylinders. Drivers five feet diameter. For further particulars inquire of the undersigned, at PROVIDENCE.

JOHN B. WINSLOW, Superintendent.
PROVIDENCE, Jan'y 10th, 1856. 2m4

ROOFING.

Plate 4



L.W. Serrell del.

THE subscribers, manufacturers and importers of **PATENT GALVANIZED TINNED IRON**, respectfully invite the attention of railroad companies and others interested in the construction of Fire-proof Buildings and Roofs, to this material, which is highly recommended for strength, durability, and lightness, combined with elegance in appearance. The advertisers can refer particularly to Roofs they have

erected in the New York Navy Yard, also to that of the New Jersey Railroad and Trans. Company, Jersey City. In Great Britain it is used at all the railroad depots and navy yards in enormous quantity.

The corrugated sheets, as on the above iron framed roof, are equally suited to lay upon wood framing, either straight or curved.

Plain sheets are prepared to lay on boarded roofs (such as have had tin coverings) by making a flute on the side so as to fasten to a wood roll, reaching from ridge to eaves and placed between each tier of sheets, see figs. 6 and 8 below. The transverse joints are secured as shown by fig. 7.

Estimates and designs for Buildings and Roofs, &c., &c.

Fig. 6.

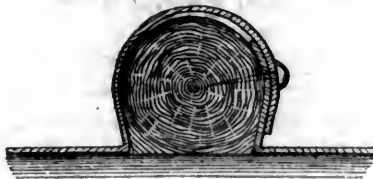
 $\frac{1}{4}$ full size.

Fig. 7.

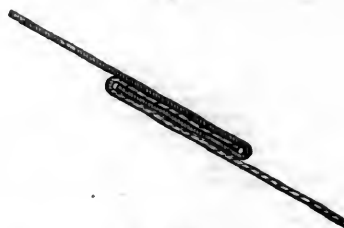
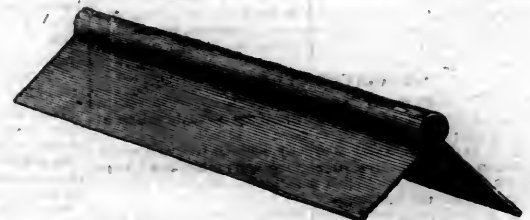
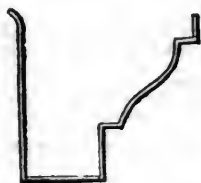
 $\frac{1}{4}$ full size.

Fig. 8.

 $\frac{1}{4}$ full size.

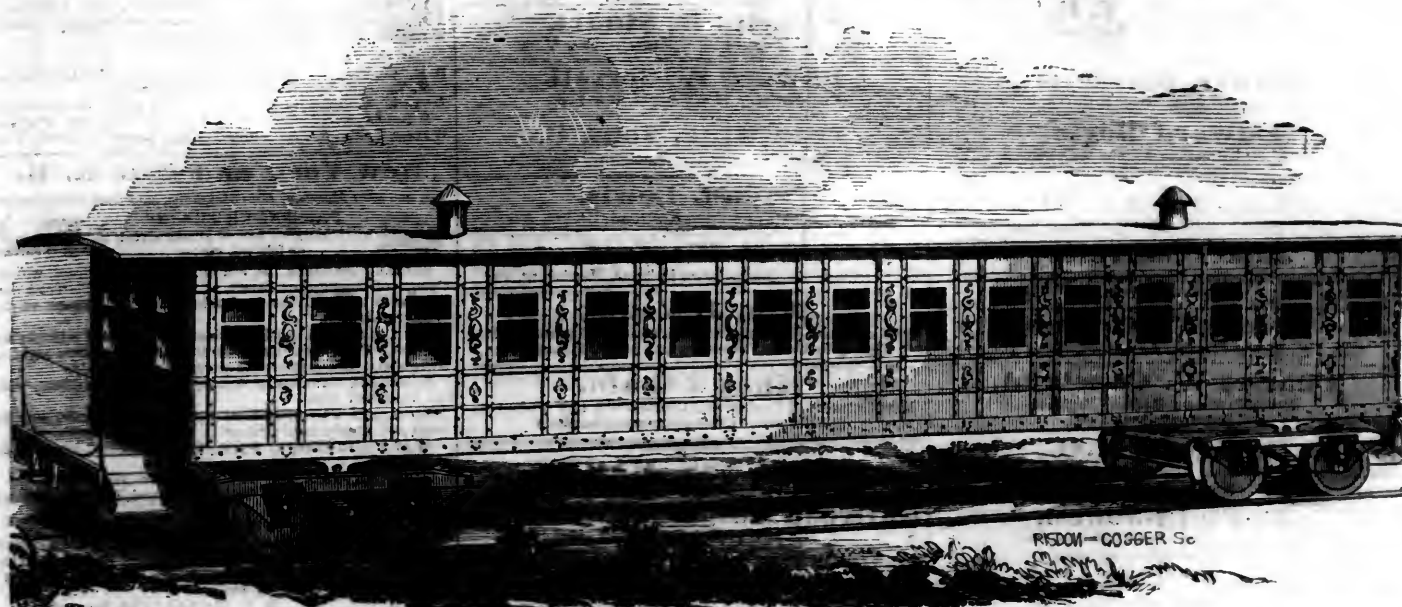
Galvanized Iron Cornices to any size or pattern, Ridge Caps, and Spouts.

TELEGRAPH AND FENCING WIRE, BLACK SHEET IRON SHIPS' IRON WORK,
LIGHTNING RODS. CORRUGATED. SPIKES, NAILS, &c., promptly galvanized.



MARSHALL LEFFERTS & BROTHER,
Corner of Broad and Beaver sts., NEW YORK.

LA MOTHE'S PATENT IRON RAILROAD CAR.



WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dudgeon's Hydraulic Jack, Sewall's Salinometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

CHAS. W. COPELAND,
Consulting Engineer.

1y17

Railroad Iron.

1,000 TONS Welsh Rails, 60 lbs. to the yard, now in bond and for sale by
CLARK & JESUP, 70 Beaver st., N. Y.

EDDY'S

Patent Car Locomotive and Tender Wheels.

GEORGE W. EDDY of Waterford, New York, is prepared to execute orders to any extent for his well known and fully tested double plate and solid Hub Wheels, fitted to axles as required. Wheels of this pattern have been in general use for eight (8) years by the various railroad companies through out the United States and Canada as well as on many roads in Great Britain. In the manufacture of these wheels they unfailingly go no annealing process which gives them a deeper and harder shell than those of any other manufacture.

W. F. SHATTUCK, G'l Agent, 229 Broadway, N. Y.

Railroad Iron.

225 TONS Welsh Iron, 56 lbs. to the yard, in store and to arrive. For sale by
CLARK & JESUP, 70 Beaver st., N. Y.

Railroad Iron.—Locomotives.

—6,000 Tons Rails, 58 to 61 lbs. per yard.
1,000 " " 55 " "
200 " " 49 " "

Several LOCOMOTIVES of best manufacture, adapted to a variety of gauges, on hand and for sale by

H. H. GOODMAN & CO.,
No. 7 Wall st.,
NEW YORK.

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Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$3 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

ENGINEER'S FIELD BOOK

By C. S. CROSS, *Civil Engineer.*

THIS work is designed as a pocket companion, and embraces all the necessary tables for prosecuting railroad surveys, in the most compact form.

- It is subdivided as follows:
- 1st. The method of staking out railroad curves and keeping field notes.
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- It is a plain, clear and most valuable book for practical Railroad Engineers.

For sale at this office. Price \$1.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

Railroad Iron Wanted.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

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A. WILKINS.

ELLIOTT & CO.,
NO. 4 WILLIAM STREET, NEW YORK.RAILROAD AGENTS
AND
COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION

FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

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Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

Second Hand Locomotive

FOR SALE VERY LOW.

Weight 13½ tons.—4 ft. 8½ in. Gauge.—11½ in. Cylinder.—16 in. Stroke.—4 ft. Drivers.—New Tender on 6 wheels.—Engine in perfect repair.

The above will be found a very serviceable engine for graveling, switching, lumber and coal trains, and contractors' use, and can be had on excellent terms on application to

ELLIOTT & CO.,
4 William st., N. Y.

TRANSIT FOR SALE

AT A BARGAIN.

AN excellent Transit made in DRESDEN and which cost there (where instruments are much cheaper than here) \$250, may be had for \$150. The standhead will need some alteration to adapt it to railroad purposes. Address Transit at this office.

64

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Barnes, Oliver W.,
Chief Eng. Pittsburg and Connellsville R.R. Co., Pittsburg, Pa.

Edward Boyle,
Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York
Office 123 Chambers st.

Clement, Wm. H.,
Little Miami Railroad, Cincinnati, Ohio.

James Converse,
Chief Engineer Galveston, Houston & Henderson Railroad,
Galveston, Texas.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
64 Broadway, New York.

Davidson, M. O.,
Civil and Mining Engineer. Office Swanton Coal and Iron Co.,
51 Exchange Place, BALTIMORE, Md.

C. Floyd-Jones.,
Division Engineer 3d and 12th Divisions.
ILLINOIS CENTRAL RAILROAD.
Vandalia, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Gilbert, Wm. B.,
Syracuse and Binghamton Railroad, Syracuse, N. Y.

Gzowski, Mr.,
St. Lawrence and Atlantic Railroad, Toronto, Canada.

Grant, James H.,
Nashville and Chattanooga R. R., Nashville, Tenn.

Theodore D. Judah,
Chief Engineer, Sacramento Valley Railroad,
Sacramento, Cal. 1y23

Robert B. Gorsuch,
Civil and Mechanical, Steam and Hydraulic Engineer,
Tabernacle Building, 340 Broadway, N. York. 18tr

S. W. Hill,
Mining Engineer and Surveyor, Eagle River,
Lake Superior.

D. Mitchell, Jr.,
Chief Engineer Pittsburg and Steubenville, and Chartiers Valley
Railroads, Pittsburg, Pa.

Samuel McElroy,
Assistant Engineer, New York Navy Yard.

Mills, John B., Civil Engineer,
Sackett Harbor and Saratoga R. R., 24 William St., N. Y.

Septimus Norris,
Civil and Mechanical Engineer, Philadelphia.

Saml. & G. H. Nott,
Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,
Civil Engineer, Office 73 South 4th st., Philadelphia.

Prichard, M. B.,
East Tenn. and Georgia Railroad, Knoxville, Tenn.

W. Milnor Roberts,
Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,
Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

Sanford, C. O.,
South Side Railroad, Virginia.

Charles L. Schlatter,
Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.

Straughan, J. R.,
Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,
Chief Engineer Bytown and Prescott Railway,
Prescott, Canada.

Steele, J. Dutton,
Pottstown, Pa.

Charles B. Stuart,
Consulting Engineer, 23 William str., New York.

Edward W. Serrell,
Civil Engineer, 23 William st. New York.

Trautwine, John C.,
Civil Engineer and Architect, Philadelphia.

Troost, Lewis,
Alabama and Tennessee Railroad, Selma, Ala.

A. B. Warford,
Chief Engineer, Susquehanna Railroad, Harrisburg, Pa.

Wm. J. Young
HAS removed his Engineering and Surveying Instrument Man-
ufactory to No. 33. North Seventh Street, Philadelphia.

Knox & Shain,
Manufacturers of Engineering Instruments, 46½ Walnut st.,
Philadelphia. (Two premiums awarded.)

BUSINESS CARDS.**Railroad Suspension Bridge.**
NOTICE.

BENJAMIN WATKINS, at Port Gibson, Mississippi, Archi-
tect and Engineer, will erect Suspension Wire Cable
Bridges for railroad crossings from two hundred to three
thousand feet span, and wooden bridges of three hundred feet
span for any purpose of crossing, and he will also erect foot
bridges for man and horse crossing with short or long spans in
any part of the United States upon fair terms. Please address
as above.
November 12th, 1855.

The Troy Iron Bridge Co.

ARE prepared to erect Iron Bridges or Roofs, or any kind
of bearing trusses, girders, or beams, to span one thou-
sand feet or under, of any required strength, in any part of the
country. Their bridges will be subjected to severe tests, and
can be built for about the price of good wooden ones. Address
D. & G. L. BLANCHARD, Troy, N. Y.
April 1st, 1855.

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CIVIL ENGINEER, SURVEYOR AND DRAFTSMAN,
CUMBERLAND, Maryland.

RAILROAD routes located, planned and estimated. Maps
and Reports furnished. Researches made for Coal, Iron,
Copper, Lead and other Minerals, Metals, &c. Contract work
in Tunnels and heavy Graduation measured and reported in
detail. Topographical Drawings executed and Lithographs
supplied by skilful artists. Mines explored, new Works laid
off, and Geological Plans prepared. 8tr

H. SAWYER

(of the late firm of SAWYER & HOBBY),
Manufacturer of Transits and Levels.

HAS removed to Union Place near Warburton Av., Yonkers.
N. Y.

Lord & Wright,

Counsellors at Law Cincinnati, Ohio. 18tr

J. S. Sewall,

CIVIL ENGINEER,
ST. PAUL MINESOTA.

Rollins & Haviland,

STOCK BROKERS,
33 Exchange Place New York.
JOHN T. ROLLINS. WALTER HAVILAND.

INCRUSTATION
OF BOILERS.

WEISSENBORN'S PATENT

Incrustation Preventor

effectually obviates incrustation by separating the incrusting
matter from the water before it enters the boiler, while at the
same time it is of great value as a HEATER and CONDENSOR.
The apparatus occupies but little space, is simple in construction
and management, and applicable alike to stationary, loco-
motive and marine engines.

Testimony can be furnished of its successful operation for
several months during which it has been in use here, and for
two years in Europe, with water containing an unusual propor-
tion of lime.

Drawings and full descriptions will be furnished to parties
desiring them. For right to use this invention, apply to
E. W. SARGENT Delmonico's Hotel,
No. 26 Broadway, New York.

ELLERY & GIBBONS,

No. 10 WALL ST.,

BANKERS, DEALERS IN DOMESTIC and FOREIGN
EXCHANGE, &c., are prepared to negotiate Stocks,
Bonds and Financial Securities in general.

REFERENCES.
D. R. MARTIN, Pres't O'Ch Bk, CORNELIUS W. LAWRENCE,
N. Y. Esq., N. Y. DEXTER & Co., Bank'rs Philad
SILAS K. EVERETT, of Everett & BROWN, N. Y. SAMUEL WILLETS, Pres't of
WELLS, FARGO & Co. 18tr Am. Exchange Bank, N. Y.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without
change of baggage or cars. At Hornellsville this Train con-
nects with a Way Train for Dunkirk and all stations on the
Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, with-
out change of cars.

ROCKLAND PASSENGERS, at 4 p.m., via Suffern's, for Pier-
mont and intermediate stations.

WAY PASSENGERS, at 4 p.m., for Otisville and intermediate
stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and inter-
mediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira &
Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dun-
kirk with the Lake Shore Railroad for Cleveland, Cincinnati
Toledo, Detroit, Chicago, etc.

Ltr. D. C. McCALLUM, General Sup't.

U. S. Railroad Directory for 1856,

to contain the names of the Presidents, Directors, and Officers
of every Railroad in the United States, as far as the same can
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Feb'y 9th, 1856.

416

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33

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pipes.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 8.]

SATURDAY, FEBRUARY 23, 1856.

[WHOLE No. 1,036, VOL. XXIX.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, February 23, 1856.

The Improvement in the Stock and Money Market.

After a long period of unexampled depression in all kinds of railroad and municipal securities, we have at last the dawn of a brighter day. The past two or three weeks have shown a large and pretty general advance in them. Money is more freely supplied than it has been for nearly three years. The public confidence is recovering its tone, and a domestic demand is again showing itself for securities. A speculative feeling is manifesting itself, the natural result of an easy money market, and of a very long period of low prices, and inaction. Peace news from Europe was the grand signal for the commencement of more active operations. The upward movement is assisted by the sound condition of all classes in the community, by the abundant supplies of capital possessed by our people, the lessened calls for our railroad enterprises, and by the returns upon their cost in the shapes of earnings, and the reduced

cost of the transportation of products. We have a right to expect such further advance as will carry securities of all kinds to an approximation of their values. Their depreciation has been all the way from 15 to 20 per cent. Only three years since Erie first mortgages commanded from 115 to 120. Equally good six per cents were at a premium. Virginia sixes sold as high as 115. There is no reason why similar securities should not again gradually creep up to these old figures. A greater advance is very likely to take place in such as have not had an established reputation, and do not appeal to so large a circle of buyers. For two years past there has been no relation whatever between values and prices. Securities of the best class could be sold only at a heavy discount from former prices, while others, less widely and favorably known, but whose solvency could not be controverted, could hardly be sold at any price.

If we contrast the condition of the country as it was, say two years since, with what it is at the present time, the inference will be most favorable for the latter. We have now twenty-two thousand miles of railroad in operation; the greater number of which are earning a fair income upon their cost. During the process of their construction, they were necessarily unproductive; and not only so, but they called for a very large proportion of the active capital of the country, and diverted a large amount of labor from other channels to one not immediately productive. It is really marvelous that the country carried the load resting upon it, not without embarrassment, but without succumbing. We cannot, in a brief article, give anything like an adequate idea of the magnitude of this burden. Some idea may be formed of it, from the fact that the construction of five thousand miles, only one quarter the extent of line opened in this country, brought Great Britain to the verge of bankruptcy, and produced a commercial crisis unexampled for its extent and severity. In this country, works of four-fold greater magnitude have been constructed in nearly as short a time as Great Britain constructed hers. But the demands created for capital by the construction of railroads was vastly greater in the United States than in Great Britain. The expenditures upon our roads have been only a small ratio to those made necessary by the opening of these works. The object

of their construction is not so much the income that may be derived from them, as the incidental advantages which could not be secured without further and immense outlays.

When we consider what our people have gone through, it is a matter of wonder that they have sustained themselves as well as they have. The improvements and discoveries in the various arts of life, have enlarged the sphere of its action and disclosed objects of pursuits far beyond the means of society for their accomplishment. The inventive genius of the age is always far in advance of the capital necessary to bring the contrivances of the former into use. Hence money, or property, must be always in demand, till science and ingenuity shall have exhausted their appropriate fields. It is only a few years since that man commenced an analysis of nature, and the conversion of all material substances into his use and service.— There is no country where the disproportion of capital to objects to be accomplished is so great as in our own. Such with us is the entire freedom of individual action, and so abundant are the opportunities and stimulants to enterprise and exertion, that there is hardly a man among us who has not the work of a year laid out, for the accomplishment of which all his means, and a favorable state of the times is necessary. Such a state of things is the rule with our people. Under the most favorable circumstances they have all they can carry. When upon the load always assumed, were thrown the cost of construction of twenty-two thousand miles of railroads; the commercial embarrassments arising out of the great European war; the entire cessation of demands for our securities, which for several years reached from thirty to forty millions of dollars annually; the withdrawal from us of all available balances, which took very nearly two years' products of the California gold mines, it is certainly wonderful that our people stand as well as they do. They are now nearly relieved of the causes of their former embarrassments. The work of past years has become productive. The country possesses more available means than at any former period. Confidence is becoming restored. The improvement in the stock and money markets therefore, we consider to be well founded, and we confidently look for a still better state of things.

Charleston and Savannah Railroad.

The annual meeting of the stockholders in this road was held in Charleston, on the 16th ult.—According to the report read upon that occasion, the trestle work, clearing and embanking of the first 18¾ miles from the Edisto river have been put under contract. But for sickness on the part of certain contractors, the work would have commenced before that time. Improvements in the location of the road have been made. Between the Ashley and Savannah rivers, the total length will be 86¾ miles. The balance of the line in Georgia has not been definitely located; but it is considered that the whole distance between Charleston and Savannah will not exceed 102 miles.

The cost of the 86¾ miles, including track, embankments, clearing, grubbing, trestling, bridging, masonry, and \$40,000 for two ferry boats, is estimated at \$12,050 per mile, or \$1,105,096 in all. Proposals have been invited for bridging the principal streams. The right to enter the corporate limits of Savannah has been established. An arrangement has been made with the Central Railroad Company for the use of their depot and tracks a short distance, for a period of three years, renewable for an equal length of time. The right of way for much of the distance has been obtained, and other parties have promised to grant the same when called on. The road will be the shortest and cheapest that can be made. Every river will be a feeder to it. A strong interest in its construction is felt by the citizens of Charleston and Savannah. A strong case is made out, not only for their sympathy, but active co-operation, if they mean to keep abreast with the other great commercial points, both on the Atlantic and in the interior.

Indiana Central Railroad.

We have received a copy of the above company's report for the fiscal year ending 31st December last. The earnings, expenses, &c., for this period were as follows:

Passengers.....	\$248,161
Freight.....	81,766
Mails, &c.....	20,249
Total.....	\$350,176
Working expenses.....	\$150,210
Paid to Dayton and Western R.	
R.....	65,591
	215,801

Net earnings.....\$184,375

Notwithstanding the unfavorable character of 1855, the gross receipts show an increase of \$23,760 over those of 1854. The present year, on account of the abundant crops to be exported, and the large passenger travel thus drawn to the line, is expected to show a large advance on both the gross and net earnings of last year. The road has been safely and economically managed. No accidents of any serious character have taken place. Their relations with the Dayton and Western company have continued to be harmonious and advantageous to both parties. The conveniences afforded by the line, its directness, and the new connections east and west, are making it a very popular route of travel.

Among those new lines which will become tributary to this road, are the Steubenville and Indiana, completed last summer to Newark on the Central Ohio road, the Pittsburg and Steubenville now in progress—these two shortening the dis-

tance to New York about 60 miles—the Western division of the Ohio and Mississippi, Terre Haute and Alton, Indiana and Illinois Central, besides roads connecting with these in Missouri and Iowa. During last year a large business has come from the Lafayette and Indianapolis and the New Albany and Salem roads. A new arrangement has been made with the Cleveland and Columbus company which formerly ticketed passengers and freight going in the direction of Indianapolis by the Bellefontaine road exclusively. In consequence of the late contract entered into between the Jeffersonville and the Madison and Indianapolis companies, the former will also in future be able to forward freight and passengers by the Indiana Central line, which they were previously prevented from doing. Much of the line has been fenced during the year, and the remainder will be proceeded with until the whole line is enclosed.

The Directors for 1856 are—Messrs Chas. Parry, Sam'l Hannah, John T. White, Wm. Petty, Joseph W. Jackson, David Commons, W. S. T. Morton, and John S. Newman. Mr. Newman is President; Chas. Parry, Vice President; John M. Commons, Secretary; Sam'l Hannah, Treasurer; Jas. M. Smith, Superintendent, and Henry L. Pope, Assistant Superintendent.

GENERAL ACCOUNT.

General construction account, including depot grounds and building, water stations, right of way, fencing, shops, discount on bonds and interest.....	\$1,665,330 24
Passenger cars.....	\$31,570
Freight do.....	\$9,650
Tools, machinery, & motive power.....	121,181
	242,581 00
Real estate not needed for the road.	114,410 00
Bills receivable and other dues....	40,625 00
Fuel on hand.....	5,575 00
Other materials on hand.....	14,425 00
Remittances to pay interest.....	55,400 00
Balance on hand.....	28,764 38
	\$2,167,110 62
Capital stock 12,234 shares.....	\$611,400 00
7 per ct. mortgage bonds conv'ble..	600,000 00
10 " " " " " " " " " " " "	598,050 00
Unfunded liabilities.....	63,129 00
Net earnings of the road.....	294,531 62
	\$2,167,110 62

Little Schuylkill Railroad.

This road is 28 miles in length, or, including sidings and double track, 40 miles, and extends from Port Clinton, on the Reading road, to a point about eight miles above Tamaqua, where it connects with the Catawissa, Williamsport, and Erie road. Its course follows that of the Little Schuylkill river. Last year, in consequence of the opening of connecting lines, a direct communication has been opened through this route, between Philadelphia and the North-west. In order to accommodate the business thus brought them, the company have re-laid some parts of their road, and on about seven miles put down a double track. They have now in use eleven locomotives, varying in weight from seventeen to thirty tons. Of these seven are coal-burners. As fast as convenient the old wood-burning engines are converted into those consuming coal. Compared with 1854, the year just closed shows a slight decrease in the transportation of coal—8,336 tons, from their own lands, and 9,640 from the Lehigh company's and other sources passing over their road. The cause of

this decrease was the heavy and frequent rains of last summer. This reduction, however, has been more than compensated by the increased receipts from other freight and passengers; while for the future, a greater revenue from both sources is anticipated.

A fire which had been communicated to some of their veins of coal, was promptly extinguished by a mode of proceeding successfully tried in Great Britain, viz: the injection by steam power of a gas which in contact with burning coal extinguishes it.

The following is an abstract of the company's business in 1855.

Railroad tolls on coal.....	\$119,559
Transportation ".....	100,801
Coal rents.....	77,031
Other freight.....	29,589
Passengers, express, and mails.....	19,099
Miscellaneous.....	7,222
	\$353,301

Expenses.....97,371

Profits.....\$255,930

From which have been paid—

Interest on mortgage and other loans.....	\$41,822
Sinking fund.....	10,000
State taxes.....	7,774
Coal lost.....	868
Dividends.....	182,680—243,144

Balance.....\$12,786

Making with balance from 1854, a surplus of \$108,323 on hand at the end of the year.

GENERAL ACCOUNT.

Land and improvements.....	\$1,502,070
Railroad, with buildings, sidings, &c..	1,373,270
Real estate at various points.....	207,670
Rolling stock.....	179,755
Other assets.....	144,885
	\$3,407,651
Capital stock.....	\$2,606,100
Mort. loan of 1860, unredeemed.....	438,500
Bills and accounts payable.....	107,722
Contingent and sinking funds.....	147,005
Profit and loss.....	108,324
	\$3,407,651

Sixth Av. (N. Y.) Railroad.

According to the annual report of the Sixth avenue Railroad, during the 13 months ending the 1st inst. the earnings for passengers' fares have been.....\$285,809 70

The receipts from all other sources.. 9,888 24

The nominal balance January 1st, 1855.....4,133 50

\$249,831 44-

The expenses and payments have been.....\$176,879 64

The dividends amounting to 7½ per cent. paid.. \$56,250 00

The entire old debt paid off.....16,384 50

The balance on 1st inst. 317 30

\$72,951 80

\$249,831 44

Less balance Jan. 1, 1856, as above.....4,133 50

Showing a net profit of...\$68,818 30

Being over 9 per cent. on the capital stock of \$750,000.

The entire floating debt of the company \$12,251 existing at the commencement of 1855 has been paid off.

Railroads in New York.

We condense the following statement of the business and financial condition of the railroads in this State, from the Annual Report of the Railroad Commissioners for the fiscal year ending 30th September last. Such of the roads as have already made separate reports are, of course omitted. In a few cases no returns were made to the Commissioners by the companies; and in others only with a good deal of difficulty. Our readers, however, will find a large amount of valuable information in what follows. We give the roads in the order published.

BUFFALO, CORNING, & NEW YORK R. R.

The authorized capital of this corporation is \$1,866,600, of which was paid in, at 30th September last, \$1,487,874. This consisted of (1) stock by original charter, of which \$1,400,000 was subscribed; and (2) stock issued by Act of March, 1854, into which a large portion of the original stock has been merged, under the provisions of that act.

The funded debt consists of first and second mortgages, of which the former was executed in April, 1852, for \$1,000,000, bearing seven per cent., convertible for five years, and maturing in 1867; the latter was made in June, 1853, for \$600,000, bearing seven per cent., not convertible, and maturing in 1878. Of the former were sold \$998,500, and of the latter \$477,900. Cash realized, \$1,806,438.

The floating debt, at same date, was \$24,783, being \$17,000 less than at the beginning of the year. It is now past due, and bears seven per cent. interest.

Total cost of road and equipment, including interest to stockholders and on funded and floating debt from construction fund, \$2,819,096. The total value of the company's property is estimated at \$2,901,311.

Of the whole road, 184¼ miles long, 100 miles are laid, and there are 8¼ miles of sidings or double track. Weight of rail used, 59 lbs. per yard. Number of locomotives, 8; of first class passenger cars, 9; of baggage, mail, and express do., 5; and of freight cars, 144. The whole line is well ballasted.

Total ascents and descents, 1,337 feet. Maximum grade, for five miles, 45 feet. There are 67 miles of straight line, and 33 curved. Minimum radius of curvature, 1,433 feet. The gauge of the road is six feet.

For the year, the mileage made by passenger trains was, 113,892; and by freight, 61,568. Number of passengers carried, 157,158. Tons of freight transported, 49,157.

Passenger earnings.....	\$84,027
Freight do.	78,075
Other sources	10,374

\$172,476

Expenses.....	\$106,143
Interest on funded debt	61,379

167,522

Balance (uncollected earnings).....\$4,954

No passenger, employee, or other party has been killed or injured by accidents, during the year.

The principal officers for the present fiscal year are—Chas. G. Miller, President; A. O. Comstock, Treasurer; F. Davis Jr., Secretary; and J. A. Red-

field, Superintendent. The company's principal office is at Avon, N. Y.

ROCHESTER & GENESSEE VALLEY R. R.

This is the name of a line, 18½ miles long, opened to Rochester from Avon, on the line of the B., C., & N. Y. road, and is leased to the latter company. Authorized capital, \$800,000, of which \$554,270 have been paid in. The funded debt consists of one issue of first mortgage bonds on road and fixtures for \$150,000, made September, 1854, and payable in 1864. The bonds bear seven per cent. interest, and are convertible. Cash realized from these, \$125,265. Floating debt, \$26,118, bearing seven per cent. interest, and payable on demand.

The total cost of road, equipment, and other expenditures to date, is \$693,961. Estimated value of the whole, \$558,893. One mile and a quarter are sidings or double track. The rail used weighs 57 to 59 lbs. per yard. The number of engines in use is three. When completed, the road will extend to Portage, a total distance of 49¾ miles.

On that part completed the sum of ascents and descents is 307½ feet. Maximum grade, 35 feet per mile. Total curvature, 3.18 miles. Minimum radius, 1,432 feet. The gauge is also six feet. The lessees furnish the necessary rolling stock.

During the year 22,012 miles were run by passenger, and 10,170 by freight trains. Number of passengers carried, 69,276. Tons of freight, 18,022. The earnings were—

Passengers	\$30,593
Freight	11,055
Miscellaneous	400

Total.....	\$42,048
Expenses.....	19,256

\$22,792

The following payments were also made. The report does not state from what source—

For interest on bonds.....	\$4,433
On stock held by city of Rochester.....	11,387
On other stock	13,385
For interest on floating debt.....	8,280

\$37,485

No serious accidents occurred.

James S. Wadsworth is President; Isaac Hills, Secretary and Treasurer; and McRee Swift, Chief Engineer. The company's principal office is at Rochester, N. Y.

BLOSSBURG & CORNING R. R.

The capital stock of this corporation is \$250,000, and has all been paid in. Shares, \$100 each. The funded debt amounts to \$220,000, which is \$25,000 less than at previous report. Floating debt, \$3,007, created last year. The funded debt consists of two issues of bonds secured by mortgages,—the former, executed to the State of New York for a loan, dated July, 1844, bears 5½ per cent. and matures in 1869. The latter owned by the Corning and Blossburg Company, was issued in November, 1851, bears seven per cent. interest, and falls due in 1871. The road was sold in July, 1855, and purchased by the present company for \$495,000, in which are included the bonded debt assumed by the new corporation. Its total cost, including equipment and other expenditures, is 496,038.

The principal characteristics of the work are as follows: Total length, 14.8 miles, of which 1.6

miles have double track. Weight of rail used, 58 lbs. per yard. Total ascents and descents, 70¾ feet. Maximum grade, 25½ feet for about 500 ft. Nearly two-thirds of its length are straight line. Minimum radius of curvature, 717 feet. The company own no locomotives nor cars, the line being operated by the Tioga company.

Number of miles run by passenger engines last year was 19,140; and by freight trains, 12,600. Number of passengers carried, 16,942; and of tons of freight, 126,479. The earnings for 1854-5 were—

Passengers	\$4,844
Freight	35,135
Other sources	314

\$40,293

Operating expenses not known.

The principal officers of this corporation are—John Magee, President; and Duncan S. Magee, Treasurer and Secretary. Office in Corning, New York.

CORNING & OLEAN R. R.

The authorized capital stock of this company is \$850,000, of which \$85,000 have been subscribed, and \$8,500 paid in. The floating debt amounts to \$10,000. No funded debt. At date of previous report, they had expended \$12,500 for engineering and agencies. No further expenditures in the year just closed. Length of line to be 80 miles. Weight of rail to be used, 70 lbs. per yard.

Hiram W. Bostwick is President and Superintendent; John Magee, Treasurer; and S. F. Darton, Secretary. Office at Corning, N. Y.

ERIE & NEW YORK CITY R. R.

This work is designed to extend from Erie, Pa., to the Erie road, at a point a few miles west of Olean, 63 miles in all. Operations were suspended last winter, and have not since been resumed. Amount of authorized capital, \$750,000. Of this, \$282,976 have been subscribed, and \$236,539 paid in. Par value of shares, \$50 each. The company own \$13,000 of funded, and \$12,610 of floating debt. The former bears seven per cent. interest, and falls due in 1874. Total cost of road, &c., \$264,733.

Wm. Hall is President; Robert Newland, Treasurer; W. D. Shaw, Secretary; and Thos. Hassard, Chief Engineer. Office at Jamestown, Chautauque county, N. Y.

ALBANY & SUSQUEHANNA R. R.

The capital stock of this company, as authorized by charter, is \$1,400,000, in shares of \$100 each, of which \$251,157 have been paid in. The total subscriptions amount to \$1,575,700. The entire debts are \$9,000, not funded. Total expenditure, \$223,016. The length of road from Albany to Binghamton, when completed, will be 140 miles.

The principal officers for 1855-6 are—Ezra P. Prentice, President; H. H. Hickcox, Treasurer and Secretary; and James P. Kirkwood, Chief Eng'r. Office at Albany, N. Y.

SYRACUSE & BINGHAMTON R. R.

The authorized capital of this company is \$1,200,000, of which \$832,500 have been subscribed, and \$768,369 paid in. Par value of shares, \$100 each. The company have executed two mortgages on the road and equipment. The first, for \$1,200,000, was made in Feb'y, 1854; and is payable in 1874, with interest at 7 per cent. Of this issue

\$1,152,500 were sold, realizing in cash \$904,491. The second, for \$300,000 at seven per cent., was executed in January, 1855, and matures in equal amounts, in four, five, six, seven, eight, nine, and ten years from date. Of the latter, \$222,850 have been sold for \$193,152. The whole funded debt is consequently \$1,375,350, to which is to be added \$203,454, the present amount of floating debt, making a total of \$1,578,804. The total cost of road and equipment, including discounts and other expenditures, is put at \$2,272,777. Total estimated value of the company's property, \$2,022,481. They have on hand and for sale real estate at various points, valued at from \$50,000 to \$60,000.

The total length of road laid is 79.7 miles, of which 5½ miles have double track or sidings. Weight of rail used, 60 lbs. per yard. The company own 13 locomotives, 18 passenger and baggage cars, and 114 freight cars. The line is well ballasted. Total ascents and descents, 1,511 feet, or 19 feet to the mile. Maximum grade, 52.8 feet. Over two-third of the road consist of straight lines. Minimum radius of curvature, 1,910 feet.

The number of passengers carried last year was 100,515; of miles run by passenger trains, 117,280. Freight carried, 41,518 tons; miles run by freight trains, 62,600.

Business for the year—

Passenger earnings.....	\$90,965
Freight do.....	63,880
Miscellaneous do.....	4,644
Total.....	\$159,484
Transportation expenses.....	\$136,981
Interest.....	54,641
	191,622

Deficiency.....\$32,133

The road was opened for public use in October, 1854.

Two persons, neither passengers nor employees, were killed during the year, while walking upon the track. Supposed to have been intoxicated at the time.

The principal officers for the present year are—Alfred H. Hovey, President; E. B. Wicks, Treasurer; C. F. Paige, Secretary; and W. B. Gilbert, Engineer and Superintendent. Office at Syracuse, N. Y.

CHEMUNG RAILROAD.

This road, 17½ miles long, extends from Jefferson to the junction with the Erie road, four miles west of Elmira, and is now leased to the Canandaigua and Elmira company. Amount of capital stock, by charter, \$380,000, which has all been subscribed and paid in. Par value of shares \$20 each. The funded debt amounts to \$70,000, is secured by a mortgage on the road and fixtures, dated July, 1859, and redeemable in 1859. Interest seven per cent. No floating debt. Road built by contract for \$450,000. Has no double track. Weight of rail used, 57 lbs. per yard. Total ascents and descents, 489 feet, or 28 feet per mile. Maximum grade 52.8 feet for 8¼ miles. Ten and a quarter miles consist of straight lines. Minimum radius, 853 feet for about 60 yards only. The company receive as an annual rent from the Canandaigua and Elmira road \$36,000, or 8 per cent on its cost.

Peter Tracy is President; Robt. Bayard, Vice-President; and Isaac Otis Secretary and Treasurer. Office, 38 Dey street, N. Y.

CANANDAIGUA AND ELMIRA RAILROAD.

The authorized capital of this corporation is \$1,600,000, of which \$462,700 have been subscribed, and \$434,111 paid in. Par value of shares, \$100. The funded debt amounts to \$800,000, and the floating debt to \$122,393. The bonds consist of the following classes, all bearing 7 per cent interest.

Charac- No. ter.	Amount.	Date of issue.	Date of ma- turity.
1	Convertible...\$300,000	July, 1850.	July, 1860.
2	Income.....200,000	Nov., 1851.	Nov., 1857.
3	Convertible...200,000	Feb., 1852.	Feb., 1862.
4	Convertible...100,000	April, 1853.	April, 1859.

The whole are secured by mortgage on the entire company's property; and in addition, the incomes are secured by all the company's receipts from date of issue to maturity. Cash proceeds of all the issues, \$894,841.

The total expenditure for road, equipment, &c., is put at \$1,275,796. Estimated value of the company's property, \$1,186,134. Length of road 46.8 miles, laid with a rail of 57 lbs. per yard. The company own 10 locomotives, 11 passenger and baggage cars, and 67 freight cars. Length of leased lines, 21.6 miles. Total distance operated, 68½ miles. No double track.

The ascents and descents amount to 1,087 feet, or 23 feet per mile. The maximum grade is 37 feet per mile for 18 miles. Of the whole distance 35 miles are straight lines. Minimum radius of curvature, 631 feet for a short distance.

The number of miles run by passenger trains last year was 92,082, ditto by freight trains, 52,058. Number of passengers carried, 143,081; tons of freight transported 31,036. The earnings were—

Passengers.....	\$109,473
Freight.....	55,617
Other sources.....	8,999

Total.....	\$174,089
Transportation expenses.....	\$104,583
Interest.....	41,320
	145,903

Balance.....\$28,186
Besides the above the company paid \$36,000 for rent of the Chemung road, \$96,084 of floating debt, and \$1,803 for use of cars.

Four fatal accidents occurred, during the year, three of which happened to parties trespassing on the line. The fourth occurred in consequence of a tree being blown across the track. No blame attached to the company in any case.

Simcon Benjamin is President; Marvin Beeman, Treasurer; F. W. Paul, Secretary; and W. G. Lapham, Engineer and Superintendent. Office at Canandaigua, N. Y.

CANANDAIGUA AND NIAGARA FALLS RAILROAD.

The authorized capital of this corporation is \$1,500,000, of which \$1,350,000 have been subscribed, and \$1,315,000 paid in. Par value of shares, \$100 each. The funded debt is \$2,170,000; and the floating, \$109,854. The former consists of the following issues:

No. 1. Sterling loan for £208,000 (equal to \$1,000,000) issued March, 1852, bears six per cent. interest, matures in April, 1862. Cash realized, \$900,000. Principal and interest payable in London. Bonds convertible, secured by mortgage and sinking fund.

No. 2. \$750,000, issued 1st Aug., 1853, falls due in August, 1863, bears seven per cent interest, pay-

able in New York. Bonds convertible and secured by mortgage. Proceeds of sales, \$600,000.

No. 3. \$600,000 of which only \$420,000 have been sold, realizing an equal amount. Date of issue, 1st December, 1853; matures in Dec., 1863. Interest, seven per cent. Bonds convertible and secured by mortgage.

All the floating debt is past due and mostly in judgment. Interest seven per cent.

The total cost of road and equipment, including discounts, losses, &c., is put at \$3,495,832. Estimated value of the company's property, \$3,207,200.

The total length of road from Canandaigua to Suspension Bridge is 98½ miles, of which nearly seven have double track or sidings. The company also own a branch line, 1¼ miles long, extending from the Falls to Suspension Bridge. The weight of rail used is 57 lbs per yard. Number of locomotive engines, 11, of passenger and baggage cars, 20; and of freight cars, 230.

Sum of ascents and descents, 1,346 feet, or 15½ feet per mile. Maximum grade, 42 feet for nearly five miles. Of the whole length 78½ miles are straight lines. Minimum radius of curvature, 882 feet.

This road was leased to the C. & E. company up to June, 1855. In July, it passed into the hands of J. P. G. Foster, as lessee. For the three months ending September 30th, there were 32,072 passengers carried, and 7,353 tons of freight.—The earnings for the same period, including June, were—

Passengers.....	\$45,764
Freight.....	11,374
Other sources.....	2,628

Total.....	\$58,766
Transportation expenses.....	70,839

Deficiency.....\$12,073

No fatal accidents occurred. The several sections of the road were opened for public use at the following dates:

Canandaigua to Batavia.....	50 miles Jan., 1853.
Batavia to Niagara Falls.....	47 " July, 1854.
Niag. Falls to Susp'n Bridge.....	1¼ " April, 1854.

Sam'l Rand is President; J. P. G. Foster, Lessee; J. C. Sibley, Secretary; and R. A. Brown, Engineer and Superintendent. Office at Niagara Falls, N. Y.

NIAGARA FALLS AND LAKE ONTARIO RAILROAD.

This work is in progress of construction, being designed principally as a feeder to the last named line. It will extend from Suspension Bridge to Lake Ontario at Youngstown. Authorized capital stock, \$200,000, in 2,000 shares, the whole of which has been subscribed, and \$188,620 paid in. The funded debt consists of a single mortgage on road and equipment for \$200,000, executed in June, 1853, and maturing in 1863. Interest, seven per cent. Par value of bonds realized. There is also the sum of \$30,290 due as floating debt. The total expenditures amount to \$393,729.

The line is a little over 13 miles long, and is laid with rail weighing 57 lbs per yard. No double track. Sum of ascents and descents, 363 feet.—There are only 19 feet of the former going north. Maximum grade, 59 feet, for about a mile and a half. Nine and a half miles consist of straight lines. Minimum radius of curvature, 1,146 feet for a few yards only.

George Wright is President; W. S. Mallory, Treasurer; J. C. Sibley, Secretary; and R. N. Brown, Engineer and Superintendent. Office at Niagara Falls, N. Y.

UTICA & BINGHAMPTON R. R.

The Utica and Binghampton Railroad Company were organized in June, 1853, and surveys of the route made in December of the same year. The length of the line will be about 91 miles. The authorized capital stock is \$1,000,000, of which \$500,000 have been subscribed. Par value of shares, \$100. The capital paid in is \$16,500. Total expenditure to date, \$11,146.

The present directory officers are—A. J. Williams, President, and J. W. Williams, Secretary and Treasurer. Office at Utica N. Y.

OAYUGA & SUSQUEHANNA R. R.

The road is leased by the Delaware, Lackawanna, and Western Railroad Company. The authorized capital is \$1,500,000, of which \$687,000 have been subscribed and paid in. Par value of shares, \$60 each. The other liabilities consist of \$500,000 funded and \$6,889 floating debt. The former consists of the following classes:

No. 1. \$300,000 issued Jan'y 1st, 1850, and matures in 1865. Rate of interest seven per cent. Cash realized, \$290,196.

No. 2. \$100,000 issued Jan'y 1st 1852, matures 1862. Interest at seven per cent. Cash realized, \$100,000.

No. 3. \$100,000 issued January 2d, 1854, falls due 1864. Interest at seven per cent. Cash realized, \$75,000.

The first and last are secured by mortgage.—The last is also convertible.

Total expenditure for road, equipment, and other purposes \$1,187,562. Estimated value of the company's property, \$971,976. Length of road 34.6 miles, $3\frac{1}{2}$ having double track or sidings.—Weight of rail used, 58 lbs. per yard. Rolling stock owned by lessees. Sum of ascents and descents, 868 feet, or an average of 25 feet per mile. Maximum grade 79.4 feet, for nearly $3\frac{1}{2}$ miles. Over one half the length consists of straight lines. Minimum radius of curvature, 800 feet.

For the last year the business shows that 21,313 miles were run by passenger, and 63,533 miles by freight trains. Number of passengers carried, 31,189; and of tons of freight, 127,516. The earnings were—

Passengers	\$19,442
Freight	106,138
Other sources	9,593
	<hr/>
	\$135,433
Transportation expenses	\$86,784
Interest on debt	37,711
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	124,495
	<hr/>
Balance	\$10,938

During the year, the sum of \$24,631 was applied to the liquidation of the floating debt. One fatal accident (to an employee) is returned.

The road was opened through to Ithaca in June, 1850.

Thos. W. Gale is President; Theodore Sturges, Treasurer and Secretary; and William R. Humphrey, Superintendent. Office in New York City.

LAKE ONTARIO, AUBURN & NEW YORK R. R.

This company suspended operations soon after the date of their report for 1854, the road then in process of construction having been sold, on fore-

closure of mortgage. The old company have consequently ceased to exist.

UNION R. R.

Capital stock, \$50,000—all paid in. Funded debt, \$50,000, bearing seven per cent. interest.—Cost of road and equipment, \$50,000. This line is leased to the Erie company, and operated as a part of their own road, for which they pay an annual rent of \$3,500. The President of this corporation is Robert Bayard.

NEW YORK & ERIE RAILROAD.

The authorized capital stock of this company is \$10,500,000. Of this, \$10,023,958 have been subscribed and paid in. The funded and unfunded indebtedness amounts to \$25,902,540. The former consists of the following issues, all bearing seven per cent. interest, payable in the city of New York.

Date of issue.	Date of mat'y.	Amount.	Cash realized.	Char. act' of realized security.
1 1847	1867..	\$3,000,000	\$2,721,465	Mort.
2 1859	1859..	4,000,000	3,538,925	"
3 1851	1871..	4,351,000	3,999,107	Con.
4 1852	1862..	3,500,000	3,118,434	"
5 1853	1883..	6,000,000	5,635,435	Mort.
6 1855	1875..	4,000,000	3,200,000	S.f.d.
		<hr/>	<hr/>	
		\$24,851,000	\$22,213,366	
Floating debt....		1,051,540		

Total

The floating debt nearly all falls due in 1856.

The total cost of road and equipment are put at \$33,742,317, consisting of the following items:

Graduation, masonry, and bridging.....	\$13,570,664
Superstructure, including iron.....	6,590,442
Passenger and freight stations, &c.....	825,312
Engine and car houses.....	427,347
Land, land damages and fences.....	1,209,143
Locomotives and fixtures.....	2,013,528
Passenger and baggage cars.....	332,773
Freight cars.....	1,719,907
Engineering, agencies, and salaries....	850,578
Construction prior to 1845.....	1,355,416
Contingencies.....	190,652
Interest on 1st mort. bonds to 1851....	499,944
Interest (previous to 1853).....	1,651,694
Steamboats, barges, depots, harbor improvements, and telegraph.....	374,988
Discount on bonds sold.....	2,130,029
	<hr/>
	\$33,742,317

As to the value of the company's property, it is believed to be, in the aggregate, equal to the original cost. In addition to their road and equipment, the company own—

Two steamboats and seven barges, on the ferry between New York and Piermont, cost.....	\$213,527
One-third interest in steamers "Queen City" and "Queen of the West," on Lake Erie.....	143,723
Five propellers used on Lake Erie in transportation of passengers.....	88,878
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	\$446,128

The length of main line is 445 miles; of double track and sidings, 265; and of branches owned by the company, 19 miles—making a total of 729 miles. Weight of rail used, 58 to 75 lbs. per yard. Number of engine houses and shops, 19.—Number of locomotives, 203; of first-class passenger cars, 97; of baggage, mail, and express do., 43; of second class and emigrant do., 28; and of freight cars, 2,770. In addition to their own line of road, as given above, they have leased the following lines:

	Miles.
Paterson and Hudson river railroad.....	14 $\frac{1}{2}$
Paterson and Ramapo railroad.....	15
Union railroad, from State line to Sufferns....	$\frac{1}{4}$
Buffalo and New York City railroad.....	91

Total.....120 $\frac{3}{4}$
Making the entire distance operated.....584 $\frac{3}{4}$

There are 203 bridge structures on the line, having 427 spans in all, and a total length of 26,614 feet. The number of switches is 727, about half of which have permanent tenders. Number of cross-ties per mile, 2,934, (on new track,) being on an average 6x6 and 9 feet long. Number of chairs per mile, 600, having an average weight of 18 $\frac{1}{2}$ lbs. Sum of ascents going west, 4,323 feet; do. going east, 3,732 feet; making a total of 8,056 feet, or 18 ft. per mile. Maximum grade per mile, 60 feet for thirty-four miles in all. Sum of straight lines, 283 $\frac{3}{4}$ miles; and of curved, 161 $\frac{1}{4}$. Total degrees of curvature, 22,252, or 138° per mile on the curved part. Minimum radius of curvature, 799 feet for about one-fourth of a mile.

Of the locomotives in use, four weigh less than 20 tons, with wood and water; 16 weigh from 20 to 25 tons; 93, from 25 to 30; and 90 weigh 30 tons or over.

Total number of cars of all descriptions, 3,237.

For the year, the number of miles run by passenger trains, was 1,464,839; and by freight, 1,676,500. Number of passengers carried, 1,033,392; tons freight transported (2,000 lbs.) 842,054. Average distance traveled by passengers, about 83 miles. The rate of speed for express trains is 32 miles per hour, when in motion, or 26 miles including stops; for ordinary passenger trains these respective rates are 26 and 20 miles; and for freight trains, 13 and 7 miles per hour. Average weight of passenger trains, exclusive of load, 12 tons; do., including passengers and baggage, 100 tons. Weight of freight trains, 192 without, and 400 tons with freight. Average fares charged for all classes of passengers, 2.02 cents per mile; average charge per ton on freight, 2.42 cents per mile.

Business for the year—

Passenger earnings.....	\$1,698,670
Freight	3,653,002
Miscellaneous.....	137,321

Total	\$5,488,993
Transportation expenses.....	\$908,031
Freight	1,717,714
Taxes.....	54,583

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	\$2,680,328
Int. on funded debt.....	1,664,890
Int. on floating debt.....	128,808
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	4,474,026

Balance.....\$1,014,967
The details of the above were lately published in the *Journal*.

"The chapter of accidents," consists of 14 employees, 3 passengers, and 19 others killed. Of the wounded were 15 employees, 1 passenger, and 4 others. In reading over the list, it is sad to think what a number of fatalities are constantly occurring from the mere circumstance of strangers carelessly walking along or crossing the track, while trains are passing.

The principal officers for this year are—Homer Ramsdell, President; Daniel Drew, Treasurer; Nathaniel Marsh, Secretary; B. E. Bremner, Acting-Auditor; and D.C. McCallum, Superintendent. Principal office of the company in New York.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.]

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	6	68		Tennessee and Alabama	80	248,486	679,906	In progr.				
Androscog. & Kennebec	55	642,343	1,475,080	2,245,020	190,605	90,797	none	16	Tennessee and Mississ.	22	170,931	175,840	In progr.				
Androscoggin	20	51,192	232,193	843,317	29,360	12,907	none	20	Memphis and Charleston	288	2,103,177	3,563,362	176,484	102,016			
Kennebec & Portland	56	1,114,725	1,681,236	2,470,600	259,330	124,038	6	88	Mobile and Ohio	527	2,300,000	3,666,991	In progr.				
Portl., Saco, & Portland	51	1,367,000	119,237	1,486,237	233,234	120,834	none	14	Miss. Central	188	642,534	628,303	In progr.				
Portland, Orono, & Montreal	93	1,808,093	1,050,612	2,771,310	372,892	151,015	none	18	N.O., Opelousas & G.W.	350	1,309,428	1,825,812	In progr.				
Cheshire	53	2,083,825	946,919	3,181,997	329,744	158,632	8	82	Vicksburg, Shreveport & Tex.	111	1,000,000	1,500,000	In progr.				
Concord	35	1,485,000	none	3,016,633	370,529	138,299	2 1/2	40	East Tennessee and Ga.	16	625,425	1,033,731	In progr.				
Northern, N. H.	32	2,768,400	787,008	1,780,062	182,887	55,173	none	---	East Tennessee and Va.	151	2,319,330	3,843,694	316,090	112,177	none		
Conn't & Passumps. Riv.	120	2,233,376	2,662,396	5,378,428	394,971	none	---	---	Covington & Lexington	93	431,091	159,299	635,363	90,930	34,864		
Rutland & Burlington	117	5,000,000	3,550,236	8,463,366	620,119	214,799	none	65	Lexington and Frankfort	29	540,117	140,000	428,057	In progr.			
Vermont Central	27	1,830,000	325,635	2,188,595	480,754	102,942	4 1/2	50	Lexington and Big Sandy	65	680,236	669,061	1,589,566	244,014	96,902	6	
Boston and Lowell	53	4,076,974	150,000	4,179,535	906,790	421,561	8	79	Lexington and Danville	254	866,939	77,294	613,231	In progr.			
Boston and Maine	21	600,000	none	600,000	102,352	42,335	none	2 1/2	Louisville and Frankfort	118	1,881,698	1,200,612	2,806,821	238,010	114,592	none	30
Berkshire	74	2,234,600	1,200,000	3,310,948	102,352	42,335	none	2 1/2	Atlantic & Gt. Western	141	4,473,721	374,127	4,546,133	1,162,801	557,905	9	101 1/2
Boston and N.Y. Central	55	3,160,000	850,705	3,811,821	201,578	201,578	none	64	Bellefontaine and Ind.	87	2,075,425	2,069,301	5,124,629	736,272	396,986	10	81 1/2
Boston and Worcester	62	4,500,000	655,428	4,865,489	1,008,004	404,461	6 1/2	86 1/2	Cleveland and Erie	133	2,686,370	2,618,162	4,818,153	450,215	255,868		69 1/2
Connecticut River	68	1,911,110	284,043	1,802,244	277,770	102,942	4 1/2	50	Cleveland and Mahoning	103	2,100,000	1,464,364	2,961,978	483,690			61
Eastern, Mass.	20	2,683,400	2,850,325	4,447,469	730,269	346,425	7	44 1/2	Cin., Wilm. & Zanesville	131	1,120,450	1,181,255	2,326,459	356,366	187,518	10	82 1/2
Essex	67	3,640,000	334,992	3,730,995	704,638	272,716	6	72	Cot. and Xenia	55	1,454,550	140,000	1,451,733	356,366	187,518	10	82 1/2
Fitchburg	14	238,140	74,099	333,884	42,647	19,274	6	---	Columbus and Xenia	63	437,838	422,658	860,496	In progr.			
Fitchburg and Worcester	12	200,000	140,000	363,658	56,135	23,823	6	83 1/2	Dayton, Xen. & Belpre	140	1,076,692	393,011	1,155,826	In progr.			
Lowell and Lawrence	14	600,000	16,000	654,003	191,891	56,533	6 1/2	---	Dayton and Michigan	42	448,411	835,994	1,345,573	113,559	53,256		28
Nashua and Lowell	21	500,000	none	533,963	198,491	56,533	6 1/2	---	Easton and Hamilton	65	2,963,921	1,171,785	3,648,172	681,562	336,708		90
N. Bedford and Taunton	14	137,280	164,554	287,413	32,677	4,666	none	---	Mad River and L. Erie	205	2,451,650	2,572,932	4,446,661				18
Newburyport	57	3,015,100	314,834	3,434,164	649,556	142,800	6	82	Central Ohio	138	1,520,927	3,485,076	4,288,443	Recently opened.			none
Old Gory and Fall River	18	460,000	none	460,000	50,896	25,619	6	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	
Pittsfield & Nth Adams	77	2,232,540	1,046,626	3,207,867	275,522	56,383	none	11 1/2	Pittsburg & Mayv. & Cin.	127	1,350,000	2,206,357	3,552,357	328,958	104,479	none	
Vermont and Mass.	155	5,150,000	5,889,520	9,953,258	1,763,944	718,703	7	89	Sandusky, Mansf. & Newk'.	135	403,975	509,050	888,858	In progr.			
Western, Mass.	46	1,141,000	218,244	1,394,708	209,118	82,959	2 1/2	43	Scioto & Hocking Valley	113	1,000,000	950,000		In progr.			
Worcester and Nashua	43	1,522,200	351,500	1,943,332	316,616	131,312	7	65	Spring, Mt. Vernon & P.	242	2,500,000	4,530,000		In progr.			
Providence and Worcester	72	2,356,000	939,000	3,313,932	730,012	352,799	10	123	Tol., Wabash & St. Louis	255	4,196,079	1,006,125	2,080,433	In progr.			
Hartford and N. Haven	123	1,845,610	2,090,124	4,060,869	268,685	119,611	none	---	Cin., Log. and Chicago	109	706,945	1,177,596	1,844,641	127,400	64,582		10
Hart'd, Prov. and Fishkill	110	2,000,000	474,177	2,429,066	330,792	18,351	none	---	Evanston & Crawford	98	1,213,723	1,442,859	2,178,461	356,012	193,142	7	59
Housatonic	67	1,031,800	753,995	1,577,167	328,266	none	4	---	Indiana Central	83	834,157	1,101,971	1,671,544		184,224		60
Naugatuck	62	2,992,000	2,252,647	4,980,407	906,018	336,611	none	30	Ind., Cleve. & Pittsburg	66	1,014,252	694,000		206,544	94,318	none	20
N. York and N. Haven	50	733,285	735,165	1,450,318	103,986	217	none	---	Jeffersonville	64	1,647,500	1,559,881	3,237,351				none
N. Haven and N. London	66	500,000	1,007,826	1,627,827	137,000	3,717	none	---	Lafayette and Indianapolis	87	2,535,121	2,531,948	6,643,189	645,827	371,402	none	10
N. London & W. & Palmer	66	1,222,300	796,886	2,599,488	304,651	95,456	6	25	Madison and Indianapolis	288	5,831,814	5,831,814	165,000	90,000			15
Norwich and Worcester	100	1,482,766	1,402,244	2,597,963	123,147	50,752	none	---	New Albany and Salem	73	974,800	804,355	1,502,166	287,512	189,702	10	95
Buffalo, Conn. and N. Y.	92	793,439	2,577,849	3,401,868	254,770	52,030	none	---	Peru and Indianapolis	182	3,141,500	2,387,155	6,214,162	In progr.			
Buffalo and N. Y. City	31	1,300,000	1,030,000	2,343,849	507,818	264,815	10	---	Chicago and Rock Is'd	220	2,300,000	1,325,000	3,925,000	In progr.			
Buffalo and St. Line	35	687,000	531,318	1,093,624	120,849	58,589	none	---	Chicago and St. Louis	298	4,334,800	1,189,304	5,666,283	1,506,710	942,231	17	112 1/2
Cayuga & Susquehanna	144	3,757,891	8,933,804	12,391,363	1,758,968	603,010	none	36	Chic. St. Paul & P'd du Lac	178	2,281,420	1,256,000	3,537,424	In progr.			
Hudson River	86	1,875,148	626,958	2,518,261	779,520	102,657	none	34	Galena and Chicago	707	1,419,440	18,001,426	17,698,099	1,532,118			97 1/2
Long Island	534	24,154,980	14,462,742	29,523,913	6,563,581	3,162,126	8	93 1/2	Peoria and Okauwika	93	669,889	818,454	1,388,342	In progr.			
New York Central	464	10,023,958	25,126,699	33,439,431	5,488,963	2,627,118	none	59 1/2	Ohio & Miss. (West. Div.)	147	1,780,295	3,292,408	4,870,586	Recently opened.			
New York and Erie	133	5,710,050	3,627,595	8,127,388	942,394	154,854	none	28 1/2	Terre Haute and Alton	178	2,281,420	1,256,000	3,537,424	In progr.			
New York and Harlem	119	1,811,627	4,622,413	5,435,565	118,527	145,733	none	---	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.			
Northern, N. Y.	37	374,920	219,594	677,754	106,764	53,380	none	---	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,556		94 1/2
Oswego and Saratoga	25	610,000	140,000	888,182	231,348	76,327	5	---	Mich. South'n & N. Ind.	155	764,075	442,726	1,193,768	In progr.			
Rensselaer & Saratoga	54	899,900	1,053,234	1,891,993	138,959	37,666	none	---	Green Bay, Mil. & Ch.	106	1,826,428	2,467,889	3,678,757	691,843	417,443	17	87
Saratoga and Washington	71	731,614	1,118,751	1,638,117	Recently opened.	none	---	---	Milwaukee and Water'n	72	354,861	132,000	81,000	In progr.			
Syracuse & Bingham'n	27	439,492	493,500	1,107,473	152,648	66,407	none	---	Milwaukee and Horicon	92				In progr.			
Troy and Boston	97	1,370,428	854,768	2,040,643	393,954	152,752	6	65	Milwaukee & La Crosse	69				In progr.			
Watertown and Delaware	94	1,500,000	1,177,376	2,177,376	1,632,486	552,456	12	---	Racine and Miss.	68				In progr.			
Camden and Delaware	60	240,125	1,269,223	1,499,185	96,673	61,700	none	---	Hannibal & St. Josephs	13	292,351	580,000	823,310	In progr.			
Camden and Atlantic	31	3,253,925	798,596	4,306,338	824,932	440,447	10	124 1/2	North Missouri	130	2,908,692	3,903,174	6,463,726	160,000			
New Jersey Central	75	2,000,000	1,632,085	3,506,226	378,145	100,796	7	---	Pacific	49	3,743,900	6,564,852	628,850	416,766	9 1/2	105	
Morris and Essex	62	1,155,715	351,500	1,549,622	323,596	96,377	6	---	Loan, 5 per ct.					1856-1103 1/2			
Allegheny Valley	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Do. 6 do.					1862-1110 1/2			
Cataw. W. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Do. 6 do.					1867-1116 1/2			
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Loan, 6 per ct.					1868-1116 1/2			
Del. Lark. & Western	109	2,865,175	1,865,897	4,140,368	In progr.	---	---	---	Do. 6 do.					1868-1116 1/2			
Erie and North East	20	600,000	150,000	750,000			10	---	Do. 6 do.					1868-1116 1/2			
Philad. & Sunbury	33	600,000	1,200,000	1,348,812	89,535	53,335	---	---	Do. 6 do.					1868-1116 1/2			
Little Schuylkill	28						---	---	Do. 6 do.					1868-1116 1/2			
Northern Penn.	19	2,530,555	731,492	3,287,678			---	---	Do. 6 do.					1868-1116 1/2			
Pennsylvania	216	12,355,525	7,619,096	18,483,489	3,533,333												

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	600,000	Do. Do. convertible	7	April, October	"	1866		
Belleville and Indiana	600,000	Do. Do. convertible	7	Jan'y, July	"	1866	90	95
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	90	92½
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	75	
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	93	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,900,000	Do. Do. convertible	7	May, Novemb.	"	1862		90
Cleveland, Painesville, and Ashtabula	587,000	Do. Do. convertible	7	Feb'y, August	"	1861		
Cleveland and Pittsburgh	800,000	Do. Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	85
Cleveland and Toledo	525,000	Do. Do. convertible	7	Feb'y, August	"	1863	87½	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	86	
Do. do.	1,200,000	Do. Do. convertible	7	April, October	"	1862-72	86	
Covington and Lexington	400,000	Do. Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	65	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	84	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. Do. convertible	7	Feb'y, August	"	1863	99	100
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90	91
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	90
Green Bay, Milwaukee, and Chicago	400,000	Do. Do. convertible	8	10 April, 10 Oct.	"	1863	93	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. Do. do.	7	Jan'y, July	"	1860-61	92	
Indianap. & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76	
Little Miami	1,500,000	Do. Do. convertible	6	2 May, 2 Nov.	"	1853	79	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	98	100
Do. do.	600,000	Do. Do. do.	8	March, Sept.	"	1869	100½	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	98
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	94	95
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	82½	
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	80	
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. Do. do.	7	Feb'y, August	"	1867	90	100
Ohio and Pennsylvania	1,750,000	Do. Do. do.	7	Jan'y, July	"	1865-66	92	95
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1880	6	Jan'y, July	Phila.	1850	93	95
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N.Y.	1861	83½	
Steuernville and Indiana	1,500,000	Do. Do. convertible	7	Jan'y, July	"	1865		78
Terre Haute and Indianapolis	600,000	Do. Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. Do. do.	7	Feb'y, August	"	1862-72	77	
Do. do.	2,000,000	2d do. Do. do.	8	Feb'y, August	"	1870	78	80

The following quotations include face accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,128,500	Do. Do. do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	93	94
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107½	108
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	99	100
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	96½	97
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90	90½
Do. do.	4,851,000	Convertible, Inscription	7	Feb'y, August	"	1871	82½	83½
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	86	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99½	100
Do. do.	2,000,000	2d do. Do. do.	7	16 June, 16 Dec.	"	1860	85	86
Do. do.	3,000,000	3d do. Do. convertible	7	May, Novemb.	"	1870	69	69½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87½	87½
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	89	90
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92½	95
New York and Harlem	1,800,000	Do. Do. do.	7	May, Novemb.	"	1861-72	85½	85½
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60		
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		97½
Northern Indiana	1,000,000	Do. Do. do.	7	Feb'y, August	"	1861	91	93
Do. Goshen Branch	1,500,000	Do. Do. do.	7	Feb'y, August	"	1868	85	85½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	87	87½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101	101½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	105	106
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	105	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. Do. convertible	6	Jan'y, July	"	1860	90	91
Do. do. 1849	3,469,000	Do. Do. inconvertible	6	April, October	"	1870	87	89

CITY SECURITIES.	Int'at payable.	Off'd Ask'd p. ct.	CITY SECURITIES.	Int'at payable.	Off'd Ask'd p. ct.
New York, 7 per ct. 1857	Feb'y, May, August and November	100	Milwaukee, 7 per ct. coup.	X Divers	81
Do. 5 do. 1858-'60		97	New Orleans, 6 per ct. cp. R.R. X	Do.	78
Do. 5 do. 1870-'75		99	Philadelphia, 6 per ct. 1876-'98	Jan'y, July	90½
Albany, 6 per ct. coup. 1871-'81	X Feb'y, August	95	Pittsburgh, 6 per ct. coup.	X Divers	75
Allegheny, 6 per ct. coup.	X Jan'y, July	68	Quincy, 8 per ct. coup.	X Jan'y, July	94
Baltimore, 6 per ct. 1879-'90	Quarterly	97	Racine, 7 per ct. coup.	X 10 Feb'y, Aug.	81
Boston, 5 per ct. coup.	X April, October	98	St. Louis, 6 per ct. coup. Long X	Divers	79
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99	Do. Municipal.	X Do.	79
Clev'Pd, 7 per ct. cp. W.W. 1879	X Do. do.	100	Sacramento, 10 p. ct. cp. 1862-'74	X Do.	79
Cincinnati, 6 per ct. coup.	X Divers	88	S.F. & Co. 7 p. a. cp. 1865, pay. N.Y. X	May, Novemb.	82
Chicago, 6 per ct. coup. 1873-'77	X Jan'y, July	88	Do. 10 p. ct. cp. 1871	X Do.	94
Detroit, 7 per ct. cp. W.W. 1873-'78	X Feb'y, August	101	Do. 10 do. pay. N.Y.	X Jan'y, July	98
Louisville, 6 per ct. cp. 1880-'83	X Divers	78½	Wheeling, 6 per ct. coup.	X Divers	70
Memphis, 6 per ct. coup. 1882	X Jan'y, July	65	Zanesville, 7 do.	X April, October	97½

Cincinnati Stock Sales,

By KIRK & CHEEVER.

For the week ending February 12th, 1856.

BONDS.	Per ct.
Marietta & Cincinnati, 7 per cent. 1st Mort.	70
Indianap. & Cin., 2d Mort. 7 per ct.	76½
Cin., Wil. & Zanes, 2d Mort. 7 per ct.	60
Covington & Lexington, 2d Mort. 7 per ct.	65
Ohio & Mississippi, 2d Mort. 7 per ct.	48
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	60
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	87½

STOCKS.

Cin., Wil. and Zanesv., 10.—Cin., Ham. and Dayton, 62½.—	
Col. & Xenia, 82½.—Cincinnati & Chic., 9.—Central Ohio, 15.—	
Covington and Lexington, 20.—Dayton and Western, 20.—	
Eaton and Hamilton, 28.—Fort Wayne and Southern, 10.—	
Indiana Central, 60.—Indianapolis and Cincinnati, 59.—Little	
Miami, 89.—Mad River and Lake Erie, 18.—Marietta and Cin.,	
17.—Ohio and Mississippi, 4.—Hillsboro' and Cincinnati, 17.—	
Junction (Indiana), 10.	

By HEWSON & HOLMES.

For the week ending February 13th, 1856.

BONDS.	Per ct.
\$1,500 Cov. & Lex., 6 per ct. Income	41
6,000 Cin., Wil. & Zanesv., 7 per ct. 2d Mort.	62
4,000 Cov. & Lex., 7 per ct. 2d Mortgage	67½
2,000 Little Miami, 6 per ct., 1st Mort.	80 (& int.)
1,000 Cin. Western, 8 per ct. Real Est. duell'g	42½
3,000 Little Miami, 7 per ct., due 1st July, 1858	96
5,000 Ohio & Miss., 7 per ct. 2d Mort.	42
1,000 Ind. & Cin. 7 per ct. 2d Mort.	77½
3,000 Hillsboro' & Cin., 7 per ct. 1st Mort.	60
395 Little Miami, Dividend Scrip, June issue	90
1,000 Columbus & Xenia, Divid.	90
1,800 Indianap. & Cin. 7 per ct. Dividend	68

STOCKS.

104 Shares Ohio & Mississippi	5½
500 " " "	6 " "
125 " " "	5 " "
40 " " "	4½ " "
444 " " "	4½ " "
220 " " "	4½ " "
250 " " "	4 " "
153 " " "	6½ " "
100 " " "	6½ " "
10 " Eaton & Hamilton	25
160 " Cin. & Chicago	9
173 " " "	18½
20 " Cincinnati, Hamilton, & Dayton	62
50 " Columbus & Xenia	84
36 " Indianapolis and Cincinnati	58
15 " Little Miami	90
100 " Central Ohio	18
62 " Bellefontaine & Indiana	80

Extract from the Circular of Robt. Benson & Co., per Canada.

LONDON, Feb. 1st, 1856.

Public confidence, in the probability of peace being established, continues unabated. Yesterday Parliament was opened, and while the speech from the Throne, and the explanations from the Ministers, express the determination of the Government to relax no Naval or Military preparations, yet, at the same time, they show that the propositions of peace have been accepted with an earnest desire to bring them to a successful conclusion. These explanations show that there is the most perfect accord between the Allied Governments, and that peace is believed to be desired by Russia. Notwithstanding, however, this prevailing opinion, in favor of the probability of peace, Consols do not quite maintain the highest point they attained during the week, in consequence of the tightness of the Money Market. On the 25th ult. we quoted them at 90¼a½, they subsequently advanced to 90¾a½, and to-day we quote them at 90¾a½ for Money, and 90¾a91 for the account.

Money has been in very active demand on the Stock Exchange, and in some instances very high rates have been paid for temporary accommodation. We may, however, quote the current rate on Government securities at 6 per cent, and on Foreign Securities from 8 to 6 per cent. In Paris the report of the Queen's Speech was favorably received. The upward tendency of prices there, however, as well as here, is checked by the extreme dearthness on Money which will probably continue for some time.

There has been an active demand for American Securities during the past week; confined chiefly however to those Railroad Bonds which have obtained currency in this market. Illinois Central 7 per cent Bonds, have been sold at 78a80, and to-day are worth 79. Freeland Bonds at 83 to 85, and are now offered at the latter price. The shares of this company have changed hands at 2 discount. New York Central 6 per cent Bonds: have been

sold at 83 per cent.; and the 7 per cent Bonds at 96a97. Of the New York and Erie, there have been transactions in the 3d Mortgage at 87a88; and in the 1862 Bonds at 78. We quote Michigan Central 8 per cent Bonds at 96; Pennsylvania 1st Mortgage at 88 a89; and 2d Mortgage Sterling at 90a91. There has been a little enquiry for United States Stock at 106; and we may quote the price of Alabama 5 per cent Sterling Bonds at 86; Maryland 5 per cent Sterling at 89a90; Pennsylvania 5 per ct. Bonds at 82 ex-Interest; and Virginia 5 per ct. Sterling at 83a86.

ROBT. BENSON & CO.

Marie & Kanz' Money Circular for the European Steamer of the 20th Inst.

[TRANSLATED EXTRACT.]

New York, Feb'y 19, 1855.

Since our advices of the 11th inst., the stock market has continued to manifest extreme activity, with a general upward tendency. The news per Canada, with Liverpool dates to the 2d inst., which came to hand yesterday per telegraph from Hall-fax, produced but a slight impression upon the market. The ease in the money market is becoming daily more decided. Exchanges are firm, and admit of the export of gold bars. State stocks are firm, with a marked advance upon Californias. The sale of Californias, Indianas and Missouris have been quite active; other States to a trifling extent. Californias are $8\frac{1}{2}$ per ct. higher, Indiana, Kentucky, Louisiana and Missouri 1 per cent. each. In city and county bonds, we quote some sales of Cleveland city 7s at 1 per cent. advance, and San Francisco 10s at a rise of $\frac{1}{4}$. Other cities and counties inactive. Railroad bonds have been moderately active, with a general advance. But Illinois Central Construction bonds have fallen off 1 per cent. Chicago and Rock Island bonds have advanced 1 per cent.; Erie 2d mort. 2; Erie 1876s 1; Hudson River 2d mort. 3; Hudson River 3d mort. 2 $\frac{1}{2}$; Freedland bonds 2 $\frac{1}{2}$, (sales at 86, ex-privilege); Harlem 1st mort. 2; Northern Indiana Goshen Line, 2 per cent. Bonds not dealt in at the Stock Exchange have been inactive. We note some important sales of Michigan Central 8 per cent., 1869, at an advance upon our previous quotations. Galena and Chicago 1st mort. are 1 per cent higher. Ohio and Indiana bonds are offered at a heavy decline, without sales. Railroad shares have been very brisk at rising prices. Erie and Michigan Southern have been especially active.—The former rose rapidly at 60, receding to 57 $\frac{1}{2}$, and closing at 59 $\frac{1}{2}$. Michigan Southern has been in special demand, to cover the contracts of parties who had speculated for a fall. It was driven to 102, immediately falling back to 91 $\frac{1}{2}$, and closing at 96. Cleveland and Pittsburg has advanced $6\frac{1}{2}$ per cent.; Cleveland and Toledo, 3 $\frac{1}{2}$; Harlem, 6; Harlem preferred, 12; Hudson River, 2; Milwaukee and Mississippi, 3; Panama, 1 per cent. Illinois Central stock sold at 98 $\frac{1}{2}$, closing at 97 $\frac{1}{2}$. N. Y. Central has fallen off 1 per ct.

MARIE & KANZ.

De Coppet & Co.'s Circular.

[TRANSLATED EXTRACT.]

New York, Tuesday, Feb. 19, 1855.

The animation in our stock market noticed in our last advices of 11th inst., has continued to be felt to a high degree, and with but little interruption during the whole week. After the considerable rise of the previous week, a natural reaction took place in some cases; in others, violent fluctuations have occurred, resulting from various speculative causes. Our to-day's quotations show, however, with very few exceptions, well sustained prices, and in many instances some advance upon last week's rates. The weekly Bank report shows again a large increase of the Specie reserves, and the money market manifests gradually more ease. Spite of this, the more substantial investment securities have scarcely participated in the movement of the more speculative stocks. The Liverpool news to the 2d of February has produced no other effect in our stock market than to revive the animation which for a

moment had been flagging. There has been but little activity in State stocks; we notice moderate sales of Indiana 6s, Missouri 6s, and Virginia 6s, the two former at some advance, the latter at a trifling decline. California 7s, with but few sales, have risen 3 per cent.

In city and county bonds there has been but little doing, and we notice only a few sales of Cleveland 7s, San Francisco 10s, and Wheeling Municipal 6s, with some advance in the price of the two former.

Transactions in Illinois Central Construction, although large, were less animated than the previous week, and show weaker prices. The various classes of Erie bonds have advanced, with the exception of 1st mortgage. Those of 1871 have been dealt in to some extent. There were also moderate sales of New York Central 6s and 7s, and Terre Haute and Alton 2d mortgage. Amongst the railroad bonds transacted at private sale, Michigan Central 8s, 1869, were done in amounts of some importance. We notice, also, some sales of Ohio and Pennsylvania income bonds, and of Peoria and Oquawka east extension 1st mortgage.

In railroad shares considerable activity prevailed in Erie, Michigan Southern, Cleveland and Toledo, and in Reading. Transactions were made to a lesser degree in New York Central, Panama, Chicago and Rock Island, Cleveland and Pittsburg, Michigan Central, and Milwaukee and Mississippi. Erie has experienced sudden fluctuations, resulting, however, in a marked advance over last week's prices—the possibility of a cash dividend at the next half-yearly term, based upon the late receipts of the road, and the prospect of the ten per cent stock dividend during the year, resulting from an equal amount of bonds of 1875, absorbed by the Sinking Fund, have contributed in producing this movement. Michigan Southern have touched during the week, 101 and 91 $\frac{1}{2}$, closing at 96. These wide and sudden fluctuations are due mainly to combinations produced by the wild speculation to which this stock has given rise of late.

DE COPPET & CO.

American Railroad Journal.

Saturday, February 23, 1856.

Railway Mismanagement.

One of the great drawbacks to the success of our railroads is the want of everything like independent action on the part of railroad companies, or of a system of management adapted to the circumstances of each case—such as amount of traffic, vicissitudes of the seasons, condition of track, &c., &c. In ordinary affairs, men, if they hope to succeed, regulate their conduct strictly according to the nature and wants of the business in which they are engaged; working up to their capacity when it presses, curtailing operations and expenses when it is slack—from whatever cause; and in all cases, graduating expenses to profit.

But when we come to the management of railroads, all such salutary rules are completely lost sight of. As far as expenses are concerned, there is but one standard—that of the most costly road in the country. The Erie railroad and its branches are good illustrations of our statement. The former is constructed in reference to an immense traffic which it enjoys. The company can afford to run their passenger trains at a high rate of speed, though at enormous expense. But when we come to the branches, we have copies of the great trunk in all save the traffic,—the same class of road, structures, and equipment,—trains run at the same speed, and all the appointments upon a similar footing. This illustration will stand for the whole country. It is notorious that

in regulating the speed of trains on our roads, no reference whatever is had to the traffic engaged by each, or the cost of those high rates. The great aim of all companies seems to be to make the best time possible. It is from this cause that the poorest companies suffer the most, as their roads are usually not more than half built.

But folly in the management of railroads is not confined to weak companies. One would suppose that the railroad companies of New England, for instance, would adopt a very different time-table in the winter months, than for the rest of the year. We suppose the wear and tear of running a road during the winter months, when the ground is frozen to a depth of two or three feet, is twice as great as at any other time. The destruction of superstructure and equipment on Northern roads the present year has been enormous. It has been utterly impossible to run to time, though the speed of the trains when in motion has very probably been greater than the average, from the necessity of making up for the constant interruptions that occur. We presume that upon the New England roads, the business of January and February will be done at a loss. Now in common affairs men exercising even ordinary good sense, would under similar circumstances, have reduced their operations so as to conform to the altered state of things. So would the railroads of New England, had their managers displayed in the management of their roads a tithe of the good sense they constantly show in conducting their own affairs. Suppose for the months of December, January, and February the running time of all the New England roads were reduced to 18 or 20 miles the hour. The receipts would be the same, while expenses would be reduced, probably, one hundred per cent. If the N. England Co's would bestow as much attention upon the economy of railway transportation, as they do in the efforts to increase receipts from increased rates of charges, they would secure all they are aiming at, with the rates as they are.

The needed reform in the latter particulars could be easily effected by the independent and manly action of a few leading companies. Till such glaring instances of thoughtlessness and incapacity for their duties are corrected, we ought to have no more complaints about low rates of charges, or of insufficient receipts. The want of success does not depend upon either of these, as we have shown in former articles, but from the want of competent management. When the most is made out of all our roads we should have few unproductive ones. But so long as they are managed in reference to one standard, and that faulty in itself, and applicable only to a few lines, we must expect to see disaster upon disaster, which are referred to anything but the real cause.

Defaulting Companies.

The Maysville and Lexington Railroad has been advertised for sale, on proceedings for foreclosure, for default in the payment of interest on the first mortgage bonds. The proceedings in this case have been of a summary character, and the result is well calculated to inspire confidence in the Judiciary of Kentucky, who appear on all occasions to have been vigilant in the protection of the right of parties investing in the securities of that State.

In the case of the Buffalo and New York City

Railroad, Mr. George Palmer has been appointed at the instance of the bondholders, Receiver, in place of Mr. Patchin. This step will be probably followed by some definite action in reference to this road. It is at present run by the New York and Erie company. We presume the net receipts at the present time are sufficient to discharge the interest on the first mortgage bonds. If so, we hope the receipts will be applied in payment of interest, to save the necessity of a sale—something in such an event will be saved for the subsequent mortgages.

Engineering and Mathematical Instruments in Baltimore.

While the extension of Railroads all over the country has increased the facilities for providing the machinery with which roads are to be constructed and kept in operation; in no city have there been greater developments in these respects than in Baltimore. Machine shops are among the finest in the country, and the work turned out, the best. The liberality of its citizens has attracted accomplished mechanics from the North and East, who work shoulder to shoulder with the old resident.

Remarking on this enterprising spirit a few days since in the presence of an Engineer of that section, we were invited to examine some field instruments made by F. W. & R. King, of Baltimore-st. They are certainly as highly finished and excellent as any we have ever seen. Their entire simplicity is their most striking feature. Their Levels have the very best reputation, and both Level and Transit are beautiful instruments.

We recommend gentlemen who would feast their eyes on fine workmanship, to call on Mr. King as they pass through Baltimore, and look at his stock. It is not necessary they purchase to engage courteous attention. Mr. King takes great pleasure in exhibiting his work to connoisseurs.—The Maryland Institute of last season awarded them the first premium of a Gold Medal.

Greek Letters in Practical Formulæ.

We disapprove entirely, the practice that obtains of mixing the letters of the Greek text with timbers that have to support the weight of a railroad train, or perhaps nothing more classical than a hundred hogsheds of molasses. There is no display of either wisdom or learning in the trick. It is a piece of pedantry and has this ill-effect, that many young men of genius, perchance, better qualified to build bridges or any other structures than those who make the formulæ, are unable, except with great sacrifice to follow an argument that might otherwise be of use to them.

The object of formulæ in Practical Science, is to aid in the proper arrangement and apportionment of material. These formulæ have to be used in at least four cases out of five, by men who know nothing whatever of Greek text.

While it is important that our Engineers should be educated men, we know very well that many of the best in the country do not know *della* from *lambda*. We are reminded of this while reading an interesting article in a late English publication. The pomposity of the author is visible in the first introduction—William Henry Barlow, F. R. S.,—here we have it full length. The subject is the Strength of Iron Girders. So practical that every mechanic ought to understand it, and so cloyed by those "queer looking things" that every prac-

tical mechanic is disgusted. Write the plain Latin text, *show that you are familiar with the subject you treat of*, and your right to the F. R. S. will not be questioned.

Generally the initial letters of the properties or qualities denoted are the best. Among men of science it has been customary to let certain Greek letters represent the same property in all formulæ. This is well enough in certain cases, but in practical mechanics—nonsense.

Pocket Book for Civil Engineers. By OLIVER BRAY.

Engineers will observe by our advertising columns the issue of a new book for their use.

The profession is familiar with the name and works of the author.

For the contents of the book we refer the reader to our advertising columns.

The chapters on coning wheels and bending rails are of value.

To Civil and Mechanical Engineers and Architects.

We desire to call the attention of persons interested in practical science to the arrangements we have made for their benefit during the current year. We have engaged the services of an experienced Engineer and Architect, who will have charge of this department. His extensive acquaintance in the profession ensures a valuable accumulation of material from the best sources.

We have already made arrangements for elaborate articles, to be illustrated in detail by fine drawings, on the following subjects, viz:—

1. Statistics of Iron Production and Consumption.
2. Application of Iron to Architectural purposes, including the result of important experiments now in progress on American iron, with beams of new patterns.
3. Iron Roofing and Roof Trusses.
4. Iron Bridging.
5. Coke, Coal, and Locomotives adapted to the consumption of those articles.
6. Engineers' Instruments.

In addition to these we shall present our readers with a variety of useful practical matter illustrating machinery and architectural structures for which we have been promised the contributions of some of the best men in the country.

We shall be glad to hear from this class of our readers. It is not important that careful essays should be prepared, it is only necessary to be sure that what is written is of practical value. Nearly every engineer as well as architect and machinist is in the constant habit of recording memoranda concerning matters in which he is directly interested. These notes if valuable to himself are equally so to others.

There can be no more important points in a mechanic's experience than his failures, if he know their cause. It would be of great advantage to the profession, if he would always analyze his mistakes and give the result to his brethren. Thus the failure of a coffer dam is a most common experience,—yet we never read of it. The reason is obvious; personal feelings are at stake, and professional reputation may suffer. But, really, the man who has seen his plans fail once, is better prepared than another to undertake a similar piece of work in the future.

We hope we shall hear frequently from these

gentlemen. We open our pages to them, as we ever have and shall be always glad to have their assistance.

Authority of the Old Masters in Architecture.

(Continued from page 73.)

Unfortunately, it too often happens that in Civil Architecture we are designing for men having money but destitute of culture; men too who have "wills of their own" which are fortified by their wealth; opinnated men without refined tastes. And thus in another way are deformities thrust forward to ruin the hopes of some artist, big with designs rich in beauty of conception. Before this evil we confess we bend; we know not how it is to be corrected.

Second. While social differences between past ages and the present are so evident and of such magnitude, it is only natural that corresponding differences of taste should exist. Since such development of the powers of men and the resources of the earth the perception of the beautiful must be enlarged; else man has lived to little purpose.

The growth of a correct taste in art is really an indication of the growth of correct ideas of goodness and the progress of a correct philosophy of life. And as we find in the Grecian art much more beauty than in mediæval art, so we shall in certain periods of Grecian life find more that is estimable and true than in the life of the middle ages.

It will seem strange indeed, that those whom we ridicule most heartily in every display they make of their every day tastes should become our models, when they enter the higher fields of the fine arts.

It is unnecessary to illustrate this point in detail. If we made the attempt, we fear we should find that our British ancestors were scarcely equal to the barbarous countrymen of Pericles in the simple matter of costume. If classic garments were more graceful, ours are more convenient. Such change should illustrate a lesson to the architect. But we may with all the beauties have the increased convenience in structures of every kind.

We imitate the churches of the 11th century and 13th. What if we copied the awkward ships of William the Conqueror or the more convenient but not less clumsy barques of Henry III.

A favorite class of Gothic Architecture is the Perpendicular style of the 13th century. Such is the servility of certain architects, to this period of the art that we almost look to see them dressed in the beautiful costumes of the period, with shoes eighteen inches longer than the feet! But so far from following their copies literally, they are like physicians who of all persons hate their own physic. Wherever we turn in the history of the middle ages we confess we find nothing beyond the fine arts to be imitated, for common uses. In the severely practical we see little that can profit from the castles and mansions to the artillery and fortifications of the 15th century. Notwithstanding which the monuments of their ignorance are being constantly paraded for admiration.

In criticising classic architecture it is customary to harp on the "simple grandeur" of the Grecian art. Certainly its simplicity was severe; for some purposes, of exquisite and noble beauty. The Grecian perception of the beautiful was generally far

superior to every thing we can find in the ancient structures of other races, though we do think unlike many of our brethren, that the Romans in many instances improved on the Grecian designs. The Roman art was, however, a mixtum of ugliness and beauties so heterogeneous, that we hardly dare mention it on the same page with the productions of her neighbors.

Ovid says the women of his time painted their eyebrows in such a manner, that they appeared to form only one, being united across the top of the nose. The Romans loved low foreheads and joined eyebrows, while the Greeks admired rather a high forehead as is illustrated in the heads of Homer, Hippocrates, Pericles, and others in the British Museum.

Notwithstanding their superiority we do not know that even the rich Corinthian capital is unimprovable. We do not know that the acanthus is more beautiful when carved in stone than many another flower.

Are these features determined by scientific laws through which we know that just such amount of material is required for the strength of the edifice?

We do not know it. We do not know that even in the "Science of the Beautiful" we have a precise formula for the composition.

The Roman taste bedecked the whole front with trifling ornament so that all impression of grandeur was destroyed. How much of the Roman taste is seen in this country, more particularly in New York. Many of our store edifices are a disgrace to the age; we might with profit study the plain granite fronts of our neighbors in Boston, who in civil architecture are as far ahead of us as they are behind in the richness of ecclesiastical structures.

A most important consideration, and one of which the architects of this country seem to have no perception is the character of our climate and atmosphere. The similarity in these respects to the South of Europe, seems to indicate that what would be appropriate there, would be proper here.

Yet, if by the study of that art we learn certain doctrines or principles that may be applied here, it does not follow that we must copy those buildings in the main. We observe of late that this subject of climate has received some notice as indicated in the Church of All Souls, of which we have before made mention. The contrasted colors in the walls of the edifice show that the architect has made at this late day a discovery. We have a clear atmosphere and an Italian sky. The fogs and humidity of England do not offer the best natural field to our designers for the study of this art.

If the mingling of colors of which we speak has been ridiculed, it is well enough. None but bores or bigots or, taking a class more numerous, the self-conceited, ridicule what they do not comprehend.

The architect has conferred a boon on this city, for which, when he perhaps cannot appreciate the sentiment, the cultivated and refined will be grateful. It will then be acknowledged that the contrast between red brick and the nearly white of Caen stone is by no means too glaring for our climate. A warmer colored stone might answer for a thicker atmosphere, a cloudier sky, would

indeed be beautiful here, but that fact does not impair the propriety of this example.

Our design has been not so much to criticize particular specimens as to direct attention to the great errors existing in our architecture as a whole. We have not even sought to indicate a source of correction, though we think that source naturally appears in what we have said.

We entreat the attention of the architect and capitalist, who, we are well assured, must be reached, to these thoughts. We need reform, and reform we must have.

Nor are we alone in complaint; before we had uttered a word we noticed in the London Civil Engineer and Architect's Journal, that in that country as well as here it was necessary to combat the antiquarianism of artists. And since the first part of this paper appeared, we have been shown an article in the *London Times* which treats with severity the designs of the London architects. We copy a paragraph from the former.

"We are no more Englishmen of the mediæval period than we are Greeks of the time of Pericles; and there is quite as much of the *ortocossia de' pedanti* in the blind imitation of what is usually called Gothic Architecture, as there is in the slavish reproduction of the monuments of Athens. Architecture does not hold the rank in public estimation—say the advocates for a diploma—which it deserves. Is not this, to a great extent, attributable to the want of an actual, vital appreciation of the wants and habits of our age by the professors of this noble art? They have become learned copyists—they create nothing."

We leave this subject to the good sense of our profession to whom we look with confidence for a reform.

Railroad Earnings.

The business on most of our roads for January and the month of Feb'y so far, has been against both wind and tide. Unusually heavy snow storms accompanied by excessive and long continued frosts have choked up many of our leading thoroughfares for days together, and made the expeditions transportation of freight almost an impossibility. To add to the evil an unusually large proportion of the motive power on most of our lines is laid up, suffering from the crown of the head to the sole of the foot, with wounds and bruises and putrefying sores. The opening of the Spring business, which promises to be very heavy in both freight and passengers, has been delayed, and will consequently come in all in a heap, finding companies in a great measure unprepared to accommodate it as they ought.

In these circumstances, it is satisfactory to learn that the four great lines extending from the seaboard to the interior have been run with remarkable regularity, everything considered. Delays of some hours were experienced, it is true, but on the whole they have been able by dint of great exertion to make their time to the satisfaction of the travelling public. In some cases two, three, or even four locomotives had to be hooked on to trains. That machinery would suffer much was to be expected. The winter just closed has probably never been exceeded, if equalled, in severity in our railroad history. Our companies may now fairly say that in this respect they have "touched bottom." They are not likely to sink to any lower depth.

That in such an interruption of travel the earnings should be diminished very considerably, was

nothing more than was universally anticipated.—The slight decrease on such as have published their monthly earnings, when compared with last year, will strike many with surprise.

Several roads which formerly were in the habit of publishing monthly statements of earnings have lately ceased doing so. We think such a step unwise. The public should know the worst as early as possible. The facts must come out sometime, and where these are delayed, because they compare unfavorably with former years, people are apt to suspect the thing to be worse than it really is.

ERIE RAILROAD.

The earnings of the Erie railroad company for Jan'y, were.....\$402,818 04
Jan'y, 1885..... 427,829 41

Decrease.....\$25,010 37

PENNSYLVANIA RAILROAD.

Receipts for the month ending Jan'y
31.....\$298,109 33
Same month last year..... 298,777 16

Decrease.....\$667 83

READING RAILROAD.

The following statement shows the business of the Philadelphia and Reading Railroad company for the months of December and January.

	1855-6	1854-5.
Received from coal.....	\$251,882	\$386,334
Merchandise.....	48,910	44,940
Travel, &c.....	43,972	44,669
Total.....	\$344,776	\$475,943
Transport'n, roadway, dump- age, renewal fund, and all charges.....	262,975	253,604

Net profits for the month of
Dec. and Jan.....\$81,970 \$222,338

MICHIGAN CENTRAL RAILROAD.

The earnings of the Michigan Central Railroad Company for the months of January, 1855'6.

	Pas'grs.	Freight.	Mail.	Total.
1856.....	\$50,190	\$86,978	\$6,785	\$156,954
1855.....	55,582	60,275	6,612	122,469
Increase....	\$7,608	\$26,702	\$173	\$34,484

NORWICH AND WORCESTER RAILROAD.

The business of the Norwich and Worcester road for January shows a small gain as compared with January, 1855. In view of the heavy snows and the closing of the Sound for a week of the month this is very favorable. In the first twenty days the receipts were \$4,000 ahead of the same period of 1855. The figures are:

Jan'y 1855.....\$18,168 61
Jan'y, 1856..... 18,587 68

Increase.....\$629 93

CHICAGO AND BURLINGTON RAILROAD.

The earnings of this line for the month of Jan., are as follows:

For transportation of freight.....	\$60,701 68
" passengers.....	30,241 62
" U. S. mail.....	1,389 29

Total.....\$92,332 60

BALTIMORE AND OHIO RAILROAD.

The revenue for the month of Jan'y has been as follows:

	Main Stem.	Wash'n Branch.	Total for both roads.
Passengers.....	\$31,308	\$21,063	\$52,372
Freight.....	130,851	8,585	139,438
	\$162,160	\$29,649	\$191,809

Compared with 1855, the results are—

	Main Stem.	Wash. Branch.
Passengers.		
Jan'y, 1856.....	\$386,023	\$84,608
Jan'y, 1855.....	162,160	29,649
	\$173,863	\$4,953

CLEVELAND AND TOLEDO RAILROAD.

The receipts of the Cleveland and Toledo Railroad Company in January \$77,713, being an increase of \$15,860 over those of January 1855, or 26 per cent. The receipts in Jan'y, 1854, were \$41,500; January, 1855, \$61,853; January, 1856, \$77,713.

Railroads in Tennessee.

The following statement taken from the report of the State Commissioners to the Legislature will show the various railroads entitled to State aid, their length in Tennessee, distance completed, amount of State aid granted, amount received, &c., &c. We copy the following recapitulation, showing the entire liability of the State, and the number of miles of road completed, in progress, and in contemplation likely to be completed:

	Miles of road in Tennessee.	Miles finished.	State aid granted.	State aid received.
West Tenn.....	407	137	\$5,103,000	\$1,318,000
Middle do.....	651	178	6,605,000	2,100,000
East do.....	490	136	5,570,000	1,639,000
Total.....	1,611	451	\$17,278,000	\$5,057,000

There are twenty-two different enterprises enumerated in the report for which the above liabilities have been incurred, present and prospective, the total cost of which, when completed in this State is estimated at \$35,000,000—more than double the State liability. They are as follows, with their length of road in Tennessee:

IN WEST TENNESSEE.

Memphis and Charleston, [Memphis to Stevenson,] 87 miles; Mississippi and Tennessee road, [Memphis to Grenada] nine and eight-tenths miles; Memphis and Ohio road, [Memphis and Paris] 30 miles; Mobile and Ohio road, [Mobile to Cairo] 118 1-2; Mississippi Central and Tennessee, [Canton, Miss., to Jackson, Tenn.], 48 miles; Northern [Nashville to Hickman] in West Tennessee, 97 miles; making a total of 470.08 miles in West Tennessee, all of which roads are in an active state of construction and progressing rapidly, and all but one or two have been granted bridge aid, in addition to the \$10,000 per mile.

IN MIDDLE TENNESSEE.

Nashville and Chattanooga, 151 miles; Tennessee and Alabama, 135 miles; McMinnville and Manchester, 43½ miles; Central Southern, Columbia and Decatur, 48½; [not yet commenced;] Louisville and Nashville, 45½ miles; Edgefield and Kentucky, [Edgefield to Henderson, Ky.,] 85 miles; Winchester and Alabama, [Decker's Depot, on the Chattanooga road to Guntersville, Ala.] 23 miles; Nashville and Northwestern, [in Middle Tennessee,] 81 miles; making in all in Middle Tennessee 667½ miles. But three of the roads here mentioned, the two first and last, are in active state of construction; and none of the others, with the exception of the Louisville and Nashville, have yet let any portion of the work to contract.

IN EAST TENNESSEE.

East Tennessee and Georgia road, [Knoxville to Dalton,] 110, finished; East Tennessee and Virginia, [Knoxville to Bristol,] 130 miles, in active construction; Knoxville and Charleston, [Knoxville to State line,] 55 miles; Knoxville and Kentucky, [Knoxville to Danville,] 50 miles; Western

and Charleston, [Athens and Blue Ridge road,] 30 miles; Cleveland and Chattanooga, 20 miles; and Cincinnati, Cumberland Gap and Charleston, 85 miles; making a total of 490 miles in East Tennessee. Of the four last mentioned roads, only one, the last mentioned, has yet any of the work out.

There are other roads in the State entitled to aid; but the Commissioner estimates that the amount of aid demanded will not exceed the amount granted in the above roads, calculating that the chances are about equal for a failure of some enumerated, to come within the provisions of the act, and for any of those not mentioned to do so.

Finances of California.

The annual message of Governor Bigler shows the indebtedness of that State to have been as follows, at the 31st of December last:—

Amount of 3 per cent. Bonds outstanding.....	\$2,925 00
" Interest on same	3,963 95
" Seven per ct. Bonds, 1851.	268,590 00
" " " " 1852.	1,390,300 00
" " " " 1855.	700,000 00
" Outstanding Comptroller's Warrants	568,687 52
" State Prison Bonds.....	9,000 00
	\$2,906,376 47
Deduct amount of cash in Treasury ..	112,106 01

Total amount of civil indebtedness, December 20th, 1855, exclusive of the School Fund 2,804,269 46

Balance due from the sale of property made in San Francisco \$295,000 00

Balance of the 25 per cent., due to the State from the city of San Francisco, on the sale of property made December 26th, 1853, under the Water Lot Act of March, 26th, 1851 165,000 00

Am't due from wharves in the city of San Francisco, as reported by Attorney General, in 1854..... 20,110 70 480,110 70

Amount of indebtedness unprovided for, December 31st, 1855..... \$2,244,158 76

Amount of indebtedness unprovided for Jan'y 1, 1855, (see message of 1854,)..... \$2,294,830 66

The Governor speaks very hopefully of the prospects of that State. Last year, a large increase was made to the civil debt; but this arose principally from the payment of indebtedness incurred before the commencement of that year. These alone amounted to over half a million dollars. Congress has assumed the war debt, and directed the payment of \$924,259 into the State Treasury. Full confidence is expressed that that body will also provide for the balance of this debt. On the mining operation the message gives a number of interesting tables. It appears that in California 303 canals and ditches have been constructed, having a total length of 4,593 miles, and costing \$6,341,700. About three-fourths of these have been opened in 1855. In addition to these, 112 canals have been commenced. There have been returned 50 quartz mills in operation, which last year crushed 222,060 tons of rock, yielding on an average about \$25 per ton, or \$4,082,100 in all. From several counties, besides, the returns have been imperfect. The erection of 15 additional mills has been commenced.

The amount of gold dust and bullion exported in 1855 was \$44,138,838; and of quicksilver, \$880,071.

North-Western and Sunbury & Erie Railroad Companies.

The annual meeting of the stockholders of the North Western Railroad Company was held at Butler, Pa., on the 6th inst., when the following officers were elected to serve for the ensuing year:—

President, Robert S. Reed;—Directors J. Price Wetherill, Christian J. Hoffman, Jam'l T. Canby, Horace C. Peck, John McCandles, Samuel Branson, and Wm. F. Smith of Philadelphia; Samuel M. Lane and Charles C. Sullivan, of Butler county; David Sankey, and R. W. Cunningham, of Lawrence county, and William Mahar, of Indiana county.

This road will, when completed form a most important link in the chain of communication from this city to the West, and we are gratified to state that its interests have been confided to the care of such intelligent gentlemen as compose the Board of Directors. Leaving the main trunk of the Pennsylvania railroad at Blairsville, it joins with the Cleveland and Mahoning road, at or near the State line, and thus furnishes a direct and speedy means of reaching Lake Erie, at one of the most important commercial points upon its shores. In prosecuting this improvement to an early completion the merchants and business men of this city are largely interested. It will enable us to outbid rivals at the North and East, for the trade that centers at Cleveland, and as that trade must increase with each area of the West, that is brought under cultivation, the prize is worth contending for. We cannot have too many roads to the Lakes. There will be business enough for them all: as trade increases faster than means to accommodate it are projected and completed. Westward the eyes of business men are turned at the present time, and with just cause, for from that great fountain proceed those streams which fertilize and make rich the seaboard States. In this view the North Western Railroad should be contemplated, and then its importance can be fully estimated.—The recently elected Board of Directors are men of energy and determination and we look forward to a rapid progress being made during the present year.

On Monday last, the Annual Meeting of the stockholders of the Sunbury and Erie company took place, when the following gentlemen were elected Managers for the present year:—Thomas Allibone, Robert Ewing, John W. Stokes, Daniel Deal, James D. Wetham, Harry Connelly and Jas. Cooper of Philadelphia; D. K. Jackman of Lock Haven; B. Rush Petriken, of Farrandville, and Jas. Armstrong, of Williamsport.

The members of the new Board, we learn, are largely interested in the success of the company, and are determined to push the road forward as rapidly as the means at their command will enable them to do. Messrs. Stokes, Deal, Jackman, and Armstrong were members of the old Board, as well as Mr. Robert L. Martin, who, with Messrs. Samuel J. Randall and Thomas J. Jeffries, were elected by Councils on behalf of the city of Philadelphia. The change in the management, it will be perceived, is materially different from last year, and while we regret the loss of the old Managers—Messrs. Wm. Bigler, Wm. Ludwig, Henry Dubring, Philip M. Price, and Charles Sinnickson, who did much for the road last year, in restoring the confidence of the company, and the hope of a speedy completion of the great work to the harbor of Erie, for the reason that so many changes have already taken place, yet we are among those who feel convinced, that with proper action, the new Board will be enabled to accomplish a great deal during the present year towards that desired end. The public should sustain them with a hearty good will. There is no railroad enterprise which promises more beneficial results to the section of country through which it is located, and to Philadelphia, than the Sunbury and Erie railroad. It

pierces the very heart of a productive region of our own State, which at the present time, is entirely out of the line of all railroad improvements, and affords a channel of communication, by means of which the products of that section can reach a market in this city. But in addition to that fact, it will bring the port of Erie within a few hours of Philadelphia, and make it tributary to our capitalists. These are the advantages which recommend the Sunbury and Erie Railroad to the confidence and support of our citizens, and any movement calculated to advance the interests of this company, should receive their active sympathy and aid. All that is necessary to insure success to this enterprise is a hearty co-operation of all its friends. The masses are well satisfied of its ultimate advantages to the State and city, and will most cordially join in all legitimate methods of furthering its final arrangements.—*Philadelphia Com. List.*

New York Central Railroad.

Statement of earnings for the six months from August 1, 1855, to February 1, 1856, compared with the corresponding period of the previous year:

			Increase.
Aug., 1855..	\$548,008	1854..	\$520,075
Sept., " "	716,286	" "	646,836
Oct., " "	736,421	" "	649,420
Nov., " "	674,941	" "	567,227
Dec., " "	668,958	" "	432,851
Jan'y, 1856..	461,807	1855..	406,125
			56,682

Total..\$3,806,423 \$3,221,535 \$584,887

General result of the six months' business—

Gross earnings, as above.....\$3,806,423
Operating expenses.....2,109,175

\$1,697,248

Deduct am't of six months' interest on the debt of the company.....\$451,828

Amount of six months contribution to the "Debt Certificate Sinking Fund.....55,591

507,419

Net earnings.....\$1,189,829

Equal to 4 94-100 per cent. on the capital of the company.

The amount of fuel included in the operating expenses for this period, is \$478,321. The cost of fuel for the year is estimated, by the General Superintendent, at \$600,000, the proportion of which for six months would be \$300,000. If, however, it be estimated at \$350,000, it will leave an excess of \$128,321 expended on this account, which, deducted from the amount of expenses, as above stated, will leave \$1,980,853, equivalent to 52 4-100 per cent. on the gross earnings.

Chicago as a Manufacturing City.

The *Democratic Press*, of the 1st of February, devotes nearly two pages of the paper to an account, in detail, of the various manufacturing establishments of Chicago. This is a very commendable work, and the citizens there should be thankful to the paper for the diligence with which it has pursued its object. In order that people abroad may see the extent of the manufactures of that city, and what it has to rely upon in this way, we copy the recapitulation, as we find it in the *Press*. At a future day, we shall attempt something of the same kind in regard to the manufactures of St. Louis, but we cannot now avoid calling attention to the fact, that the manufacture of flour alone in St. Louis reaches well on to one-half of all the manufactures of Chicago. In 1855, 603,352 barrels of flour were manufactured, which, at only \$8, would produce \$4,826,816. But as Chicago has, in this very matter, chosen to make comparisons with St. Louis, we shall undertake to show that she is *nowhere* in the comparison, in any of the branches of productive industry.

	Capital.	Hands.	Value of manuf's.
Iron works, machinery, &c....	\$1,102,000	1,395	\$1,926,500
Agricultural implements.....	454,000	480	649,790
Railroad cars, &c....	750,000	550	980,000
Brass, tin, copper ware, &c....	142,000	188	377,260
Type, printers' furnishing, &c....	15,000	12	.....
Carriages, wagons, &c....	417,000	791	702,104
Lead pipes, &c., (estimated)....	20,000	75	50,000
Plan'g mills, sash factories, shingle mills, &c....	374,000	896	749,684
Cabinet furniture &c....	300,000	530	455,500
Marble and stone.	578,000	676	588,900
Whiskey, ale, porter, beer, &c....	397,506	180	826,645
Oils, soap, candles; &c....	361,000	104	464,180
Gas, coke, &c....	.....	.....	126,442
Leather.....	150,000	130	290,000
Brick.....	56,000	220	260,000
Saddlery.....	52,000	120	142,000
Musical inst'm'ts.	16,000	38	45,000
Dag'types, photographs, &c....	43,500	47	70,000
Jewelry, silver plating, &c....	77,000	37	80,100
Quick lime.....	80,000	110	96,000
Confections.....	24,000	60	80,000
Stoves.....	80,000	32	190,000
W'denware, br'ms, &c....	90,000	48	120,000
Bl'nk-books, book binding, &c....	26,500	66	124,000
Barrels.....	30,000	100	105,000
Glue.....	10,000	15	4,072
Ship building.....	50,000	250	300,000
Hats, caps, &c....	17,000	30	40,000
Mill stones.....	5,000	14	23,418
Trunks.....	50,000	80	180,000
Lithography, engraving, &c....	10,000	15	20,000
Saleratus.....	6,000	8	18,000
Matches.....	5,000	21	18,000
Boots and shoes, clothing, millinery, tobacco, crackers, bread, coffee & spices, surgical instruments, &c....	506,500	1,866	1,954,006
	\$6,295,000	8,740	\$11,031,491

Recapitulation of 1854.....4,220,000 5,000 7,870,000

Increase during 1855.....\$2,075,000 3,740 \$3,161,491

Lead Mines in Grand Co., Wisconsin—Rich Discoveries.

The location of these mines is in the south part of our county; the great chain or range of mines supposed to be the richest in the lead region, commences at Fairplay and extends eastward through the south part of Grant county, terminating at White Oak Springs, in Lafayette county. Hazel Creek mines are located upon this range, and have probably afforded more lead than any other diggings in the lead region. In places at Hazel Green the earth seems riddled with holes, presenting the appearance of a vast sieve. In such places all the minerals have been taken out down as far as the water level, which varies from 60 to 100 feet in depth, the surface being somewhat rolling in that vicinity.

That the reader may better understand what is meant by water level, we remark that in our mines water may always be found at some uniform depth in each vicinity; this point, to which the water rises over large sections of land, is a proof that the

earth beneath the water level contains many openings or canals, all communicating one with another, being a net-work of tubes; that to drain a single opening a very large area must be drained—that a pump fixed at any point and set to work will drain the water from quite a considerable circumference of land. Such conclusions led Mr. Jefferson Crawford to conceive the idea of erecting a mammoth Bull Pump at Hazel Green, a little southeast of the village. By such apparatus we mean a common pump worked by bull or ox power; we believe the one in question is attached to a tread-wheel. It was set to work last summer, and has not rested since; from which time forth, the water has been drawn off, day by day—every day a few inches lower, every week a foot or so deeper mineral bottom, and every month the water sinking a few feet over a square mile or less of the richest mineral in the country. The pump raises about ten barrels of water per minute, and drains an area of nearly as many miles.

The water level is now about twenty feet below its usual height. The purpose of Mr. Crawford is to add a water-power of the spring, driven by the water from the Bull Pump, which will be of about as much service as the other. The depth of main shaft is now about 104 feet, and of neighboring shafts affected by the pump, nearly the same. In the main shaft they are at work on an eight inch sheet of mineral. On Capt. McCoy's land, but in pump bounds, a rich show for a lead was struck last week.

Several other leads within bounds are also being worked. The old lead of Christopher Dignum is improving. The pump pays largely, the miners as well as proprietors.—*Grant Co. Herald.*

New Orleans, Jackson, and Great Northern Railroad.

An able and comprehensive report of the condition of this road has been submitted by the worthy President, J. Calhoun, Esq., to the Legislature, in accordance with a law of the State. We are much gratified, and the people at large will share in this gratification, that the prospects of this work are so much better than the depressed condition of the money market for some time back, and particularly in reference to railroad securities, would seem to warrant.

Eighty-seven and one-third miles of the road, the distance between New Orleans and the Southern boundary line of Mississippi, are in good running order. Beyond this point fourteen miles are graded, upon five miles of which the iron is laid; seventeen additional miles are in progress of graduation, and will be ready for the rails in June next. Satisfactory arrangements have been made for the prosecution of the road to Jackson, Miss., a distance of fifty-five miles. Thirty-five miles of this distance has been put under contract, and the work on it will be commenced in all this month or the next, and pushed forward with vigor and perseverance. For the intermediate distance of 20 miles to Jackson, the Board has received favorable proposals for the execution of the work. Beyond Jackson to Canton, a distance of twenty-four miles, the graduation is entirely finished, and the iron laid on eighteen miles; the track laying on the remaining six miles of this portion of the road will be completed within a couple of weeks. Beyond Canton, nothing has been done in the way of work, since the decision of the Supreme Court of Mississippi determining the transfer of the Canton, Kosciusko, Aberdeen and Tusculum railroad company of all their rights, privileges, franchises, subscriptions, etc., to the New Orleans, Jackson, and Great Northern railroad, to be null and void. Of this extension, 70 miles have been under contract, upon which work to the amount of \$111,000 had been performed. This work is now suspended. The Board has wisely determined to let this part of the work remain for a time in abeyance, and apply all their means and energies to the completion of the road South of Canton. Canton is an important point of junction. At this terminus we connect with the Mississippi Central railroad, running thence to Jackson, Tennessee, a distance of about 236 miles, where it unites with the Mo-

bile and Ohio railroad running to Cairo, at the mouth of the Ohio, and there connecting with the Illinois Central railroad, long since completed and in successful operation.

These two roads, the Central, and the Mobile and Ohio, are being pushed forward as expeditiously as practicable; and in the space of two years will be fully completed. Our own road will be continuously finished before the expiration of that period to Canton, when we will then be brought in communication, by railroad, with the extreme limits of the United States.—*N. O. Com. Bul.*

Cincinnati and Marietta Railroad.

This road has recently been opened to Zaleski, a point 45 miles east of Chillicothe, where it will enter the great coal and iron region of South-eastern Ohio. The annexed description of this important work and its business prospects, we take from a Cincinnati cotemporary:—

The Cincinnati and Marietta railroad is an important link in that which must be the shortest and easiest line that can be constructed from the Mississippi to the Atlantic touching this city. Looking upon it in its relations with the Baltimore and Ohio road, on the East, and the Ohio and Mississippi on the West, we may, in the light in which we view the vital character of our interest in the last named work, gain a glimpse of the importance to our future prosperity of this, its true eastern extension. As the great through route from the seaboard to the Mississippi valley, it would seem as if, when once completed, it could hardly find a rival route for trade or travel more convenient for all points between the East and the West, south of its termini. It will open to the people of the West and South-west means of convenient access to a choice of markets, a thing which is now of much importance—each of the cities of the seaboard from Boston to Baltimore, having its peculiar trade wherein it unrivals the others. A road passing from the Mississippi to the Ocean, so direct in its course that its variance from end to end is less than a degree of latitude, could hardly be constructed on any other line; and the fact that upon such a route can be concentrated the combined trade of such cities as St. Louis, Cincinnati, and Baltimore, cannot otherwise than make it an avenue of great importance.

It was, however, to the advantages of this work as an avenue of local trade, that our attention was, at this time, particularly directed. The agricultural wealth of the valley of the Scioto is almost proverbial. Nor is it the Scioto alone whose waters are bounded by tracts of the richest alluvion and whose plains are second only to the bottoms which they adjoin. All along the Southern border of the State are streams, whose intervals are mines of wealth to the cultivator of the soil, and supply an annually increasing surplus of the products of his industry. The mineral riches of this region is that which is, in future to furnish the item of the largest magnitude in the business of the thoroughfare, and when it is understood that in Athens and the adjoining counties of easy access to the line of the Cincinnati and Marietta railroad, there are already ten furnaces, producing an aggregate of nearly one hundred tons of pig metal per day, some conception may be gained of the importance of the road to this branch of industry, when it shall have become fully developed. Here every hill has its veins of ore and its mines of coal, and nothing is needed but the hand of man and the means of transit to render them productive. Already is development going on with great rapidity, and the wants of the community for coal, and the pressure of the iron upon the market, is already producing a greater call for the facilities for transportation than the Company is able to supply.

It is estimated that within three hundred thousand dollars, this Company has money sufficient for the completion of their work to the Ohio river, a distance of about fifty miles. When completed and equipped, the road will have cost twelve millions. The grading is done and the Company has

the iron, which is being laid down, and they hope to reach the Ohio in September next. In the prosecution of this magnificent undertaking there has been manifested an energy that has been seldom exceeded in human industrial enterprises, and no road is able to exhibit a greater number of able, faithful and resolute men in its directory than the Cincinnati and Marietta.

The Trial by Frost of Iron on Railroads.

Among the troubles of railroad management, and the drawbacks upon railroad profits, is the mischievous influence of frost upon iron, wrought and cast. All the lines throughout the Northern States have suffered this winter from this cause—some of them much more than others. The differences in the amount of damage severally sustained by them, or rather in their number of their accidents from frost, are due to the differences in the quality of the iron used for making axles and wheels. Good metal stands the test bravely, while the poor succumbs, and betrays the traveler, and troubles the engineer.

The fracture of wheels and axles takes place mostly in the early morning, about sunrise, when, as we heard a Welch "driver" say, the frost begins to "move out." The day succeeding one of intense cold, is more fatal to iron under strain, it is said, than the cold day itself. Straining is said to be a severer test than percussion. During the last three weeks upon the Eastern end of the Albany and Utica Division of the Central road, six large six inch axles in driving wheels were snapped off. In that time not one of the smaller truck axles broke. This perhaps should be taken as a remarkable proof of the excellence of the "Wiscallow Axle"—the 4½ inch ones on the road being all of this excellent make. Last week, the spokes of one of the five foot driving wheels of an express engine were all jerked off the hub at a crack, and the rim of the wheel was thrown up into the cab. The fracture in the axles takes place in all cases, close to the wheel. The break is vertical, and with a comparatively plain face, where the iron is inferior, and jagged and stringy where it is excellent.

The abundant facilities for repairs, and the large motive power possessed by the Central road, enables it to maintain its trains without interruption during such trying weather as we have just passed through. More than this—it is able to lend locomotives to its neighbor roads, short of power, by the going into hospital of many of its engines.—*Albany Eve. Journal.*

Central Ohio Railroad.

The city of Zanesville has accepted for herself the terms agreed upon by creditors with the Central Ohio Railroad Co. Several changes have also taken place in the directory of the road:—C. B. Goddard in the place of Solomon Sturges, who resigned some time since; and Messrs. Hoesmer, Clark and Whitmore having resigned, Messrs. D. Applegate, Hugh J. Jewett and Richard Stillwell, of Zanesville, have been appointed to fill vacancies.

Burlington and Missouri Railroad.

At a recent meeting at Fairfield, Jefferson Co., Iowa, it was resolved to submit the proposition to the voters for the taking of an additional \$100,000 stock in the Burlington and Missouri railroad. It was also resolved that the county Judge appoint the 26th of March next as the day for voting on the proposition. Similar action has been taken in Welpello county, the subscription to the stock of the road being fixed at \$100,000. It is confidently anticipated that the vote in both counties will be largely in the affirmative.

We learn from the Burlington Gazette that the Directors held a meeting in that city on Wednesday last, in order to make arrangements for putting the section of the road from Skunk river to Ottumwa under contract, and it was understood that the contractors, acting upon the presumption that the vote will be decidedly in favor of the above loans, will immediately send out a large number of hands and set them to work. The Gazette

is confident that the road will be completed to Ottumwa by the 1st of Jan'y 1857.

Pensacola and Georgia Railroad.

The Supreme Court of Florida having decided in favor of the constitutional right of counties to impose a tax for purposes of internal improvement, the *Floridian*, is of opinion that the entire Pensacola and Georgia Railroad "will be placed under contract at once, and prosecuted with vigor to an early completion."

THE HARRISBURG CAR COMPANY, HARRISBURG, PENNA.,

ARE prepared to fill the heaviest orders for PASSENGER, MAIL, BAGGAGE, BOX, CATTLE, PLATFORM, and COAL CARS.

Located in the centre of the IRON, COAL, and LUMBER region of Pennsylvania, having the most improved labor saving machinery, with a large stock of WELL SEASONED LUMBER on hand, and an Eastern Superintendent thoroughly experienced in every department of the passenger and freight car building business, this company can recommend their manufactures as equal to the best Eastern work. This company also cast

Chilled Plate Car Wheels

from the best cold blast charcoal wheel iron in the State, that are entirely free from strain, that are unsurpassed for strength and durability, and which they will furnish fitted or unfitted at the lowest prices.

N.B.—Strong and neat hand cars constantly on hand.
WM. T. HILDRUP, ISAAC MCKINLEY,
Superintendent. Treasurer.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against THE MAYSVILLE & LEXINGTON RAILROAD COMPANY and others, defendants.—By virtue of the Judgment of the Fayette Circuit Court, rendered in the above case, I will sell, at public auction, on Wednesday, the 23rd day of April, 1856, at the Public Square, in the City of Lexington, State of Kentucky—

THE MAYSVILLE & LEXINGTON RAILROAD; both that part of the road which is completed and the part unfinished; embracing the road bed, and superstructure where the same is laid down, the right of way, and all lots of land in and adjacent to the road track, with all the buildings, stations, car-houses, and improvements belonging to said railroad, together with the franchises of the Maysville and Lexington Railroad Company; all of which will be sold together, upon credits of six, twelve, eighteen, and twenty-four months, in equal instalments.

At the same time and place, I will also sell all the Lots of Land belonging to said Company, and not adjacent to the railroad track—consisting of a lot of land in the City of Lexington, a tract of land in Fleming County, and town lots in Paris and Millersburg, on credit of six and twelve months, in equal instalments.

And at the same time and place, I will sell all the Locomotives, Freight and Passenger Cars, Cross-Ties, &c.—consisting in part of two locomotives and tenders of twenty-four tons each, three passenger cars for sixty passengers each, one entirely new and all in good order; seven box freight cars, eleven platform cars, eleven tops for platform cars, five gravel cars, and a top for another; fifteen pairs of car wheels, a hand car, a lot of bridge and car iron; 9,500 cross-ties near Maysville, 1,380 of which are of locust and the remainder of oak; about 6,000 cross-ties along the line of the railroad between Lexington and Millersburg. The new passenger car, two freight cars, and the tops for platform cars, are in Maysville, all the other rolling stock is in Lexington, and the whole is of 4 feet 8½ inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the purchase money, having the force of Judgments, with good security, to be approved by me, of one of the following kinds, to wit:—1. Personal security. 2. First Mortgage Bonds of the Maysville and Lexington Railroad Company. 3. Mortgages in real estate in counties near this railroad or the Covington Railroad. 4. State and United States Bonds. 5. A First Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of purchasing, by the undersigned, who will be found in Lexington, Ky., or by A. M. JANUARY, at Maysville. Letters of enquiry, addressed to me, will be attended to. EBEN MILTON,
Receiver and Committee,
LEXINGTON, Kentucky

2m8

Notice to Contractors.

LOUISVILLE AND FRANKFORT RAILROAD,
SUPERINTENDENT'S OFFICE,
Louisville, Ky., Jan'y 30th, 1856.

PROPOSITIONS are requested for the rebuilding of the masonry and superstructure of the bridge across the Kentucky river, at Frankfort, Ky. The superstructure will be near four hundred and fifty feet in length, and the depth of water in the river near thirty feet.

Parties offering designs must accompany same with detailed drawings.

Persons desirous of making propositions will please communicate immediately with the undersigned, at Louisville, Ky.

SAMUEL GILL,
Supt L. and F. R. R.

466

Kerosene, or Coal Oil.

SECURED BY PATENTS.

THE undersigned beg leave to call the attention of the public to the annexed certificate of E. N. KENT Esq., Chemist, as a perfect answer to the now universal question, "What shall we use for light?"

AUSTENS, Agents
of the North American Kerosene Co.,
No. 57 Beaver st., New York.
LABORATORY, No. 116 John st.,
New York, Feb'y 6th, 1856.

The North American Kerosene Company:

GENTLEMEN—I have made a careful photometrical examination of your Kerosene Oil, in comparison with the various kinds of oil and burning fluids in use in this country, with the following results:—

MATERIAL.	LAMP.	Intensity of Light	Consumption by weight	Specific Gravity.	Consumption by meas.	Quantity of Light in equal measure of oil.	Retail Price of the Oil per gallon.	Cost of an equal amount of light.
Kerosene...	Kerosene...	13.689	478	845	562	2.435	1 00	\$4 10
Camphene...	Camphene...	5.625	377	870	433	1.299	63	4 85
Sylvic Oil...	Resin Oil...	1.190	140	970	144	826	50	6 05
Rapeseed Oil...	Mechanic's...	5.929	329	920	357	1.660	1 50	9 00
Whale Oil...	Solar...	1.892	211	925	227	833	1 00	12 00
Lard Oil...	Solar...	1.640	213	915	232	706	1 25	17 40
Sperm Oil...	Solar...	2.025	210	880	238	850	2 25	26 47
Burning Fluid...	Large Wick...	553	154	825	184	300	87	29 00

MATERIAL.	Intensity of Light.	Consumption per hour.	Consumption Gas equal to Intensity of oil.	Retail price of materials.	Cost of a light same Intensity per hour.
Kerosene Oil...	13.689	1,200 grs	50 C. ft.	\$1 per gal.	2.44 of 1 c.
Coal Gas...	4.970	50 C. ft.	13.75 C. ft.	\$3 per M.	4.12 of 1 c.

From the above statement it will be seen that Kerosene produces the most light, at the least cost, and that Burning Fluid produces the least light at the greatest cost.

I have also made a careful analysis of your Kerosene Oil, and find it to be remarkably pure and free from all substances which would otherwise render it unfit for burning in lamps. When thus purified by the process now in use, it is not explosive, even when heated to 212 deg. F., and being much less volatile than Camphene, it is not liable to smoke.

In view of the above facts, I am sanguine that your "Purified Kerosene" is destined to supersede all other oils or burning fluids, as a source of light for artificial illumination, and would recommend it as the most valuable material for that purpose with which I am acquainted.

Very respectfully, your ob't serv't,
EDWARD N. KENT, Chemist.

IMPORTANT TO ENGINEERS, RAILROAD CONTRACTORS, and others.
Messrs. WILEY & HALSTED,
351 BROADWAY, New York.

BEG to inform those interested in Engineering, both Civil and Mechanical, that they keep constantly on hand, and offer for sale on reasonable terms, all the best and most approved works on the above-mentioned subjects, both

ENGLISH and AMERICAN.

They will also continue to supply the following Magazines punctually to subscribers at the annexed prices per annum:—

Civil Engineer and Architect's Journal.....	\$7.50
Mechanic's Magazine.....	4.00
Practical Mechanic's Journal.....	3.50
Repository of Patent Inventions.....	12.00
Artizan.....	4.00
Mining Journal.....	9.00

W. & H.'s CATALOGUE OF ENGINEERING AND MECHANICAL WORKS GRATIS TO ALL WHO DESIRE IT.

W. & H. will give especial attention to the importation of Engineering and Architectural works, either by the single volume or quantity, from England, France, and Germany.

Railroad Iron.

600 TONS "Erie" pattern, 55 lbs. per lineal yard, now in yard. For sale by
VOSE, LIVINGSTON, & CO.,
No. 9 South William st., N. Y.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dugdon's Hydraulic Jack, Sewall's Salmometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1y17

Illinois Central R. R. Co.

FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the South. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands is carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent per annum, may be negotiated by special application. Twenty per cent from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five fold. When

required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., Chicago, Ill.

OIL. OIL.

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF MACHINERY & BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY FIVE per cent more DURABLE than Sperm Oil, for Lubricating, and the only Oil that is in all cases RELIABLE, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

Engineers' and Surveying INSTRUMENTS.

F. W. & R. KING,
226 BALTIMORE ST.,
BALTIMORE, MD.,

KEEP on hand, and manufacture to order, a general assortment of instruments for Engineers and Surveyors' use—including Levels, Transits, Levelling Rods, Compasses, Chains, Drawing Instruments, Scales, Tape Lines, &c. Repairing and Jobbing promptly attended to.

Railroad Iron.

1,200 TONS, delivered at New Orleans, within the month of February. Apply to
THEODORE DEHON,
10 WALL ST., NEW YORK.
28th January, 1856. 415

SCIENTIFIC WORKS,

PUBLISHED BY

D. APPLETON & CO.,

346 and 348 BROADWAY, NEW YORK.

Appleton's Dictionary of Mechanics, Machines, Engine Work, and Engineering, 2 vols. 8vo.....	\$12.00
Bourne's Catechism of the Steam Engine, Bourne's Treatise on the Screw Propeller, 4to.....	\$9.00
Griffiths on Marine Architecture.....	\$2.00
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Knapen's Mechanic's Assistant.....	\$1.00
Lyle's Principles of Geology, 1 vol. 8vo.....	\$2.25
Lyle's Manual of Geology, 1 vol. 8vo.....	\$1.75
Overman's Metallurgy, 8vo.....	\$5.00
Templeton's Mechanic's, Millwright, and Engineer's Pocket Companion.....	\$1.00
Ure's Dictionary of Arts, Manufactures, and Mines, 2 vols. 8vo, new edition.....	\$5.00

D. APPLETON & Co. have on sale all the important English Engineering Works. 511

NOTICE TO

Railroad Contractors.

Memphis, Clarksville, and Louisville Railroad. THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect, at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

Maps, profiles, and plans can be seen at the office of the Company in CLARKSVILLE, or inquiries made of the undersigned.

W. B. MUNFORD, Pres't M. C., & L. R. R.
CLARKSVILLE, Tenn., Jan'y 16th, 1856. 614

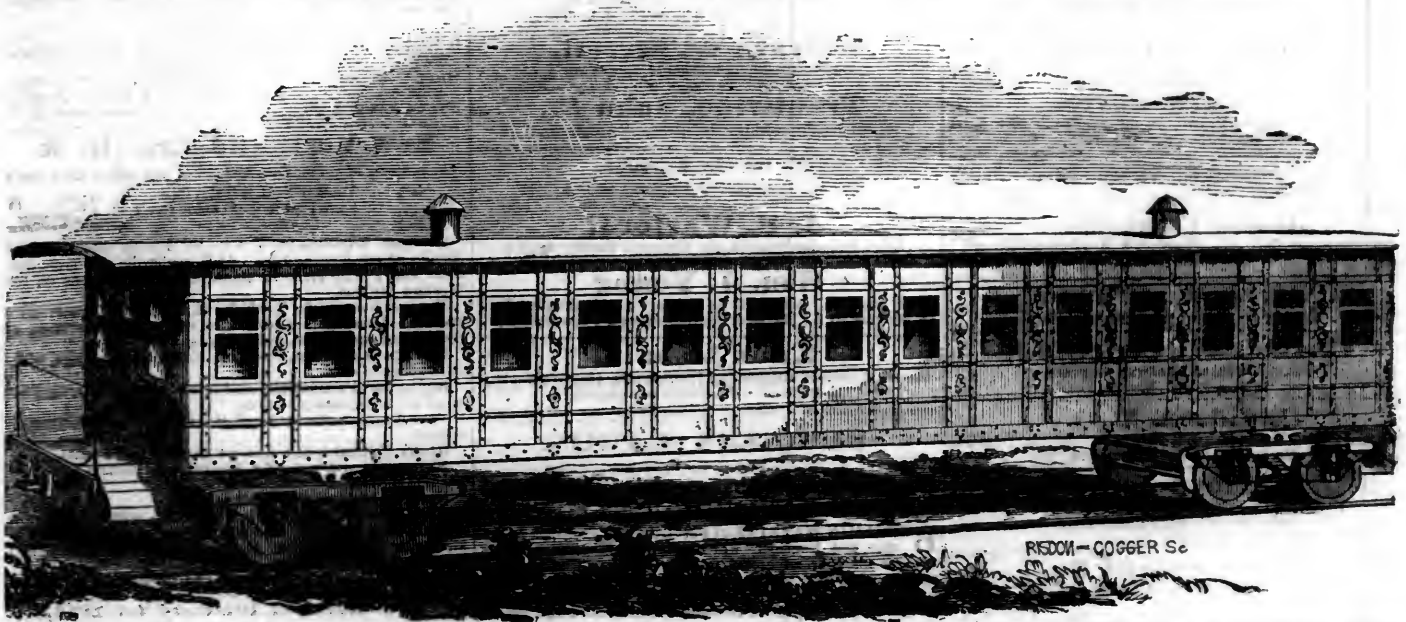
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all of which have 4 wheels connected with centre bearing
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XII., No 9.]

SATURDAY, MARCH 1, 1856.

[WHOLE No. 1,037, VOL. XXIX.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, March 1, 1856.

CITY RAILROADS.

In all large commercial cities, we find that common interests concentrate themselves to as small a space as the positive demands of business will permit. Thus, each department of operation is confined, and all the various occupations of which money-making by wholesale transaction is the object, will be found in possession of a comparatively small territory. The reason is plain enough. Commercial transactions dependent on navigation cling to the wharves and form the root from which all other heavy business grows and on which it depends. So it folds around and clings to the great interest and thus is built up that important part of such cities known as "Downtown."

Hanging on the skirts of this division the retail trade of all sorts will be found. And then come the "Up-town" residences and farther off the suburbs.

To accommodate those, who during the day are piled up five, six, and seven deep among boxes, bales, and barrels of the lower part of cities—came in the contrivance of cheap lines of stages.

This sort of accommodation is made use of by all where no better exists and the omnibus is accordingly the most democratic institution in the land.

But this arrangement has its inconveniences. For instance the island on which the city of New

York is built is very long and at the lower end somewhat narrow, so that the different lines of omnibus coming down the various avenues are huddled together, while yet a mile from the lower end of their routes. And moreover, when they are in the less crowded parts of their channels, they take up great quantities of room because confined by no enforced regulations. The result of all this is that the business of the common haulage is interfered with and everything in the street clogged and delayed.

To a greater or less degree this is the case in all cities.

Obviously, the first remedy presenting itself is to regulate the routes of the stages—confine them to the proper side of the street for instance. And this is attempted. But though to a certain extent successful in accomplishing the object, there are reasons that must still operate against the toleration of the omnibus. It seats a very small number of persons, and, therefore, the number required is so large as to make them troublesome.

Small as they are they require the power of two horses who with a load of fourteen persons draw on an average less than a ton.

Their speed with this small load is too slow—for men of business.

These facts lead to various inventions, for improving matters.

The first suggestion is to make a smoother pavement; hence the iron or wooden or the smooth stone called in New York the Russ pavement. This does not cure the whole trouble. Omnibus drivers will turn out of their course and block up the streets. And then too the stages hold no more than before. Why not put the coach on railroad wheels and lay down an iron track, and by this means the running friction being reduced, the carriage may be enlarged and a greater accommodation afforded.

These thoughts suggested the city railroad—contrivances more necessary to New York than cities generally because of the fact before mentioned, that this island is so long and narrow—extending as it does nine miles from North to South with a width averaging less than a mile.

But for all large cities they are an improvement on stage lines.

We have before suggested that too close an analogy has been drawn between these roads and the steam-track—a fact that will appear in our description.

THE GAUGE

adopted is 4 ft. 8½ inches being the most common railroad gauge of the country.

THE RAILS

weigh, from 64 to 75 lbs. per yard.

It is necessary that the rail should not present difficulties in the way of teams crossing the track. It is therefore laid level with the adjacent pavement. The rail is 5 in. wide and 2½ in. high. On the inside is a groove 2½ in. wide by one inch deep. The tread on the outside of the railroad is 2 in. wide.

Suppose this to be the proper shape for the rail it is, we conceive, badly proportioned. But we think it fundamentally wrong.

First, the groove is unnecessary; the tread side of the rail is sufficient protection to the wheel with its flanch, so that the inner edge of the groove might be dispensed with, and hence the whole groove side except so much as is necessary for a bottom flanch to make lateral stiffness.

Again, the tread is too wide. On the steam-track a wide tread is necessary for the support of greater weight moved at high velocities, and for the purpose of furnishing adhesive surface for the drivers.

A city car when loaded with 70 passengers weighs about 7 gross tons, and is never moved at a speed greater than ten miles per hour. The train is moreover an isolated car. The steam-track, on the contrary, is required frequently to support on the same number of wheels twenty gross tons at a speed of thirty miles an hour, and this is followed immediately by a train inflicting succession of concussions at the same speed.

It may be observed, however, that the city grooved track is subjected constantly to violence from the common carts and vehicles in the street.

The number of miles run in a year on the city track with the single car is not twice the number run with the entire trains on the principal steam roads of the country.

Hence then the absurdity of laying down such rails. [Carrying the clipping process a step further having disposed of the groove we would reduce

the tread to a half inch and batter the outer side about one-half in one. We should then have a rail weighing less than one-half the present and answering the purpose much better. There would be no receptacle for mud and snow as in the present groove, nor could pebbles or lumps of snow and ice lie upon the tread as is now the case.

In addition to these advantages, the rolling friction would be greatly reduced by reducing the width of the tread.

At all street crossings the broad rail should be used.

The greatest advantage of all would be that the quantity of iron used would be reduced one-half, while we should have all that is necessary.

THE CARS

are not of the sort adapted to these uses. When we reflect on the duty they have to perform as compared with the large cars of the steam roads, we cannot fail to be astonished that so singular a mistake should have been made. Naturally, we should have supposed the omnibus and not the railroad car would have been the model. But so it has happened that railroad cars really stronger than the sixty passenger carriages have been constructed for these purposes.

This is no reflection on the car-builders who have furnished what was ordered, but is a very decided reflection on the intelligence of those who have designed and managed these works.

The bodies of these small cars affording twenty-four seats weigh 5,000 lbs. Of the narrow gauge sixty passenger steam car, $2\frac{1}{2}$ feet wider, the weight exclusive of trucks amounts to about 13,000 lbs. That is to say—the pieces of the frames are turned out of the same machines and are of the same sizes. We have a smaller car as to capacity without any reduction in the size of the parts.

There is one good reason for this and that is of importance, if it be granted that the present is the best form of car. It is, that the disturbances of the rail are such that the carriage is mounted with more room for side play than is customary on the smoother rail and that, therefore, there is more *wabbling* of the car. In addition to which the track is much more rough. The result of which fact is that a stronger carriage in every way is needed.

But the truth is, the *principle* of construction is wrong. The shape of the vehicle is wrong—the mounting is wrong. Instead of being the clumsy things they are, these cars should not weigh—wheels and all—over 3,000 lbs., and then should be stonger than they are at present.

We have been informed that arrangements are in progress, by which for the future they are to be of reduced weight; but we fear the same ugly shape will be maintained, in which case they must be of reduced strength. We wish the common omnibuses were the model.

At the manufacture's establishment of Passavant, Archer, & Co. in this city we have observed some iron cars under construction for a Boston road. They are warranted to weigh but 3,300 lbs. and are of improved pattern. We believe they will be the best cars in existence, because we believe all cars should be built of iron.

The wooden cars of the city roads in this country are of the same square shape as the steam

cars, being about 17 ft. long, 6 ft. 6 in. high, and 6 ft. 6 in. wide. The seats are arranged along the sides facing the middle like those in the omnibus. Cars of this length are lighted on each side by nine windows and are called "nine-panelled cars." Just under the roof are hand rails passing the length of the car from each side of the doorway holding straps for the support of standers. They have doors at each end and platforms like the common cars. The door is supported on a bracket bed at top and rolls into the end wall when opened, thus covering and making useless for ventilating purposes one window at each end. Over the other window is put the signal lantern, which sets into the wall and thus prevents opening the sash below; so the door is the only ventilation to be relied on in the extremities of the carriage.

These cars are seldom turned, but the horses are changed from end to end as necessary.

They are provided with brakes to be operated by a crank at either platform. Bells with straps form communication between the driver in front and the conductor on the rear.

THE STABLES AND DEPOTS

are at the upper end of the lines where property is cheapest and the town least settled.

Some considerable mistakes are made in the arrangement of these buildings. But we leave the consideration of that matter for the present and return to the

TRACK AND ITS BUSINESS.

Financially, they are among the most important interests of the day, and as new cities are built, the demand for this sort of improvement increases. Having the experience of the old world for a guide and the benefit of an example somewhat nearer in the older districts of American towns, we find as might be expected the enterprise and foresight of the pioneers of the West as well as the liberality of Eastern municipalities have been careful to project city streets of greater width than has been customary in days past.

The most important cities of the West are turning their attention to the subject and are looking in this direction for information.

If the city of New York was not the first, certainly in New York only have they been built to a considerable extent. Nothing can demonstrate the necessity and value of these channels better than the amount of work they actually accomplish.

Thus we have in this vicinity, including the lines in the neighboring city of Brooklyn, six companies owning 87 miles of track with the necessary stock to equip and work.

These companies represent a capital of more than five millions of dollars (\$5,020,000). They own real estate—shops, depots, stables, &c.,—to the amount of \$633,000, while their roadway is estimated at \$3,346,000, including the price of 9,500 tons of iron rail.

They employ 1,450 men as conductors, drivers, switchmen, hostlers, &c., and their motive power is found in the sinews of 2,550 horses and mules valued at \$385,300. The accommodation is found in 350 cars, worth in the aggregate \$265,600. During the twelve months ending the last day of September, 1855, there had been transported over these roads more than twenty-nine million passengers (29,072,300.) Thus a number equal to the whole proportion of New York and

Brooklyn may have been to ride in the Avenue Cars 40 times. And the cars have been moved nearly five million miles, (4,755,886) so that the rails have been run over about fifty-five thousand times by a single car. The expense during the year of doing all this work was \$820,000. The earnings, \$1,300,000. Leaving a balance of \$500,000 or nearly 10 per cent. on the capital.

There are also in addition to the city railroads of New York and Brooklyn—a road is under construction in Massachusetts—connecting different portions of Cambridge with Boston.—Companies are also organized in Boston for the purpose of building a city road to Roxbury and another to Dorchester. The subject is agitated in Philadelphia, and we learn that in St. Louis a charter has been granted to a company that with its main stem and ramifications will cover 50 miles. Chicago is also contemplating a similar work.—There is a small road from Louisville, Ky., around the Falls to Portland.

They must in time become a feature of all American cities.

In Europe we are familiar with none except a short road in Paris, modeled to some degree, on the American roads. They use the same rail as that laid in New York.

But the Parisian cars are much like the French *diligence*, and are provided with seats on the top.

They have but one door of entrance which is at the rear, and are turned at the end of the trips, driving out of the the track upon a hard road-bed and then driven back into the track—

Railroads in New York.

(Continued from Page 117.)

NEW YORK CENTRAL R. R.

(See the Journal for December 22d, 1855.)

OSWEGO & SYRACUSE R. R.

The authorized capital of this corporation is \$350,000 in fifty dollar shares. The amount paid in is \$399,000. The excess consists of an increased stock issue made by authority of the stockholders, and divided *pro rata* among themselves, on the payment of 35 per cent of its par value in cash, the remainder being given to represent earnings. The total funded debt is \$196,5000, bearing seven per cent interest, and maturing at the following dates:

Jan'y 1st, 1857.....	\$14,500
July 1st, 1858.....	100,000
Jan'y 1st, 1859.....	50,000
Jan'y 1st, 1862.....	12,000
July 1st, 1863.....	9,000
Jan'y 1st, 1864.....	11,000

Total.....\$196,500

The bonds are not secured by mortgage. The floating debt amounts to \$20,181, which is \$2,913 less than last year. This is made up of daily transactions, none of it forming a permanent standing debt.

Total cost of road and equipment, \$723,683. Estimated value, \$784,091. Length of road 35.2 miles; of double track, 2.4 miles. Weight of rail used, 57 lbs. per yard. Number of locomotives, 6; of passenger, baggage, and mail cars, 8; and of freight cars, 42. About 30 miles have been ballasted, at a cost of \$1,350 per mile. Sum of ascents and descents, 305½ feet, giving an average of 8.6 feet per mile. Maximum grade, 26.4 feet, for less than half a mile. Total straight line,

29½ miles. Minimum radius of curvature, 1,536 feet for one quarter of a mile.

During the last fiscal year, 50,015 miles were run by passenger, and 20,100 miles by freight trains. Number of passengers carried, 102,793. Tons of freight transported, 40,851. The earnings were—

Passengers.....	\$71,177
Freight.....	51,035
Other sources.....	4,328

\$126,540

Transportation expenses.....	\$67,558
Interest on debts.....	14,566
Dividends.....	13,117
	<hr/> 95,241

Balance.....\$31,299

Two persons, both employees, were killed by falling from the cars. No other accidents.

The present officers are—F. T. Carrington, President; Luther Wright, Treasurer; A. P. Grant, Secretary; and George Skinner, Superintendent. Office at Oswego, N. Y.

BLACK RIVER & UTICA R. R.

This road, which is opened from Utica to Boonville, 35 miles, is designed to extend to the St. Lawrence at Clayton, a total distance of 109 miles. The capital authorized by law is \$1,500,000, of which \$1,130,700 have been subscribed, and \$618,330 paid in. Par value of shares, \$100 each. City of Utica has subscribed \$250,000 to the work. Total funded debt, \$132,000; and of floating debts, \$185,859. The former is an issue for a like amount secured by a first mortgage, made in July, 1854, bearing seven per cent, and payable in 1869.—Cash realized from sale, \$126,300.

Total cost of road, equipment, &c., \$974,823.—Estimated value, \$974,000. Length of line 108½ miles, of which 27 were laid at 30th September last. Weight of rail used, 58 and 61 lbs. The rolling stock consists of 3 locomotives; 5 passenger, baggage, and mail cars, and 25 freight cars. Sum of ascents and descents, on 35 miles, is 1,148 feet, or nearly 33 feet per mile. Maximum grade, 66 feet. Sum of straight lines, 22½ miles. Total curvature, 998°. Minimum radius, 1,433 feet, for 1-10 mile only.

During the nine months in which the road was operated, there were 19,398 miles run by passenger, and 969 miles by freight trains exclusively.—Number of passengers carried, 60,616; of tons of freight transported, 7,403. The earnings were—

Passengers.....	\$18,573
Freight.....	7,388
Other sources.....	301

\$26,262

Transportation expenses.....	\$12,402
Interest on debts.....	9,640
	<hr/> 22,042

Balance.....\$4,220

John Butterfield is President; James S. Lynch, Treasurer; Wm. H. Ferry, Secretary; and Daniel C. Jeune, Engineer. Office at Utica, N. Y.

OGDENSBURG, CLAYTON & ROME R. R.

The authorized capital of this company is \$2,000,000, of which \$1,002,400 has been subscribed, and \$397,238 paid in. Par value of shares, \$100 each. Fifteen hundred of these are held by the village of Rome. The whole funded debt consists an issue of \$7,700, at seven per cent., secured by mortgage. Date of issue, Jan'y 1st, 1855; and of

maturity, Jan'y, 1870. The floating debt is \$67,537, making a total indebtedness of \$75,237.

Total cost of road and equipment, \$436,822.—Total estimated value, \$356,291. Length of road from Rome to Ogdensburg, 123¼ miles. Value of materials on hand, \$12,071. Payments made last year were \$245 for interest on bonds, and \$3,452 for interest on floating debt. There is no work now being done on the line. The Directors are making an effort to pay off the floating debt, and commence operations in spring.

John Stryker is President; Roland S. Doty, Treasurer; Nelson J. Beach, Secretary; Octave Blanc, Engineer. Principal office at Rome, New York.

WATERTOWN & ROME R. R.

Authorized capital stock, \$1,500,000, of which have been subscribed \$1,371,263, and \$1,370,378 paid in. Par value of shares \$100 each. No loss on sale of stock. Funded debt, \$545,000, consisting of the following issues bearing seven per cent. interest.

No.	Issue.	Am't of issue.	Date of maturity.	Cash realized.	Char. of sec'y.
1.	\$400,000	1851—1858	to 1868.	\$372,272	Mort.
2.	250,000	1851—1856	to 1870.	230,956	Con.
3.	200,000	1852—Converted	.....	118,000	Con.
4.	30,000	1853—1863	.....	27,500	Io.
5.	21,000	1855—1880	.....	18,850	Mort.

\$901,000

\$767,578

Of the third class, all have been converted into stock, and \$146,000 of the second. Of the fourth class, \$10,000 have been exchanged for those of the fifth, which was issued to redeem previous issues. The first and second classes are secured on all the company's property. The floating debt amounts to \$255,979, making in all \$800,979.

The total cost of road, equipment, &c., is put at \$2,068,063. Estimated value of the company's property, \$1,960,316. The latter includes interest in steam and canal boats, valued at \$20,444.

Length of road, 96¾ miles; of double track, including sidings, 10 miles. Weight of rail per yard, 56 lbs. Number of engine houses and shops, 5; of locomotives, 19; of first class passenger cars, 11; of baggage, mail, and express do., 6; and of freight cars, 266.

There is one draw bridge on the line, over the Chaumont river, 480 feet long, and having a draw of 24 feet.

Sum of ascents and descents, 1,785½ feet, or an average per mile of 18½ feet. Maximum grade, 40 feet for one mile and three quarters.—Sum of straight lines, 75 miles. Total degrees of curvature, 1,738. Minimum radius, 816 feet.

During the year, 151,276 miles were run by passenger, and 99,268 miles by freight trains.—Number of passengers carried, 186,763; do., tons of freight, 132,675. The earnings were—

Passengers.....	\$155,363
Freight.....	232,820
Other sources.....	16,191

Total.....\$404,374

Transportation expenses.....	\$231,900
Int. on funded debt.....	37,380
Int. on floating debt.....	24,458
Dividends.....	48,028
Surplus fund.....	52,999
	<hr/> 394,765

Two fatal accidents are reported, one of which happened to a passenger. No blame attached to company in either case.

The principal officers for 1855 6 are—William C. Pierrepont, President; Daniel Lee, Treasurer; Clarke Rice, Secretary; and Job Collamer, Supt. Principal office at Watertown, N. Y.

POTSDAM & WATERTOWN R. R.

The authorized capital of this company is \$2,000,000, in shares of \$100 each. Stock subscribed, \$792,900; do., paid in, \$467,200. The contractors take one-half stock on their contracts, deliverable as the work progresses. Funded debt, \$211,500; floating do., \$52,689; total, \$264,189. The former consists of one issue, secured by first mortgage, dated December, 1853, bearing seven per cent. interest, and redeemable—\$100,000 in 1861; \$100,000 in 1869, and \$41,500 in 1874.—Cash realized for bonds, \$220,800.

Total cost of road, equipment, &c., \$749,683.—Estimated value of property, \$720,422. Length of road, 75½ miles, of which 29½ are laid. Weight of rail, 56 lbs. per yard. Number of engine houses and shops, 1; of locomotives, 2; of passenger and baggage cars, 3; and of freight cars, 30. Twenty-seven miles are ballasted.

Sum of ascents and descents, 646¾ feet, or an average of 22 feet per mile. Maximum grade, 37 feet per mile for 11 miles. Total straight line, 23¼ miles. Degrees of curvature, 687½. Minimum radius, 550 feet for a few yards only.

During the year there were run 22,767 miles, by mixed passenger and freight trains, and 76,553 miles by the latter exclusively. Passengers carried, 31,155; tons of freight hauled, 22,825. The earnings were—

Passengers.....	\$11,186
Freight.....	14,807
Other sources.....	302

Total.....\$26,385

No return is made of expenses of operating, as the contractors have, by agreement, operated the road upon their own account. The company have paid as interest on funded and floating debt \$12,217.

The road was opened from North Potsdam to Potsdam, 7 miles, in October, 1854; from Watertown to Evans' Mills, 10 miles, in November following; thence to Philadelphia, 7 miles, in June, 1855; and to Antwerp, 6 miles, in August of the same year.

Edwin Dodge is President; Daniel Lee, Treas.; H. L. Knowles, Sec'y; Jonathan Adams, Engineer; and G. B. Phelps, Supt. Principal office at Watertown, N. Y.

BUFFALO & STATE LINE R. R.

The capital of this company, as fixed by charter, is \$1,300,000, which has been all subscribed and paid in. Par value of shares, \$50 each.—Funded debt, \$1,000,000 at seven per cent. interest. The following are the issues of bonds made:

No.	Amount.	Cash realized.	Date of issue.	Date of maturity.
1..	\$500,000	\$444,993	Oct. 1851.	1866 Mort.
2..	300,000	272,920	Ap'l 1852.	'59 '62 In.
3..	200,000	189,121	Oct. 1852.	1864 None.

\$1,000,000 \$907,034

The floating debt is now \$40,000. Total liabilities \$1,040,000. Cost of construction, including equipment and other expenditures, \$2,494,364.—Estimated value of property, \$2,448,697.

The total length of road from Buffalo to State

Line, is 69 miles. Twelve miles have double track or sidings. The company own 15 miles of branch road. Weight of rail per yard, 58 lbs.—Number of shops, 2; of locomotives, 20; of first class passenger cars, 22; of baggage, mail, and express, 10; of second class passenger, 4; and of freight cars, 189. There are 6 bridges each having a span of 150 feet and over. Number of cross-ties per mile, 2,344; and of chairs 586.

The total ascents and descents are 1,039 $\frac{3}{4}$ feet, or an average of 15 feet per mile. Minimum grade 36 feet for two miles. Sixty-one and three-fourth miles consist of straight lines. Total degrees of curvature 490 $\frac{1}{2}$. Minimum radius, 1,273 feet for one-third of a mile.

The number of miles run by passenger trains, last year was 204,642; and by freight trains, 151,309. Number of passengers carried, 391,909; tons of freight, 179,451. The earnings were;

Passengers.....	\$397,341
Freight.....	268,609
Other sources.....	13,800

\$679,750

Transportation expenses.....	\$323,987
Interest.....	58,223
Dividends (10 per ct.).....	130,000
	512,210

Balance.....\$167,640

Four fatal accidents occurred, two of the victims being employees, one a passenger who jumped off the train while in motion, and one neither passenger nor employee struck when crossing the track.

George Palmer is President; F. S. Tows, Acting Treasurer and Secretary; and C. C. Dennis, Superintendent. Principal office at Buffalo, New York.

BUFFALO & PITTSBURG R. R.

The authorized capital of this company is \$750,000. Amount subscribed, \$228,100; paid in \$83,975. Par value of shares, \$100. The company owe no debts except a note for \$1,500 bearing seven per cent interest. Total expenditures, \$81,043. No increase to the above was made last fiscal year. Estimated value of property \$69,300. The length of road, when completed, will be 74 miles. None of it is yet laid.

Orlando Allen is President; Frederick Gridley, Treasurer and Secretary; and E. R. Blackwell, Chief Engineer. Principal office at Buffalo, New York.

NEW YORK & NEW HAVEN R. R.

Authorized capital, as by charter, \$3,000,000, all subscribed, and of which, \$2,992,450 have been paid in. Par value of shares, \$100 each. Cash realized from stock, \$2,335,775, the balance having been taken by contractors. Funded debt, \$2,126,000; floating do., \$138,656; making a total of \$2,264,656, all bearing seven per cent. interest. The company have on hand assets, as cash, stock and bonds unsold, worth \$117,830, which will reduce their floating debt to the figure it formerly was returned at. The bonded debt consists of the following:

No.	Amount.	Cash realized.	Date of issue.	Date of maturity.
1..	\$251,000	In full.	April, 1850.	Dec., 1855.
2..	450,000	"	April, 1851.	Dec., 1860.
3..	50,000	"	Jan'y, 1851.	Jan., 1861.
4..	1,375,000	1,328,203	1852—1854.	Dec., 1866.

\$2,126,000

None of the bonds are secured in any way.—

On the 1st of October last, a new issue was created, secured by mortgage on the road and equipment, for \$3,000,000, wherewith to meet all these bonds referred to. The following items are given in the cost of construction.

Graduation, masonry, and bridges.....	\$1,906,453
Superstructure, including iron.....	1,117,136
Buildings, stations, and fixtures.....	266,611
Land, land damages, and ferres.....	357,396
Locomotives and cars.....	548,961
Miscellaneous.....	710,227

Total.....\$4,906,784

It is believed that the increased value of "right of way" will fully cover any depreciation which has taken place.

The length of road is 62 miles; of double track and sidings, 58 $\frac{1}{4}$ miles. A little over 14 miles is in the State of New York. Weight of rail, 61 lbs. per yard. Number of engine houses and shops, 5; of locomotives, 27; of first class passenger cars, 73; of baggage, mail, and express do., 18; and of freight cars, 329. The company have leased 55 $\frac{1}{2}$ miles in Connecticut. On the road there are 21 bridges having a length of 20 feet and over. One of these, 80 feet long, is of iron, and six are draw-bridges each having an aggregate length of 4,822 ft. The road is ballasted ten feet wide by two feet deep. Number of cross-ties per mile, 2,344 being on an average of 6x8 and 8 feet long. Chairs per mile, 586, having an average weight of 24 lbs.—The rails have been four years in use. We omit characteristics of the track, as these are given for that part in the State of New York only.

During the year 385,974 miles were run by passenger; and 89,611 by freight trains. Number of passengers carried, 1,072,055; tons of freight, 74,625. The earnings were—

Passengers.....	\$734,754
Freight.....	151,592
Other sources.....	49,679

Total.....\$936,025

Trans. expenses.....	\$594,358
Int. on debt.....	148,976

\$743,334

Harlem Co. share.....	71,002
Loss on canal road.....	34,647
Damages Norwalk accident.....	25,304
Balance to payment of floating debt.....	61,738
	\$936,025

On that part of the road within the limits of this State, one employee and three "others" were killed by accidents. Eleven passengers were injured by a train being thrown off the track.

The principal officers for 1855-6 are—J. R. Bulkley, President; Wm. Bement, Treasurer; E. S. Abernethy, Secretary; and J. H. Hoyt, Superintendent. Principal office at No. 1 Hanover-st., New York.

N. Y. & HARLEM R. R.

Amount of capital authorized by charter, \$8,000,000, of which have been subscribed—

Old stock, (\$50 shares).....	\$4,217,100
New " ".....	1,500,000

\$5,717,100

—all of which has been paid in. The actual cash realized cannot be given. Total funded debt, \$3,074,301; floating do., \$995,468; making a total of \$4,069,769. The funded debt consists of the following issues—

No. 1—\$129,301, issued in 1849 and '53, due in

1858, six per cent. interest. Full amount realized. No security.

No. 2—\$157,000, issued in Feb'y, 1849, payable in 1859, seven per cent. Full amount realized.—No security.

No. 3—\$156,000, issued in Feb'y, 1851, payable, 1861, seven per cent. Full amount realized. No security.

No. 4—\$94,000, issued May, 1852, payable, 1867, seven per cent. interest. No security. Am't realized not ascertainable.

No. 5—\$113,000, issued March, 1851, payable, 1872, seven per cent. Full amount realized. No security.

No. 6—\$2,262,000, issued May 1st, 1853, payable, 1873, seven per cent. First mortgage. Cash realized, \$2,101,395.

No. 7—\$163,000, issued August, 1854, due, 1864, seven per cent., 2d mortgage. Cash realized, \$142,047.

The floating debt consists of—

Real estate mort., 7 per cent., having various times to run.....\$141,312

Current obligations, 7 per cent., and varying in time of payment from loans on demand to notes and bonds payable in six months.....769,790

Unpaid bills, \$8,683; unpaid interest and dividends, \$47,097; individual acc'ts, partly at 7 per ct., \$108,755.....164,535

\$1,075,637

Less cash items and bills receivable...80,169

Balance.....\$995,468

The total expenditure for graduation, masonry, bridges, superstructure, buildings, lands, and fencing, to date, have been.....\$5,612,278
Engines and cars.....846,526
Albany extension certificates.....1,533,500
Other expenditures.....765,899

Total.....\$8,758,203

Estimated value of the company's property, \$7,067,407. Length of road, 130 $\frac{3}{4}$ miles; of double track and sidings, 80 $\frac{3}{8}$ miles; and of branches, 21 $\frac{1}{2}$ miles. Weight of rail used, 50 and 60 lbs. per yard. Number of engine shops and houses, 19; of locomotives, 37; of first class passenger cars, 63; of baggage, mail, and express do., 13; of city line cars, 29; and of freight cars, 388. There are 95 bridges, each over 20 feet long. The longest of these is 362 feet. Road is all well ballasted, except where such is rendered unnecessary. The characteristics of the road to the north line of Westchester county only, are given.

The mileage made for the year by steam passenger trains was 357,868, and by freight trains 187,827. Tons of freight carried, 123,256. Number of passengers not given. Average fare for the latter, two cents per mile. The earnings were—

Passengers.....	\$524,048
Freight.....	424,780
Other sources.....	86,749

\$1,035,577

Trans. expenses.....	\$801,451
Interest.....	298,031

1,099,482

Deficit.....\$63,905

One passenger, two employees, and five others were killed; and thirty-two passengers, one employee, and four others wounded. A collision was the cause of thirty passengers being wounded, and one employee being killed.

The principal officers for the present year are—Philo Hurd, President; Wm. A. Whitehead, Treasurer; W. H. Emerson, Secretary; John B. Sargent, Engineer; Jeremiah Nottingham, Superintendent; and W. J. Campbell, Assistant Superintendent. Principal office, 1 Centre street, New York.

HUDSON & BOSTON R. R.

The capital stock of this company is \$175,000, which is all subscribed and paid in. Par value of shares, \$100 each. No debts. Cost of road and equipment, \$175,000. Estimated value of property, \$175,000. Length of road from Hudson to Chatham, 17 miles. Last year, 16,400 miles were run by passenger, and 30,600 miles by freight trains. Number of passengers carried, 32,788; tons of freight, 55,784. The earnings were—

Passengers.....	\$9,929
Freight.....	34,944

Total.....	\$44,873
Trans. expenses.....	34,047

Balance carried to surplus account..\$10,226
One person, an employee, was killed.

Geo. H. Power is President; Stephen Fairbanks, Treasurer; John T. Olcott, Secretary; and J. B. Waterman, Chief-Engineer. Principal office, in Hudson, N. Y.

ALBANY & WEST STOCKBRIDGE R. R.

This road is leased by the Western railroad company of Massachusetts. The capital is \$1,000,000, all subscribed and paid in. Par value of shares, \$100 each. With the exception of a few shares held by individuals, for the purpose of maintaining the company's organization, the entire stock is held by the city of Albany, which issued bonds to a like amount. In addition to this, the lessees have expended, at different times, \$930,895 on construction, which may be regarded as so much floating debt due them by the A. & W. S. R. R. Co. The sum of \$10,000 is annually set apart to redeem the bonds at maturity. At 30th September last, the aggregate amt set apart for this purpose was \$452,933.

Length of road, 38 miles; of double track and sidings, 6 miles. Weight of rail per yard, 56 to 61 lbs. No engines or cars. Miles run in 1854-5, 83,246 by passenger, and 181,898 by freight trains. Passengers carried, 181,429; tons of freight, 226,228. The earnings were—

Passengers.....	\$131,860
Freight.....	184,995
Other sources.....	6,463

Total.....	\$323,318
Trans. expenses.....	\$219,991
Int. on debts.....	93,327
Dividends.....	10,000
	\$323,318

One man, neither passenger nor employee, was killed while walking on the track.

Marcus T. Reynolds is President; Stephen Fairbanks, Treasurer; Dexter Reynolds, Sec'y; and Henry Gray, Superintendent. Principal office, at Springfield, Mass.

HUDSON RIVER RAILROAD.

The authorized capital of this company is \$1,000,000, of which \$3,770,926 have been subscribed, and \$3,758,466 paid in. Par value of shares, \$100. The stock consists of \$3,062,300 old stock taken at par, and \$696,166 issued for interest on stock. The funded debt is \$8,842,000, and the

floating debt, \$408,362; making an aggregate of \$9,250,362. The former consists of the following issues.

No. 1. \$1,954,000, at seven per cent issued in 1849, due February 1st, 1869. With No's. two and three, it is secured by a first mortgage on the whole real and personal estate of the company.

No. 2. \$1,936,000, at seven per cent., issued in 1849, falls due February 1st, 1869.

No. 3. \$110,000, at six per cent., issued in 1849, falls due August 1st, 1869. The whole of these three issues realized their par value in cash.

No. 4. \$2,000,000, at seven per cent, issued in 1850, due December, 1860. Secured by second mortgage. Discount on sale, 3.28 per cent.

No. 5. \$1,147,000, at seven per cent, issued in 1852, due May 1st, 1867. Bonds convertible, unsecured. Discount on sale 10 per cent.

No. 6. \$1,695,000, at seven per cent, issued Nov., 1854, due May 1st, 1875. Secured by third mortgage. Discount on sale, 24.48 per cent. The following items of cost are given in the report:

Graduation, masonry, and bridging....	\$5,443,605
Superstructure including iron.....	2,223,441
Buildings.....	720,852
Land, damages and fencing.....	880,867
Locomotives.....	521,678
Passenger, baggage and freight cars....	634,450
Engineering and agencies.....	707,917
Interest, discount, contingencies, &c....	1,585,288

Total.....\$12,737,898

The cost of the property is believed to be a fair estimate of its value.

Length of road, 144 miles; of double track and sidings, 111 miles, making as total single track 255 miles. Weight of rail, 70 lbs. per yard. Number of engine houses and shops, 10, of locomotives, 57; of first class passenger cars, 99; of baggage, mail, and express do., 27; of second class and emigrant do., 12; and of freight cars, 512. The company operate under lease, the Troy and Greenbush road, 6 miles, extending from Albany to Troy. Number of bridge structures, 90, including 10 drawbridges. Total length of bridging, 38,031 feet. Road ballasted, 10 feet in width by one foot deep. Cross-ties per mile, 2,200, being on an average 6x6 and 7½ feet long. Chairs per mile, 596, averaging 26 lbs. each. Characteristics as to graduation and curvature not given.

During the year 543,539 miles were run by passenger, and 338,944 by freight trains. Number of passengers carried, 1,540,856. Tons of freight hauled, 139,968. Average rate of speed for passenger trains, 33 miles per hour when in motion, or 28 including stops; of express trains these respective rates are 39 and 35; and of freight trains, 20 and 16 miles. The earnings were—

Passenger.....	\$1,213,970
Freight.....	565,717
Other sources.....	32,400

Total.....\$1,812,087

Transportation expenses—	
Passengers.....	\$744,215
Freight.....	463,926

Interest on funded debt.....	\$1,208,141
" floating do.....	581,093
	30,751
	\$1,819,985

Deficit.....\$7,898

The surplus fund amounts at present to \$49,819. Materials on hand are valued at \$225,629. Aver-

age number of persons employed during the year, 1,233. Floating debt paid, \$495,421. Total accidents, 35, of which 26 were fatal. Of the latter 2 were passengers, 2 employees, and 22 others.—Nearly every case arose from walking or lying on the track, or jumping from trains while in motion.

The officers for the present year are—Samuel Sloan, President; M. L. Sykes, Jr., Vice President and Superintendent; John T. Davenport, Treasurer; Thomas M. North, Secretary and Attorney; Francis A. Utter, Engineer; and C. C. Clark, Auditor. Principal office at No. 68 Warren street, New York.

Railroad Earnings.

The annexed table gives the receipts of railroads in Jan., as far as published:

	1856.	1855.	Inc.
Balt & Ohio.....	\$162,160	\$336,024	*\$173,864
Balt. & Ohio W.			
Br.....	29,650	34,604	*4,954
Chicago and Burlington.....	92,332	.....	.....
Chicago and R.			
Island.....	74,065	53,221	20,844
Cleveland & Toledo.....	77,713	61,853	15,860
Erie.....	402,818	427,827	*25,011
Hudson River.....	185,000	209,511	*24,511
Illinois Central.....	134,000	57,443	76,557
Milwaukee and			
Mississippi.....	36,589	32,769	3,820
Michigan Central.	156,955	122,470	34,486
N. York Central.	461,807	405,125	56,682
New York and N.			
Haven.....	60,435	56,727	3,708
Norwich & Worcester.....	18,538	18,167	371
Pennsylvania Cen.			
tral.....	298,109	298,777	*668

*Decrease.

INDIANAPOLIS AND CINCINNATI RAILROAD.

The earnings of this road for the month ending Jan'y 31, are—

Passenger.....	\$17,776 06
Freight.....	18,450 48
Mail.....	752 08
Express.....	405 00

Total.....\$37,383 57

The Maryland Delaware Railroad.

The *Easton Star* has a memorial to the Legislature, which is circulated in Talbot and the adjoining counties, praying for the balance due the Eastern Shore for works of internal improvements on the \$1,000,000 appropriated by the Legislature in 1836 for that purpose. The petition states that by the 8th section of the act passed at December session, 1835, chapter 595, the Treasurer of the Western Shore was authorized to subscribe for one million of dollars of the capital stock of the Eastern Shore Railroad Company, on condition that the subscriptions to the stock of said company (including that of the State) should be sufficient for the construction of said railroad. But in the event of sufficient stock not being subscribed, "then and in that case the million of dollars set apart for, and intended to be applied to said work shall be held sacred, and the faith of the State is hereby pledged that the said million of dollars shall be applied to the exclusive purpose of internal improvements on the Eastern Shore, and for no other purpose whatsoever; and shall be subject to the disposition of any future Legislature for this purpose.

The appropriation not proving sufficient for the construction of the road, the work was stopped, and the balance of the money, \$827,335 86, retained by the State, and this balance the petition now asks for the prosecution of the Maryland and Delaware Railroad.—*Balt. American.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,533,100	2,973,700	6,019,929	470,647	90,797	none	68	Tennessee and Alabama.	30	246,486	670,906	In progr.	---	---	---	---
Androscoog & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	90,797	none	18	Tennessee and Mississ.	---	170,931	175,340	In progr.	---	---	---	---
Androscoog.	20	91,192	232,193	343,317	29,396	12,807	none	20	Memphis and Charleston.	283	2,103,177	3,563,362	176,484	102,016	---	---	---
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	---	---	---	14	Mobile and Ohio.	527	2,300,000	1,310,666	3,666,991	In progr.	---	---	---
Port, Saco, & Portsmouth.	51	1,367,000	119,327	1,466,327	259,330	124,038	6	83	M.S. Central.	188	642,534	628,303	In progr.	---	---	---	---
Port, Saco, & Montreal.	93	1,008,093	1,059,512	2,771,310	233,234	120,834	10	17	N.O., Opelousas & G.W.	350	1,309,428	476,143	In progr.	---	---	---	---
Cheshire.	53	2,083,825	948,919	3,181,997	372,892	131,015	none	17	Vicksburg, Shreveport & Tex.	---	111,750	none	107,895	In progr.	---	---	---
Concord.	35	1,485,000	none	1,412,576	329,744	158,632	8	83	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	41	East Tennessee and Va.	16	625,425	1,023,781	In progr.	---	---	---	---
Conn't & Passumpsic Riv.	61	1,485,145	787,608	1,780,062	162,687	55,173	none	---	Nash. and Chattanooga.	151	2,319,330	1,497,081	3,843,694	316,090	112,177	none	---
Rutland & Burlington.	120	2,233,376	2,602,396	6,378,428	394,971	---	---	---	Covington & Lexington.	93	---	---	264,973	---	---	---	18 1/2
Vermont Central.	117	5,000,000	3,550,236	8,463,366	830,119	214,703	none	---	Lexington and Danville.	29	431,091	159,299	635,363	90,930	34,804	---	---
Boston and Lowell.	27	1,830,000	325,635	2,188,395	49,754	140,377	6	70	Lexington & Big Sandy.	---	540,117	61,525	428,057	In progr.	---	---	---
Boston and Maine.	83	4,976,074	150,000	4,179,535	906,790	421,561	8	78 1/2	Lexington and Frankfort.	---	---	---	570,463	In progr.	---	---	---
Berkshire.	21	600,000	none	600,000	---	42,000	7	---	Louisville and Frankfort.	65	693,236	609,061	1,559,596	244,014	96,902	6	---
Boston and N.Y. Central.	71	2,231,600	1,200,000	3,310,048	102,352	42,335	none	3 1/2	Atlantic & Gt. Western.	254	866,939	77,294	613,231	In progr.	---	---	---
Boston and Providence.	55	3,100,000	350,705	3,611,821	598,071	201,578	none	65	Bellevue and Erie.	95	---	---	---	---	---	---	---
Boston and Worcester.	68	4,500,000	655,428	4,865,439	1,008,004	404,461	6 1/2	87 1/2	Cleveland and Erie.	---	---	---	---	---	---	---	---
Connecticut River.	5	1,591,110	254,043	1,802,244	277,770	102,942	4 1/2	47	Clev., Col., and Cincin.	141	4,473,721	374,127	4,548,123	1,162,601	557,905	9	101 1/2
Eastern, Mass.	60	2,583,400	2,850,325	4,447,456	330,269	346,425	7	44	Clev., Zanesv., and Cincin.	87	---	---	---	---	---	---	---
Essex.	20	299,107	409,311	747,008	51,246	none	none	---	Cleveland and Toledo.	200	2,676,425	2,689,301	6,124,629	736,272	396,986	10	79 1/2
Fitchburg.	67	3,540,000	334,992	3,739,965	704,638	272,716	6	71 1/2	Clev. and Mahoning.	103	---	---	---	---	---	---	---
Fitchburg and Worcester.	14	238,170	74,099	333,884	42,407	19,274	6	---	Clev. and Pittsburgh.	133	2,686,770	2,516,162	4,818,153	450,216	255,868	---	67 1/2
Lowell and Lawrence.	12	200,000	140,000	303,658	56,135	23,823	6	---	Cin., Hamilton & Dayton.	60	2,100,000	1,464,364	2,961,978	483,620	---	---	65
Lowell and Lowell.	14	600,000	16,000	654,603	101,857	55,877	8	80	Cin., Wilm., & Zanesv.	131	1,120,450	1,131,255	2,326,459	In progr.	---	---	20
N. Bedford and Taunton.	21	500,000	none	533,953	198,491	56,533	6 1/2	---	Col. and Xenia.	55	1,484,550	149,000	1,481,739	356,365	187,518	10	84
Newburyport.	14	137,260	154,554	287,413	32,677	4,666	none	---	Columbus and Xenia.	64	1,418,350	311,032	1,440,447	340,781	168,949	---	---
Old Col'y and Fall River.	87	3,015,109	314,834	3,434,164	649,656	142,800	6	82 1/2	Dayton, Xen., & Belpre.	63	437,838	422,658	860,496	In progr.	---	---	---
Pittsford & Nth Adams.	18	450,000	none	413,677	50,895	25,519	6	---	Dayton and Michigan.	140	1,076,092	393,011	1,185,526	In progr.	---	---	---
Vermont and Mass.	77	2,232,540	1,046,626	3,207,867	275,523	56,383	none	11	Eaton and Hamilton.	42	448,411	835,694	1,345,673	113,859	53,256	25	---
Western, Mass.	155	5,150,000	5,689,520	9,953,258	1,763,944	718,703	7	90 1/2	Little Miami.	65	2,963,921	1,171,785	3,648,172	681,562	336,768	90	---
Worcester and Nashua.	46	1,141,000	218,244	1,394,703	209,118	82,959	2 1/2	43	Mad River and L. Erie.	205	2,451,650	2,572,932	4,446,661	---	---	---	---
Providence and Worcester.	43	1,522,200	351,000	1,843,332	316,616	131,312	7	70	Central Ohio.	138	1,520,927	3,485,076	4,283,443	Recently opened.	---	---	15
Hartford and N. Haven.	72	2,359,000	939,000	3,313,932	730,012	352,799	10	23	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	---
Hartford, Prov., and Fishkill.	123	1,845,610	2,000,124	4,060,809	268,685	119,011	none	---	Pittsbg, Maysv. & Cin.	50	---	---	343,582	In progr.	---	---	---
Housatonic.	10	2,000,000	474,177	2,420,066	330,792	18,551	none	---	Sand'y, Mansf. & Newk.	127	1,350,000	2,200,357	3,562,537	328,958	164,479	none	---
Naugatuck.	57	1,031,800	573,995	1,577,167	238,266	none	4	---	Scotlo & Hocking Valley.	135	403,975	569,650	888,858	In progr.	---	---	---
N. York and N. Haven.	62	2,992,000	2,252,647	4,980,407	906,016	335,611	none	30	Springf., Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
N. Haven and N. London.	50	738,258	735,165	1,450,318	103,956	217	none	---	Tol., Wash. & St. Louis.	242	2,500,000	4,530,000	---	In progr.	---	---	---
N. London, W. & Palmer.	66	506,600	1,007,824	1,527,827	137,660	3,717	none	---	Cin., Log. & Chicago.	255	4,196,679	1,006,125	2,080,433	In progr.	---	---	7
Norwich and Worcester.	66	1,222,300	796,886	2,509,488	304,651	95,456	6	33	Evansville & Crawfordsv.	109	708,445	1,177,596	1,844,541	127,400	64,552	---	---
Buffalo, Conn. and N. Y.	100	1,482,766	1,402,244	2,597,963	123,147	50,752	none	---	Ind. and Cincinnati.	88	1,213,723	1,442,859	2,778,612	193,142	193,142	7	56
Buffalo and N. Y. City.	92	798,439	2,587,849	3,401,868	254,770	52,030	none	---	Indiana Central.	66	608,829	1,251,357	1,669,090	321,400	186,224	---	60
Buffalo and St. Line.	81	1,300,000	1,030,000	2,343,840	507,618	264,835	10	---	Ind., Clev. & Pittsburg.	53	834,157	1,101,971	1,671,544	---	---	---	---
Cayuga & Susquehanna.	56	687,000	531,318	1,093,624	120,849	58,589	none	---	Jeffersonville.	66	1,014,252	694,000	---	206,544	94,318	---	---
Hudson River.	144	3,657,891	8,983,804	12,591,363	1,753,996	603,010	none	34 1/2	Lafayette and Indianapolis.	64	---	---	---	---	---	---	---
Long Island.	80	1,875,148	626,958	2,518,261	2,93,581	102,657	33	---	Madison and Indianapolis.	87	1,647,500	1,559,881	3,237,381	---	---	---	---
New York Central.	534	24,154,860	14,462,742	23,523,913	5,638,583	3,102,126	8	93	New Albany and Salem.	258	2,635,121	5,281,948	6,643,189	645,527	371,402	none	10
New York and Erie.	464	10,023,958	25,126,669	33,439,431	8,488,993	2,627,118	none	59 1/2	Peru and Indianapolis.	73	---	858,314	---	150,000	90,000	none	15
New York and Harlem.	133	6,166,050	3,527,995	8,127,385	942,394	154,854	none	21 1/2	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	95
Northern, N. Y.	119	1,611,527	4,522,413	5,435,565	518,527	145,733	none	2 1/2	Chicago and Rock Isl'd.	182	3,141,500	2,387,155	5,214,152	In progr.	---	---	---
Oswego and Syracuse.	37	374,920	219,594	677,754	106,764	53,380	none	---	Chicago and St. Louis.	220	---	---	---	1,077,312	---	---	---
Rensselaer & Saratoga.	25	610,000	140,000	888,182	251,348	76,327	5	---	Chic., St. Paul & P'd du Lac.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Saratoga and Washington.	54	899,900	1,053,234	1,891,993	183,959	37,666	none	---	Galena and Chicago.	298	4,334,800	1,189,304	5,866,263	1,506,710	942,281	17	112 1/2
Saratoga & Rensselaer.	71	731,614	1,118,751	1,626,117	152,648	66,407	none	---	Illinois Central.	707	1,419,440	18,001,426	17,698,090	1,532,118	---	---	97 1/2
Troy and Boston.	49	439,492	493,500	1,107,737	122,648	66,407	none	---	Peoria and Oquawka.	93	569,859	818,454	1,388,312	In progr.	---	---	---
Watertown and Rome.	97	1,370,428	854,768	2,040,543	393,954	152,752	5	65	Chic. & Miss. (Wat. Div.).	147	1,780,295	3,292,403	4,870,556	Recently opened.	---	---	---
Belvidere and Delaware.	59	1,000,000	1,177,376	2,177,376	124,301	44,828	none	---	Terre Haute and Alton.	173	2,281,420	1,256,000	3,537,424	In progr.	---	---	---
Camden and Amboy.	94	1,500,000	4,763,184	1,682,486	562,456	12	---	Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.	---	---	---	
Camden and Atlantic.	90	240,125	1,209,223	1,490,185	69,673	61,760	none	---	Mich. Central.	282	6,021,916	6,142,023	10,300,147	2,215,283	879,650	94 1/2	---
New Jersey.	31	3,253,925	798,696	4,306,338	824,032	440,447	10	123 1/2	Mich. South'n & N. Ind.	475	6,928,900	6,194,221	11,645,208	2,410,000	875,000	10	95 1/2
New Jersey Central.	75	2,000,000	1,632,085	3,600,226	378,145	180,796	7	---	Green Bay, Mil. & Ch.	155	764,075	442,726	1,193,766	In progr.	---	---	---
Morris and Essex.	62	1,155,715	351,500	1,549,622	233,596	99,377	6	---	Milwaukee and Miss.	106	1,826,428	2,467,889	3,578,757	691,843	417,443	17	84 1/2
Albany Valley.	44	1,637,867	342,564	1,983,317	---	---	---	---	Milwaukee & Watert'n.	72	354,861	132,000	514,238	In progr.	---	---	---
Cataraugus, W. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Milwaukee and Horicon.	92	---	---	31,000	In progr.	---	---	---
Chambard Valley.	50	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Milwaukee & La Crosse.	69	---	---	---	In progr.	---	---	---
Del. Lack. & Western.	109	2,865,175	1,865,597	4,140,365	In progr.	---	---	---	Racine and Miss.	68	---	---	---	In progr.	---	---	---
Erie and North East.	20	600,000	150,000	750,000	---	---	---	---	Hannibal & St.								

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1868	90	95
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1868	90	92½
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. cast. sec.	7	Div's	"	1861-64		
Do.	800,000	2d do. convertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867		
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	83
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1863	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861		
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860		
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	85
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863		
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	86	
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	86	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863		
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	86	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	75	80
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	99	100
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90	91
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	94
Jeffersonville	300,000	Do. 2d sec. conv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61		
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865		
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1853	79	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99½	100½
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100½	101½
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	98
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	94½	95
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1853-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	90	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92	95
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	93	95
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N.Y.	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	79	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	78	80

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,128,000	Do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	93	95
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107	108½
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	100½	101
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	96½	97½
Do. do.	4,000,000	Not conv. Sunk Fund, \$420,000	7	Feb'y, August	"	1875	89½	90
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	84½	85
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	86	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	90	100
Do. do.	2,000,000	2d do. do.	7	16 June 16 Dec	"	1860	85	86
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67½	68
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87½	87½
Do. (Free Land)	8,000,000	M'ge 345,000 acrs-priv 7 shares	7	March, Sept.	"	1860	80½	90½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	90	93
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	86	87
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60		
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	90	92
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	54½	85
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	87½	88
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June 15 Dec	"	1864	101½	101½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	104	
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	104	
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	87½	89

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. 1857	Feb'y, May,	100	-----	Milwaukee, 7 per ct. coup.	X	84	85
Do. 5 do. 1858-60	August and	97	98	New Orleans, 6 per ct. ep. R.R. X	Do.	78	78
Do. 5 do. 1870-75	November	97	99	Philadelphia, 6 per ct. 1870-78	Jan'y, July	92½	93
Albany, 6 per ct. coup. 1871-81	X Feb'y, August.	95	-----	Pittsburgh, 6 per ct. coup.	X	75½	76½
Alleghany, 6 per ct. coup.	X Jan'y, July	-----	68	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	94
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug.	81
Boston, 5 per ct. coup.	X April, October	98	100	St. Louis, 6 per ct. coup.	Long X	Divers	79
Brooklyn, 6 per ct. coup.	Long X Jan'y, July	99	-----	Do. do. Municipal	X	Do.	79½
Clev'Pd, 7 per ct. ep. W.W. 1879 X	Do. do.	100	100½	Sacramento, 10 p. ct. ep. 1862-74 X	Do.	Do.	79½
Cincinnati, 6 per ct. coup.	X Divers	83	88½	S.F. & C. 10 p. ct. ep. 1865, pay. N.Y. X	May, Novemb.	Do.	82
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	83	89	Do. 10 p. ct. ep. 1871 X	Do. do.	Do.	95
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August.	101	102	Do. 10 do. pay. N.Y. X	Jan'y, July	Do.	98
Louisville, 6 per ct. ep. 1880-83 X	Divers	78½	79½	Wheeling, 6 per ct. coup.	X Divers	Do.	87
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	65	70	Zanesville, 7 do.	X April, October	Do.	97½

Cincinnati Stock Sales,
By KIRK & CHEEVER.

For the week ending February 19th, 1856.

BONDS.	Per ct.
Marietta & Cincinnati, 7 per cent. 1st Mort.	70
Indianapolis & Cin., 2nd Mort. 7 per ct.	77
Cin., Wil. & Zanes. 2d Mort. 7 per ct.	60
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	43
Covington & Lexington, 10 per ct. Income	62
Little Miami, 6 per ct. Mort.	80
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	88

STOCKS.

Cin., Wil. and Zanesv., 18.—Cin., Ham. and Dayton, 62½.—	
Col. & Xenia, 82.—Cincinnati & Cin., 7.—Central Ohio, 15.—	
Covington & Lexington, 18.—Dayton and Western, 20.—	
Eaton and Hamilton, 28.—Fort Wayne and Southern, 10.—	
Indiana Central, 40.—Indianapolis and Cincinnati, 58.—Little	
Miami, 89.—Mad River and Lake Erie, 18.—Marietta and Cin.,	
17.—Ohio and Mississippi, 5.—Hillsboro' and Cincinnati, 17.—	
—Junction (Indiana), 10.	

By HEWSON & HOLMES.

For the week ending February 20th, 1856.

BONDS.	(& mt.)
\$2,000 Cin., Ham. and Dayton, 7 per ct. 2d Mort.	56
4,000 Covington & Lex., 7 per ct. 2nd Mortgage	65
1,000 Little Miami, 6 per ct. due in 1859	80
5,000 Cin. and Chic., 8 per ct. Real Estate, George	
Mine, Trustee, due in 1859	50
2,000 City of Wheeling, 6½, 1872	65
1,300 Ind. & Cin., 7 per cent. Dividend	68
500 Indiana Central, 10 per ct. Income	60
3,000 Cov. and Lex., 10½ per ct. Income	62½
848 Little Miami, Divid. Scrip. Dec'r issue	60
229 Little Miami, Dividend Scrip. June issue	80
2,000 C. & C. Wil. and Zanesv., 7 per ct. Income	46

STOCKS.

145 Sharps Ohio & Mississippi	9	"
190 " " "	8	"
200 " " "	8	"
160 " " "	6½	"
300 " " "	6	"
122 " Cin. & Chicago	8½	"
67 " " "	7½	"
100 " " "	7½	"
50 " " "	7	"
20 " Covington & Lexington	18	"
178 " Little Miami	18½	"
25 " Cincinnati, Hamilton, & Dayton	62½	"
100 " Dayton & Western	20	"
51 " Eaton & Hamilton	25	"
20 " Columbus & Xenia	84	"
48 " Indianapolis and Cincinnati	66	"

Marie & Kanz' Money Circular for the
European Steamer of the 27th inst.

[TRANSLATED EXTRACT.]

New York, Feb'y 25, 1855.

The day after our last advices of 19th inst., the stock market continued active at advancing prices. But, since then, the disposition to speculate has been checked by the fears in relation to a rupture between the cabinets of London and Washington. And in consequence of the want of activity produced thereby, prices have for the most part receded. The advices received to-day per steamers Atlantic and Asia have produced no marked effect on the market. State stocks show no notable change. California and Virginias have alone given rise to transactions of any importance, with a rise of ½ per cent. on the latter. City and county bonds are firm. Some considerable purchases of St. Louis city bonds have been made for European account. Milwaukeees have advanced 3 per cent.; San Francisco, 1. In railroad bonds there have been a fair amount of sales in Illinois Central Construction and Freeland bonds, Erie of 1875 and 1871, and New York Central 7 per cent. Erie 2d mort. have advanced ½; Erie 3d mort., 1; Erie, 1871, 1; and Harlem 1st mort., 1. Illinois Central Construction bonds are rather weak, compared to our previous quotations. Hudson River 3d mort. bonds have fallen off 1 per cent. Bonds not quoted at the Stock Exchange, have been dealt in in moderate amounts. Railroad shares have been less active than the week previous, and generally at lower prices; Cleveland and Pittsburg has declined 2, Erie 1, Harlem 2, Hudson River 2, Mich. Southern 2, New York Central ½, Panama 2, Cleveland and Toledo, after improving 2 per cent., has since fallen back 2½; Cleveland, Columbus and Cincinnati has advanced ½; Galena and Chicago 1½; and Harlem preferred 8 per cent. Money continues easy, at about previous quotations. Exchanges—sterling in fair demand at 109½; France active at 5.18½; German exchanges tending upwards, with few lots offering.

MARIE & KANZ.

Extract from the Circular of Robt. Benson & Co., per Asia.

LONDON, Feb. 8th, 1856.

The expectation that peace will result from the approaching negotiations continues to be more firmly entertained; and it is now stated that even the party most warlike in Russia look to a termination of the struggle. These views have not much affected consols, as their effect is counteracted by money continuing to be in very active demand.—To-day, however, the market is decidedly firmer. Our quotations, last Friday, were 90 $\frac{3}{4}$ a $\frac{7}{8}$ for money, and 90 $\frac{7}{8}$ a91 for the account. We quote them to-day 91 $\frac{1}{8}$ a $\frac{1}{4}$ for money, and 91 $\frac{3}{8}$ a $\frac{3}{4}$ for the account.

We have had some arrivals of gold, most of which, it is understood, remains in the country.—A new issue of consols, which has been anticipated, is not now looked for, at least in the meantime, and the disposition to invest is much more apparent.

There has been some demand for American securities during the week, although not quite so active a one as we had occasion to advise in our last. And as before it has been chiefly confined to the securities of the Illinois Central railroad.—Freeland bonds are 83 $\frac{1}{2}$ a84 $\frac{1}{2}$; Construction bonds 78 $\frac{1}{2}$ a79 $\frac{1}{2}$; New York Central six per cent. bonds, 79a81, seven per cent. bonds, 93a95; N.Y. and Erie bonds of 1875, 79a81; Pennsylvania 1st mort., 85a87, and 2d mort. sterling bonds are firm at 90 $\frac{1}{2}$ a91. There is no enquiry for State stocks.

ROBT. BENSON & CO.

American Railroad Journal

Saturday, March 1, 1856.

Racine and Mississippi Railroad.

We give in another column, their recent annual report, which speaks most creditably for the energy and means of this enterprising company.

We are also informed that the President of the company, H. S. Durand, Esq., has purchased, thro' their agents, Messrs. Clark & Jesup, 3,000 tons of rails, to be shipped to Racine on the opening of navigation—to be laid on the division between Beloit and Freeport. It is intended to complete this division the present year. It will, with the first division to Beloit, make 102 miles in operation. The same parties have also just made a sale of bonds to a foreign party, to the amount of \$300,000. The bonds bear 8 per cent., and we are informed were sold at 85. This company have thus far carried forward their road mainly from their own means. Efficiency and economy have characterized their operations, as is usually the case where a company rely upon themselves, and put their own means into the enterprise.

The Locomotive "Ebenezer Allen."

The Houston (Texas) Telegraph has the following notice of the first locomotive which has been run in Texas.

We were present yesterday by invitation of Messrs. J. H. Wells, & Co., the efficient contractors for the iron and equipments of the Galveston and Red River railroad company, to witness the first trial experiment of this splendid engine. The engine and tender are of the first class, built last summer, by Messrs. Danforth, Cooke, & Co., of Paterson, New Jersey, and weighing with wood and water, 27 tons. The cylinders are 12 inches in diameter and 20 inches stroke; the driving wheels are five feet high, and the whole machine is arranged with all the latest improvements, being equal to any engine of her class in the United States, and as large as any west of the Mississippi. She started from her stall amid the firing of cannon and the shouts of spectators, her tender covered, top and sides, with persons anxious to take the first ride, and moved nobly up a grade

of 125 feet to the mile, containing also a curve of ten degrees.

South Carolina Railroad.

The Charleston papers contain the report of the President of the South Carolina Railroad, showing the result of its operations, during the year ending Dec. 31.

The income of the year is.....\$1,585,991 54
And the expenses of management,
ordinary and extraordinary..... 702,589 37

Out of the remainder..... \$883,402 17
The interest on the foreign and domestic debt, claims for damages, &c., have been paid, say..... 202,585 74
And two semi-annual dividends of..... 358,718 50
Leaving a balance of..... 322,097 93
for the maintenance and improvement of the property, and the reduction of the indebtedness of the company.

Rock Island Bridge.

The Rock Islander, in a notice of this great undertaking has the following:

The present steady weather allows work on the Mississippi bridge to proceed rapidly. The late injuries to it have all been repaired. The second span is now finished, and the construction of the turn table will soon begin. Before many weeks roll round we hope to have the pleasure of recording the completion of this great enterprise.

Spartanburg and Union Railroad.

This road will be, when completed, 70 miles in length. It unites with the Greenville and Columbia (S. C.) road, at Alston, 25 miles above Columbia, and makes a straight projection, via Unionville, to Spartanburg C. H., in the direction of Asheville, N. C., and is a part of the old Cincinnati, Louisville, and Charleston scheme.

We learn that the whole line is now graded, and that 20 miles are already completed and in operation. The capital stock is \$750,000. There is no funded nor floating debt. The estimated cost of construction is \$1,000,000. The charter authorizes its extension to the North Carolina State line, there to connect with the French Broad and Tennessee roads.

Charlotte and South Carolina Railroad.

According to the recently published report of this company, their earnings for the year ending 31st December last, were—

Passengers.....\$60,285 31
Freight..... 213,586 74
Mails, &c..... 17,347 79

Total.....\$291,219 84
—which is an increase of 19 4-5 per cent. over those of 1854. The operating expenses amounted to \$152,374 09, an advance of only 5 $\frac{1}{4}$ per cent. upon the previous year, leaving as net gains \$138,875 45. Out of this a dividend of six per cent. was declared, the balance having been applied to the payment of interest on bonds, and to construction account. Included in the latter are one locomotive and ten box cars. At the annual meeting in January, 1855, a resolution had been adopted, appointing a train to be run, connecting with both the South Carolina night and day trains. After trying the experiment some months the managers abandoned it, as proving unremunerative. The passenger business for the year shows a decline of \$2,112 67; while the freight has increased \$44,852 72. Attention is called to the impolicy of reducing charges to a low figure.

Authority had also been given, at the last an-

nual meeting, to issue bonds to the amount of \$200,000, for the purchase of a T rail, to relay the track, if the iron could be obtained at \$50 per ton. As the surplus iron on hand from the previous year has all been laid, and a further supply could not at any time be obtained at the above rate, it is recommended that the restriction be abolished, leaving the Directors to exercise their own discretion.

The machine shop has obtained a high degree of efficiency. Financially, the company are in a very favorable condition, having had no floating debt for two years past, and all their obligations being promptly met, without even making temporary loans. The work of repairing has kept pace with the natural decay of the track. Twenty-four miles of new ties have been laid this past year. Considerable expenses have been incurred in keeping the bridges in order. The trestle work is in good condition, but it is considered advisable to commence filling it in at an early day. Little additional work requires to be done, under the head of construction.

The rolling stock consists of 13 locomotives, 4 first and 2 second class passenger cars, 3 mail or baggage do., and 176 other cars of various kinds. It is proposed that in future the company build their own freight cars. A large increase of business is anticipated in consequence of the opening of the North Carolina railroad to Charlotte.

The following items of cost are furnished by the Treasurer:

Graduation, Masonry, and bridging.....	\$663,110 49
Superstructure, including iron.....	506,584 39
Engines and cars.....	253,857 84
Engineering.....	47,853 70
Real estate and land damages.....	46,675 96
Depot buildings and stations.....	60,678 03
Miscellaneous.....	198,285 34
	\$1,719,045 75

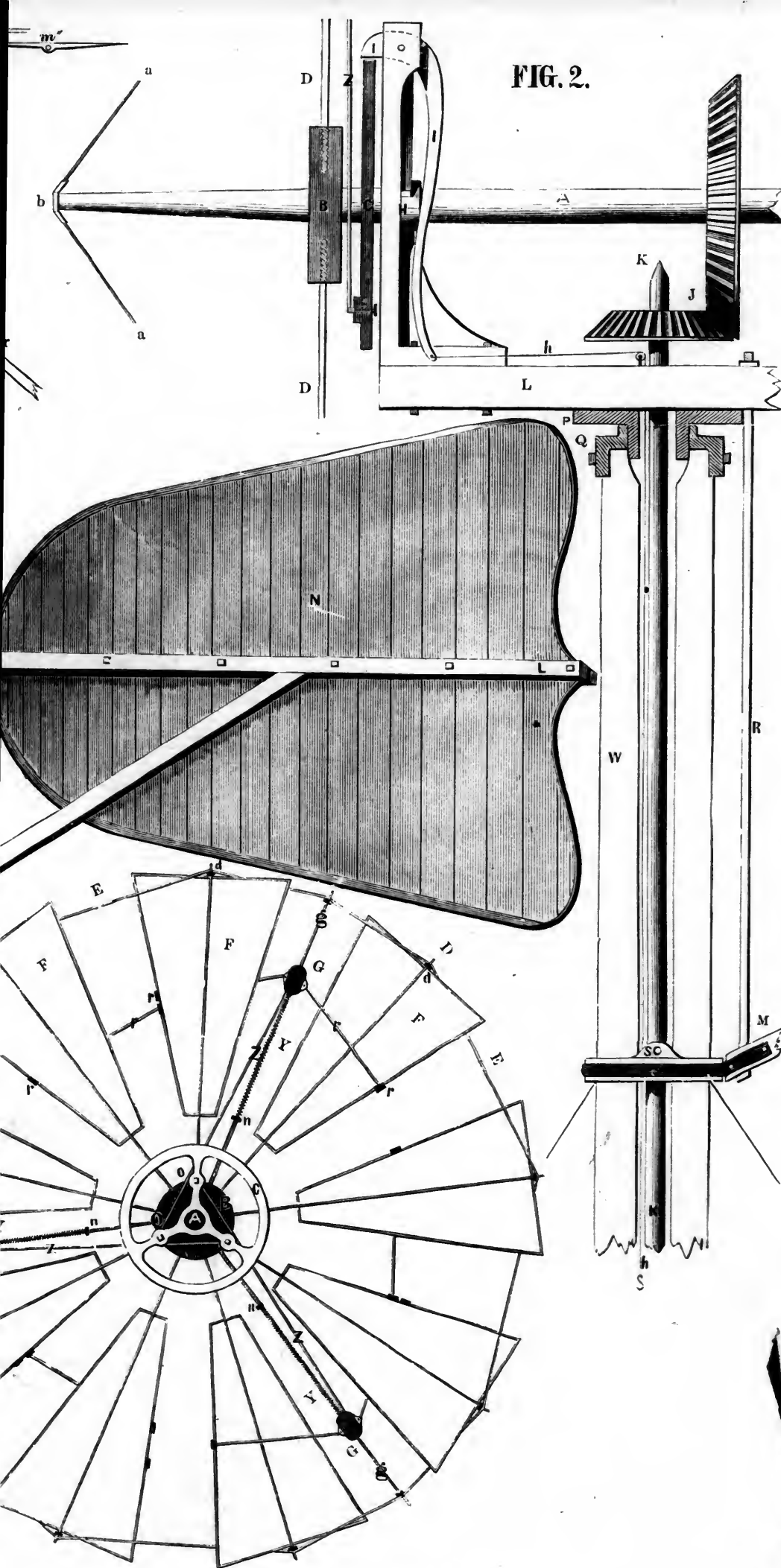
The capital stock was \$1,201,000, and the bonded debt \$384,000, at last report. They are not given in the present; but we presume they do not differ materially from the above figures. The difference between the sum of these and cost, has arisen from the application of earnings to construction.

Trade and Commerce of the Canals.

The following comparative statement of the business of the canals presents some features worthy of notice. In the table of the products of animals the figures show a falling off in pork equal to 68,576 68,576 bbls, bacon, 8,772,000 lbs, lard, tallow, &c., 7,346,000 lbs., and an increase in cheese of 3,832,000 lbs., butter 1,888,000 do., and wool, 1,198,000 lbs. With the exception of the last, the market value of all the articles named has ruled high the greater part of last season, and during the Fall our railroads were taxed to their utmost capacity in the conveyance of the articles above named.—Up to the commencement of the Fall trade, the receipts of flour were far behind those of the previous season, but the shipments afterwards were more liberal, and the result shows an increase of 40,703 barrels. The same can be said of wheat, for the figures show an excess of \$1,902,466 bushels. By reducing the wheat to flour, we have an excess of the latter over last year of 421,196 barrels. The receipts of rye over last year were 448,033 bushels. Other grains show a falling off—corn equal to 3,495,787 bushels, barley 220,751 do., oats 816,125 do. The increased receipts of both barley and oats, by railroad, have more than made up the falling off in the supply by canal.

The following is a summary of the articles transported to the eastward last year. The figures

FIG. 2.



REGULATING WINDMILL.

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have been furnished semi-officially to the Albany Evening Journal.

	1854.	1855.
	Tons.	Tons.
Total forest products.....	1,103,018	877,865
" animal do.....	53,956	39,198
" vegetable food.....	786,692	741,326
All other agricultural products.....	846,447	782,607
Total manufactures.....	40,082	44,844
" merchandize.....	14,632	15,559
Other articles.....	219,564	174,781

The sum total of the values of these amounted to \$72,120,981, in 1854; and \$74,377,937, in 1855.

The following statement shows the tonnage and estimated value of property which went from tide water, in 1854 and 1855.

	1853.	1854.	1855.
Tons.....	584,141	531,831	504,696
Total tonnage to and from Tide Water:			
Tons.....	3,089,938	2,765,574	2,400,289
Amount received for tolls on the canals:			
	1853.	1854.	1855.
	\$3,204,718	\$2,773,566	\$2,805,976

The above exhibits a falling off in tonnage and an increase of tolls over the previous season. This is accounted for in the fact that the shipments of property paying a high rate of tolls exceeded those of 1854, while at the same time there has been a large falling off in those paying a mere nominal toll.

Important to Railroad Superintendents.—Lighting Railroad Cars.

We wish to call the attention of those having authority in the matter to a new oil for burning.

We do so not for the purpose of puffing the article but because we have other important reasons. Our travelling has long been accomplished on the night trains that we might have the day for business. Nothing can exceed the gloom of the visible darkness in our ill-lighted cars. This is very greatly owing to the color of the inside finish, which is dark mahogany, while at the same time it is partly due to the insufficiency of the light provided. It is quite a mistake to suppose that travelers prefer a dimly lighted car to aid sleep—most men can sleep better in a crowd, if they first feel secure, and this sense of security is gained only by a fair view of our surroundings.

The "Kerosene" or "Coal Oil" advertised in another column is a truly excellent article. We believe it to be the only thing known suitable for lighting railroad cars. We entreat all enterprising Superintendents to try it. We can say from personal observation that it is a good thing. The character of Mr. Kent, the chemist employed by the company, is a guarantee sufficient for all parties. Mr. Kent is in the United States service at the Assay Office.

We do not make this notice at the request of the advertisers, but voluntarily, because in our own experience in looking after a good as well as cheap light we have at last been able to cry: *Eureka.*

While we are on the subject we may say a word more of the inside finish of cars. Our old style has been the mahogany veneer with dark plush. These colors absorb the light which is thus wasted. A few months ago, while in Troy, we examined some very beautiful cars built by Eaton & Gilbert, of which the finish was entirely American woods;

the panelling of birds eye maple highly polished, and Sycamore. They are decidedly the most cheerful cars we have ever seen.

Some of the finest cars in the country are on the New Jersey and Camden and Amboy road. The cars of the Philadelphia Night Express are better lighted than is customary and are of cheerful gay finish. But the proper light after all is to be got from the Coal Oil. It may be seen burning at the establishment of the advertising parties, and to see it is all that is necessary. It is in no manner explosive.

Description of Frank G. Johnson's Patent Self-Regulating Windmill.

Reference being had to the accompanying drawing, in which fig. 1 is a perspective view—fig. 2, a longitudinal elevation of the central portion of the mill—fig. 3, a back face view of the wind wheel—and fig. 4, one of the fans. Like letters refer to like parts.

A represents the wind-shaft; HH, cast iron bearings; B, a cast iron hub keyed to the shaft; C, a light cast iron stop wheel, fitted but not keyed to the shaft; DD, round wrought iron spokes screwed permanently in the hub, and a thread three or four inches long cut on the outer ends; FF, fans screwed on to the spokes; dd, nuts screwed on to the spokes after the fans; EE, strong band or tire-iron slipped on to the spokes and tightened by turning back the nuts dd; aa, smaller spokes screwed into their hub b, and into the band EE, to brace the wheel front and back; GGG, the regulating weights, slipped on to three extra spokes, and connected to the edges of the fans by the rods rrr; YYY, spiral springs, slipped on the spokes and attached to the weights and adjusting nuts nnn; ZZZ, connecting rods between the stop wheel and weights; I, the brake, h its cord passing down with the upright shaft K, to h, where it is hooked on the light weight v to operate the brake; J, set of gears; e, a brace to afford a bearing for the upright shaft; W, upright or standard, being bored out to admit the shaft; TT, main braces; tt, cross braces; U, beam to sustain the upright shaft; V, large band or belt pulley; L, a very strong plank, somewhat tapering towards the vane end, and slotted out to receive the vane N; P, cast iron flange bolted to the plank and extending through, and fitted to the heavy iron cap Q, which is bolted to the standard, and on which turns and rests the mill; M, strong wooden brace bolted to the plank L and vane, the other end being fastened to the standard W, by the collar S, which works in an iron groove s bolted to the standard; R, an iron rod or bar to prevent the mill from being lifted up; X, (fig. 4) canvas, laced into a wrought iron frame kk; mm, wrought iron yokes, riveted on to the frame, and through which is slipped the spokes—a deep smooth thread being cut in the outer one, and screwed on to the spokes so as to be clear of the nuts dd.

The principle upon which the Regulator operates, is centrifugal force of weights acting against the tension of spiral springs—the tension of the springs taking the place of the force of gravitation in ordinary regulators, such as are used on steam engines. The tension of the springs keeps the sails turned or set to receive the wind, and the centrifugal force of the weights, whenever the velocity becomes too great, turns the sail out of or edgewise to the wind.

The operation of this mill is as follows, reference being had to fig. 3.

1st. The sliding weights GGG, connecting rods rrr, and spiral springs YYY, constitute the governor or regulating apparatus. Thus: whenever the motion of the wheel becomes too rapid, the weights by centrifugal force, will be thrown out to a greater distance from the centre, and the extremities of the rods rrr drawn closer together; which turns the fan edgewise to the wind. The tendency of the mill, now, is to revolve slower and slower, until the tension of the springs shall overcome the centrifugal force of the weights, which will slip or draw them in towards the centre again, and thus turn the fans back to receive the wind; giving the mill, (whenever the wind is sufficiently strong,) an uniform velocity, irrespective of the variation of wind and resistance presented to it; for, an increase of resistance, having the tendency to lessen the velocity, simultaneously diminishes the centrifugal force of the weights, thereby giving a corresponding increase to the motive power, by presenting more surface of sail to the wind; and vice versa.

The unity and limitation of the action or motion of the weights is given by their similar connection with the common stop-wheel, so that whatever action is given to one weight or fan is given to all. To give the mill greater or less velocity at any time, it is only necessary to diminish, or increase the tension of the springs, which is done by turning the nuts n n n (to which is attached their inner extremities) out from or in towards the centre. To provide against the danger of being blown down by very strong and sudden gusts or gales of wind, the fans are made somewhat wider or the back than on the front side of their bearings so that they will turn back and crowd the weights out from the centre, before the velocity necessary to do the same could be acquired.

2d. The stop-wheel C, and the rods Z Z Z connecting it and the weights, constitute the stopping apparatus, which operates as follows: Thus, suppose the brake (I fig. 2,) to be borne upon the stop-wheel, and thus stopping, or rather holding back, said wheel; while the main wheel turns on, then the point O would raise to o, or as far above, the wind shaft as now it is below it; and thus throw out the weights from G to g, and turn all the fans edgewise to the wind; causing the mill to stand still until the brake is again taken off.—The brake is made to operate by a three or four pound weight, v, being hung on the hook h.

This Governor and stopping apparatus, it will be seen, revolve with and constitute a part of the wind wheel, and are independent of every other part of the mill, thus making the wind-wheel alone self-regulating, and almost self-stopping.

3d. By means of the brace M and collar S, together with the iron bar R, as connected in the drawings, the strain of the mill, in its tendency to be blown over is brought on the bottom of the post or standard as well as on the top, allowing it at the same time, perfect freedom to be turned to face the wind by the action of the same on the vane. If the mill were sustained by a continuation of the spindle P a distance down into the post, the whole mill, by the peculiar action of the wind, would acquire a rocking motion, placing the spindle and post in danger of being broken off, which liability is prevented by the above arrangement.

Abstract from the several Returns of the Railroads of Massachusetts for the year 1855.

NAMES OF ROADS.	CAPITAL.	CAPITAL PAID IN.	COST.	LENGTH IN MILES.	Length of Double Track.	Length of Branches.	EARNINGS.	EXPENSE OF WORKING.	NET EARNINGS.	DIVIDENDS.	DEBT.	SURPLUS.	CASUALTIES.		INTEREST PAID, &c.
													FATAL.	NOT FATAL.	
Agricultural Branch.....	\$580,000	\$150,308	\$241,069	28.36	.....	.....	\$27,416	\$27,968	loss \$553	.....	\$105,752	.....	.....	.....	\$5,298
Amherst and Belchertown.....	400,000	194,050	238,910	19.56	.....	.....	42,000	42,000	42,000	\$41,440	90,065	.....	.....	.....	.....
Barnstable.....	600,000	600,000	600,000	21.26	.....	.....	489,765	366,120	123,645	64,900	325,636	\$191,990	.....	.....	.....
Boston and Lowell.....	1,830,000	1,830,000	2,186,595	25.77	25.77	1.87	854,926	624,366	330,000	249,342	1,518,671	228,898	14	4	16,748
Boston and Maine.....	4,156,700	4,076,975	4,179,546	74.26	27.79	8.79	59,917	51,178	8,740	.....	385,182	299,105	.....	.....	24,206
Boston and New York Central.....	2,700,000	2,340,300	3,468,818	74.50	19	.....	588,671	387,890	196,485	292,500	656,429	216,340	.....	.....	13,201
Boston and Providence.....	3,160,000	3,160,000	3,677,154	43.50	15.75	12.00	1,008,000	616,744	391,251	48,611	280,598	111,717	.....	.....	16,916
Boston and Worcester.....	4,500,000	4,500,000	4,865,439	44.63	44.63	24.00	1,008,000	616,744	391,251	48,611	280,598	111,717	.....	.....	16,916
Cape Cod.....	600,000	681,690	997,252	58.64	.....	1.04	389,221	300,108	143,665	88,780	97,198	45,097	4	2	9,291
Cheshire.....	2,250,000	2,085,925	3,179,687	50.00	.....	2.35	280,568	201,368	94,496	.....	.....	.....	.....	.....	.....
Connecticut River.....	1,750,000	1,691,110	1,802,245	9.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danvers.....	100,000	73,340	136,789	3.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dorchester and Milton Branch.....	4,150,000	2,853,400	4,621,016	40.10	18.00	19.91	647,281	341,283	162,740	1,250	2,949,737	162,740	.....	.....	143,258
Eastern.....	50,000	47,920	64,400	3.78	.....	.....	2,906	884	1,548	.....	7,495	117	.....	.....	145
Eastern Branch.....	700,000	299,108	747,009	15.81	2.00	1.36	49,357	40,592	19,394	.....	489,312	.....	.....	.....	28,159
Fairhaven Branch.....	300,000	224,457	440,024	16.11	.....	.....	60,318	40,940	19,378	.....	157,795	.....	.....	.....	10,233
Fitchburg.....	3,540,000	3,540,000	3,765,998	50.38	50.38	16.85	681,163	467,335	213,888	.....	165,700	201	.....	.....	4,054
Fitchburg and Worcester.....	500,000	237,221	333,885	13.99	.....	.....	37,588	29,481	8,107	10,200	76,265	.....	.....	.....	.....
Grand Junction Railroad and Depot Co.....	1,350,000	774,152	1,777,572	9.00	2.90	.....	63,835	12,343	46,234	.....	1,094,445	.....	.....	.....	.....
Hampshire and Hampden.....	375,000	291,153	461,824	24.96	.....	.....	.....	.....	.....	.....	180,914	.....	.....	.....	.....
Hartford and New Haven.....	300,000	2,000	.....	5.67	5.87	.....	.....	.....	.....	.....	939,000	.....	.....	.....	.....
Horn Pond Branch.....	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lexington and West Cambridge.....	241,200	211,200	226,034	6.63	.....	.....	19,693	6,278	13,416	12,280	.....	5,767	.....	.....	205
Lowell and Lawrence.....	300,000	200,000	363,658	12.35	.....	.....	50,235	26,166	14,049	8,000	140,000	12,866	4	.....	7,912
Marlborough Branch.....	80,000	56,465	130,034	8.90	.....	.....	3,876	.....	2,476	.....	78,086	.....	.....	.....	.....
Medway Branch.....	35,000	32,500	37,909	8.60	.....	.....	521	.....	.....	.....	6,784	.....	.....	.....	.....
Middleborough and Taunton.....	150,000	71,620	71,700	8.04	.....	.....	.....	.....	.....	.....	1,232	.....	.....	.....	.....
Nashua and Lowell.....	600,000	600,000	651,603	14.58	14.30	.....	166,517	127,850	60,456	36,000	8,000	36,068	2	.....	.....
New Bedford and Taunton.....	500,000	500,000	553,245	20.13	.....	1.24	169,781	130,419	39,363	30,000	15,000	47,846	1	.....	1,660
Newburyport.....	430,000	218,950	592,624	26.38	.....	.....	50,876	50,462	413	.....	357,877	.....	.....	.....	15,369
New London, Willimantic, and Palmer.....	1,700,000	509,200	1,594,383	66.00	.....	.....	124,044	123,824	219	.....	1,078,673	.....	.....	.....	66,112
New York and Boston, in Massachusetts.....	1,600,000	223,176	336,720	32.00	.....	.....	15,986	11,180	4,806	.....	677,354	4,806	.....	.....	42,546
Norwich and Worcester.....	2,825,000	2,122,800	2,507,153	59.00	1.80	7	304,286	258,324	45,912	52,787	873,489	32,371	3	1	19,372
Old Colony and Fall River.....	3,300,000	2,015,100	3,382,949	79.50	11.50	7.75	683,489	877,134	270,366	180,906	292,650	182,466	1	2	.....
Peterborough and Shirley.....	275,000	262,500	265,263	14.08	.....	.....	.....	.....	.....	.....	50,600	.....	.....	.....	.....
Pittsfield and North Adams.....	500,000	460,000	448,678	18.65	.....	.....	64,842	29,231	25,612	.....	125,500	.....	.....	.....	7,097
Providence, Warren, and Bristol.....	292,000	276,066	409,160	13.66	.....	.....	14,233	226,433	111,627	.....	338,461	.....	.....	.....	26,630
Providence and Worcester.....	1,550,000	1,513,020	1,806,696	48.41	6.41	.....	311,430	226,433	111,627	.....	142,256	.....	.....	.....	.....
Salem and Lowell.....	400,000	243,300	374,666	16.88	.....	.....	66,884	8,792	1,501	.....	84,151	.....	.....	.....	.....
Saugus Branch.....	160,000	126,550	184,453	8.40	.....	.....	12,632	.....	.....	.....	189,654	.....	.....	.....	11,465
South Reading Branch.....	400,000	209,538	293,684	8.15	.....	.....	13,566	22,335	8,794	.....	.....	.....	.....	.....	.....
South Shore.....	600,000	259,655	500,669	11.56	.....	.....	66,310	60,378	4,931	.....	.....	.....	.....	.....	.....
Stockbridge and Pittsfield.....	448,700	448,700	448,700	21.93	.....	.....	81,409	.....	31,409	31,409	.....	.....	.....	.....	.....
Stoneham Branch.....	100,000	83,316	266,782	6.67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stony Brook.....	275,000	267,300	33,483	13.16	.....	.....	42,571	26,460	16,811	16,026	.....	2,329	.....	.....	.....
Stoughton Branch.....	85,400	85,400	93,483	4.04	.....	.....	33,565	29,615	3,939	6,832	.....	36,887	1	.....	.....
Taunton Branch.....	250,000	250,000	307,136	11.10	.....	.....	151,369	126,174	25,195	20,000	.....	.....	.....	.....	.....
Troy and Greenfield.....	1,500,000	1,214,418	3,209,727	42.55	.....	.....	298,726	244,892	23,894	.....	1,033,689	.....	.....	.....	63,419
Vermont and Massachusetts.....	3,200,000	2,232,541	3,209,727	69.00	.....	.....	1,869,678	1,236,660	633,018	360,500	5,966,420	108,188	4	.....	12,118
Western.....	6,150,000	5,150,000	10,456,505	155.40	63.14	.....	204,784	129,020	75,760	\$2 pr share	206,665	45,316	1	.....	.....
West Stockbridge.....	41,600	39,600	1,351,271	2.75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Worcester and Nashua.....	2,100,000	1,441,000	1,351,271	45.69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	\$63,117,600	\$50,416,152	\$69,094,319	1,517.31	232.34	104.38	\$10,100,911	\$6,757,265	\$3,256,488	\$1,539,098	\$22,598,407	\$1,785,299	73	.....	\$8,410,029,108

* Incl. interest. —† Incl. late Charles River and Charles River Branch railroads. —‡ 8.6 miles completed. —§ Merged in Hartford and N. Haven R. R. in Conn. —|| Run by Housatonic R. R. Co. —¶ Run by Boston, R. R. Co. —** Run by Old Col. & Fall R. R. Co. —†† Run by Fitchburg R. R. Co. —‡‡ Run by Boston & N. Y. Cent. & Boston & F. R. R. Co. —§§ Op. by Fitchburg R. R. Co. by Post & Maine R. R. Co. —*** Run by B. & N. Hudson & B. & N. R. R. Co. —††† R. R. Co. more than p. d. —§§§ Int. comm'n. &c. \$72,467. —||| Int. on State Loans, \$297,860; pay't to sink f'd, \$50,000.

North Carolina Railroad.

Col. Walter Gwynn, the Chief Engineer of this great work, on his resignation of that office, has presented a report of its past history and present condition to the company. Our readers are aware that the North Carolina railroad, through its entire length from Goldsboro to Charlotte, 228 miles, has recently been opened for public use. Much of it is, of course, unfinished, as well as depots, stations, shops, and other buildings, which are under progress.

The company was chartered in January, 1849, with a capital of \$3,000,000—the State agreeing to take two thirds, or \$2,000,000, when the remaining \$1,000,000 should be subscribed by other parties, and \$500,000 paid in. The first of these conditions was complied with, by individuals exclusively, in 1850, and the company duly organized in July of that year. In August following, the surveys were begun, and completed in May, 1851. In July, 1852 the work of grading and masonry was let; and on the 11th of that month ground was broken with appropriate ceremonies. From that date the work of construction has been steadily proceeded with. No difficulties with contractors from the want of means or other causes had been experienced. By January, 1853, the second condition requisite for obtaining State aid had been complied with. The contractors were generally parties living along the line and interested as stockholders in the work. The importance to the State of such an undertaking, when completed to the harbor of Beaufort, will be of the highest magnitude.

The cost of road and equipment will be about \$4,235,000, or \$1,235,000 beyond the first estimates. It must be borne in mind, however, that the latter were made before the great rise in the price of iron took place. The difference in the price of this commodity paid, \$22 per ton for 18,000 tons, would make nearly \$400,000 on a single item. The motive power and rolling stock were estimated originally for only sufficient to do the first year's business after completion. A full equipment will involve an additional outlay of over \$370,000. Adding to this additional sheds for locomotives, the higher prices of provisions and labor, and it will be seen that the discrepancy between the original and final estimates is really insignificant.

Changes in location, shortening the length of the road, with increased expense in passing through towns, have also raised the cost above \$30,000.

The General Assembly, on an application from the company, readily responded by granting an additional subscription of \$1,000,000. The capital is now consequently \$4,000,000, the State owning three millions and individuals one million of dollars.

A low rate of speed—not exceeding 16 miles for passenger, and 12 miles per hour for freight trains—is strongly recommended to the managers.

The receipts of the road are stated to have fully sustained the expectations of its friends, and verify their predictions, with regard to its prospective income and profits.

The rolling stock consists of 6 passenger, 8 freight, and 2 gravel locomotives; 7 passenger, 4 baggage, 84 box, 66 platform, and 20 gravel cars. The locomotives have all been obtained from Norris' establishment at Philadelphia.

At the meeting of the Board, on the 10th of January, to which Col. Gwynn's resignation was tendered, the thanks of that body were unanimously returned to him for his able, efficient, and faithful services.

Journal of Railroad Law.

STOCK SUBSCRIPTIONS.—MUNICIPAL POWERS.—CONSTITUTIONAL LAW.

(Continued from page 107.)

In *Nichol vs. Mayor and Aldermen of Nashville*, 9 Humphreys, 252, the city of Nashville subscribed to the Nashville and Chattanooga railroad company; the Legislature of Tennessee sanctioned the subscription, and authorized the city to raise the amount by taxation. The bill prayed for an injunction to restrain the subscription, and the issue of bonds.

The Court decide that the Legislature had the constitutional power to authorize the subscription; that the making the railroad was a legitimate corporate purpose of the city, and that the city had the right either to levy a tax or to borrow money by its bonds to meet its subscription.

In *Shaw vs. Dennis*, 5 Gilman, 405, the Legislature of Illinois, by an act, imposed a tax upon Rockford, to pay for a bridge over Rock river or Rockford. An action of trespass was brought against the tax collector, and the commissioners especially appointed by the act.

The Court decide the act to be constitutional, and the tax legitimate.

In *Simeon Ryder vs. the Alton and Sangamon railroad company*, 13 Illinois, 516, the Court in deciding another question, say, "The city of Alton had a clear right to become stockholders in the railroad company."

In *Goddin vs. Crump*, 8 Leigh, 120, the Legislature of Virginia passed an act sanctioning a subscription made by the city of Richmond to the James river and Kanawha company, in accordance with the vote of the citizens. The defendant, a tax collector, levied upon property of the complainant for his tax, and advertised the same for sale. The bill prayed an injunction to restrain sale. The Court decide the act to be constitutional, and that the Legislature, and not the Court, were the proper parties to determine the expediency of taxing for a special internal improvement. See also *Harrison Justices vs. Holland*, 3 Grattan, 247.

In *Thomas vs. Leland*, 24 Wendall, 65, the Supreme Court of the State of New York decided, that an act of the Legislature imposing a tax upon the owners of real estate in the city of Utica, to pay the expenses of connecting the Chenango canal with the Western canal of that city, was unconstitutional. And see *The People vs. the Mayor, etc., of Brooklyn*, 4 Comstock, 419.

The same general question has been similarly decided in the following cases not yet regularly reported. *Right Bank vs. Successors of John Mc Donough*, (La.); *Clay vs. Trot*, U. S. Circuit, Me.; *Strickland vs. Mississippi Central railroad company*, *Am. R. R. Journal*, vol. xxvi, pp. 91; *Co. of Dubuque vs. Dubuque and Pacific railroad company*, (Iowa.) See also *McCulloch vs. Maryland*, 4 Wheaton, 428; *Shitz vs. Berks Co.*, 6 Barr, 80; *Norwich vs. the County Commissioners*, 13 Pick. 62; *Rice vs. Foster*, 1 Harrington, R. 479.

Racine and Mississippi Railroad.**ANNUAL REPORT.**

Since our last report, the transactions of the Board have been important, and generally successful. In submitting their third annual report, it affords them great pleasure in being able to announce forty-seven miles of your road completed and in successful operation, viz: from Racine to Delavan. This event was appropriately celebrated by the people of Delavan and Walworth county, on the 31st ult; and from the vast concourse of people assembled on that occasion, we had most flattering evidence of the interest felt by the community at large, in the progress and success of the work. The policy of raising the means chiefly by subscriptions on the line of the road, and the plan of taking, in payment, well secured bonds and mortgages on improved farms, has not only found great favor with the people, but has thus far resulted most successfully to the company.—It will be recollected that at the date of our last report, but little, comparatively, had been done in the way of construction, and the ways and means then on hand were anything but money.—In May last the first purchases of iron were made, and it was near the middle of July before the tracklaying was commenced. Frequent interruptions occurred by reason of delay in shipments of material, and also from the backwardness of the grading. The fall was most unpropitious for this kind of work, and since the winter set in the weather has been unparalleled in severity. The money market has been uniformly stringent, and and railroad securities have for the most part been completely ignored by capitalists. Yet, amid all of these unfavorable circumstances, we present you to-day, your road and property in the following condition:

Main line, 47 miles, with $3\frac{1}{2}$ miles of side track completed; the grading of 21 miles more, from Delavan to Beloit completed; 1,993 tons of iron on hand, with wrought iron chairs for 21 miles; 250 kegs of spikes; 200,000 ties; seven locomotives; 84 first class freight cars; four do. do., passenger; two baggage and five hand cars; 1,000 car wheels, 500 car axles; lumber and freight for 120 cars; about 35 miles of fence erected; and 18 miles of road ballasted.

At Racine, the depot, 28×180, is completed; also one brick engine house, 183 feet in diameter, with blacksmith and stationary engine shop, 50×70 feet. The foundation of a machine shop, 60×120, has been laid. Car house, shop, and turn-table are finished. Depots and water station are completed or nearly so, at Union Grove, Burlington, Springfield, Elphorn and Delavan. At Lyons and Dover, temporary buildings have been erected, with the necessary sidings. One stationary engine, 30 horse power, with boiler, shafting, &c, has been erected; also all the requisite machinery and tools. Scales, safes, desks, &c., have been provided. The company have also settled for the right of way from Racine to Beloit, with such depot grounds as shall be needed.

The depot grounds belonging to the company in the cities of Racine and Beloit, have often been referred to; but from their extent and value at this time, the Board take pleasure in again calling your attention to them, as it is an item second only in importance to the grading or iron for the road. We now own more than twenty acres of ground in the centre of the city of Racine, with a river frontage of over three quarters of a mile, and worth, at the lowest estimate, two hundred thousand dollars. In Beloit we have extensive grounds, worth at this time, over fifty thousand dollars.—The company own, in addition, over four thousand acres of choice farming lands, taken in payment of subscriptions to stock, and worth at this time full fifty per cent. more than their cost. By reference to the report of the Secretary, it will be

seen that this entire property has cost the company but \$76,882 41, while the Board feel justified in estimating it worth now in cash, \$310,000. The farming lands will be sold hereafter, and may be added to the present assets at \$60,000.

It will be seen from the report of the Secretary, that the total subscriptions to capital stock, amt. to the sum of..... \$1,826,000 00 (\$540,000 of this sum has been paid by 7 per ct. city and town bonds, \$190,000 of which have been negotiated, netting the company a little over 87½ cents on the dollar.)

Total receipts to subscriptions on capital stock..... \$921,905 96

Total disbursements on account of construction, equipments, lands, interest, &c..... \$1,289,321 17

Add cash on hand..... 25,304 59

The present liabilities of the company of every kind, including permanent loans, and covering all materials on hand, amount to the sum of..... 380,715 12

(The company has as yet no bonded debt whatever.)

The total resources amount to... 1,585,094 04

Including \$680,000 of 1st mortgage 8 per cent. bonds, on 68 miles of road from Racine to Beloit, and cash on hand..... 25,304 59

For details of receipts and disbursements, together with the resources, &c., reference will be had to the Secretary's report annexed.

Subscriptions are now being taken on the western division of the road, between Freeport and Savannah; and from the liberal manner in which the people of that section are taking hold of the work; there is but little doubt that the entire means to complete the road to the Mississippi river, will be raised, and that there will be no occasion to mortgage the balance of the road. Should this be realized, the present small issue of \$680,000 8 per cent. bonds on a road 126 miles long, costing about \$3,000,000, connecting Lake Michigan with the Mississippi river by the shortest possible line, and running through the best settled and most productive country in the West, must certainly be regarded a very rare security.

Until recently, our entire project has been the construction of a road from the city of Racine to Freeport; there depending on a connection with other lines for access to the Mississippi river. Yet, while this has been considered a very strong and promising project, there have always been misgivings in the minds of the directors, as to the policy of an expenditure of upwards of two millions of dollars on a road, without a more reliable western terminus. Besides this, the business now done on the upper rivers is immense; a due share of which would of itself afford a remunerative traffic to your road, could it be reached. In view of this and other considerations, which will be hereafter mentioned, the Board have recently formed and perfected a consolidation with the Freeport and Savannah railroad company, styled in their charter, "Savannah Branch Railroad." This arrangement has been hailed with great satisfaction by our own stockholders and public, as well as by the people of that section of country and central Iowa. This will only increase the length of our road about 34 miles, which still keeps it within a limit for the most economical working, and at the same time opens up a country that will furnish a business of almost unlimited extent, and places our project in the very front rank, in point of traffic and profit, while it will confer untold benefits upon the country through which it passes. The enthusiasm of the people of Stephenson and Carroll counties, together with the liberal stock subscriptions which are now being made, insures the completion of the entire road at a very early day. The line from Freeport to Savannah, has been thoroughly engineered and located, a considerable portion of the right of way procured, and eligible depot grounds, with a river frontage of

1,200 feet in Savannah, are now owned by the company. This arrangement is regarded with no less interest and satisfaction by the people of Sabula and central Iowa, as it affords a short and direct outlet to Lake Michigan, and will soon insure the construction of the "Iowa Central Air Line railroad," (\$1,200,000 stock having already been raised for that purpose, on its line.)

Another matter of hardly less importance to our company, is the business connection with the Chicago, St. Paul, and Fond du Lac railroad, which will soon be completed from Chicago to Janesville, and which crosses our line at Clinton, 58 miles west of Racine, and 78 miles east of Savannah.—By reference to the "table of distances" hereto annexed, it will be seen that this arrangement forms a line from Savannah to Chicago, 22 miles shorter than from Galena to Chicago, by the Galena and Chicago railroad; 5 miles shorter from Freeport to Chicago, and 15 miles shorter from Beloit to Chicago. This must throw an immense passenger as well as freight business on to the west 78 miles of our road, while at the same time it places us in direct communication with the city of Janesville and the roads running therefrom.—The Beloit and Madison railroad is making good progress, with 20 miles now in operation. This line will be completed to Madison during the coming season, and will prove a most valuable tributary to our road, while we shall probably more than reciprocate the benefits derived therefrom.

At the last session of the Illinois Legislature, an act was passed chartering the Rockford Central railroad company, under which the people of Rockford have perfected an organization with a view of connecting the city of Rockford with our road at Rockton, and ultimately extending the line down the Rock River Valley to Mendota or Dixon. The division from Rockford to its connection with our road at Rockton, has already been surveyed and prepared for letting. The requisite means for its construction have been secured, and the work will be speedily commenced. This connection will furnish to the city of Rockford an outlet to Lake Michigan at Racine, by a line ten miles shorter than their present road to Chicago, besides giving them the advantage of a Wisconsin market for their produce (an item now well understood and appreciated by the people of Northern Illinois generally.)

The Board have observed with much satisfaction, the progress of the Detroit and Grand Haven railroad, and are happy to learn that sixty miles is now in operation, with a good prospect of its being fully completed to Grand Haven during the next eighteen months. To the completion of this road, the people of Southern Wisconsin are looking with great interest; and as an outlet to a large and rapidly increasing business in our region, its importance cannot well be overrated. To our road it will prove a most valuable auxiliary.

Good and responsible parties stand ready to put on a line of first class steamers between Racine and Grand Haven, immediately on its completion.

The several routes eastward from Racine, will then be as follows, viz:

	Miles.
By Grand Haven and Detroit.....	513
By Chicago, Michigan Cen. and Canada railroad.....	593
By Chicago, Michigan Southern and Lake Shore.....	590
By Collingwood and Toronto.....	—
By the Lakes.....	866

By these various routes, it will be seen that the Racine has every facility possessed by any other lake city for communication with all parts of the world.

On the 4th inst., two regular trains commenced running between Racine and Delavan, twice a day, each way, carrying both freight and passengers, and making regular connections with all trains on the Lake Shore railroad. It was expected that these trains would be sufficient for the winter; but during the first week, it became necessary to run four extra trains each way, to do the business of

fered. The incidental business taken up by the construction train, to 1st of January, amounted to over \$12,000, which was chiefly from passengers, as the large quantities of materials daily used in construction, demanded nearly all of our means of transportation up to that time. The business of the road is daily increasing in both freight and passenger traffic. The passenger business is very far beyond our expectations, and already demands increased facilities; hence, three more first class passenger cars have been ordered. Contracts have been made with the Post Office Department for carrying the mails, and also with the American Express company, for extending their business over the road; and the service for each has already commenced. The Board have deemed it unnecessary to speak particularly with reference to the character of the work completed, as so large a proportion of the stockholders have recently had an opportunity of examining it in person. All of the freight cars, with the exception of twenty, have been manufactured at our own shops. The cars of our own manufacture are very far superior to those generally made to sell, as no pains are spared either in materials or workmanship. Besides this, we find them to cost no less than the inferior cars we should be obliged to purchase. When our road is completed through to the Mississippi river, not less than five hundred freight cars will be required to do the business, even though the roads with which we connect should furnish their proper share. In view of this increase of equipments, we have already procured the materials for one hundred more freight cars, in addition to the one hundred now being finished.—This will give us two hundred and twenty of the largest size freight cars during the coming season. Increased facilities for this work are much needed, which, however, the early completion of the new shop will afford.

The present total liabilities of the company, of every kind, are \$380,715 12; about one-half of which is in the shape of permanent loans, and the balance being for materials, will mature in from one to fifteen months.

The estimates for the completion of the road to Beloit, may be stated as follows, viz:

To complete the grading, masonry, and bridging.....	\$21,000
Balance of ties.....	8,750
Balance of spikes.....	3,000
Balance of 500 tons more iron.....	35,000
Laying track and dressing up.....	8,000
Ballasting.....	50,000
Fencing and cattle-guards, complete...	37,500
Buildings.....	10,000
Three more locomotives.....	28,500
Three more passenger cars.....	6,600
One hundred more freight cars.....	60,000
Engineering, interest, and expenses...	30,000

Add present expenditures..... \$298,360
1,289,321

Total cost of 68 miles..... \$1,587,671
—or about \$23,348 per mile.

A considerable amount, included in the above disbursements, has been expended in the surveys, and procuring of right of way on the western division. Many other items, such as expenses of organization, interest, expense account, and other sacrifices incident to a new undertaking, might be properly apportioned on the other half the road; besides this, the present equipments, depot grounds, repair shops, &c., at Lake terminus, will be sufficient to operate the whole line, with the exception of cars and locomotives; so that it may be deemed a perfectly safe calculation that the cost per mile of the work thus far completed, will be a full average of the whole line.

The policy of the Board has been to push forward the work as fast as the means and credit of the company would permit; having, at the same time, a proper regard to the safety of the enterprise, by being able to honor our engagements without too much sacrifice. This, we believe, has been fully carried out, and that the credit of the

company justly stands high at home and abroad.

The prospects of the company were never more auspicious; the importance of the work and value of the stock, never so well appreciated by the public at large; and its early completion to the Mississippi river never so urgent. In order to meet promptly every demand, and at the same time to prosecute the work with vigor, the Board have deemed it best to execute a mortgage on the first division of the road, viz: from Racine to Beloit, sixty-eight miles; to secure bonds to the amount of \$10,000 per mile, bearing interest at eight per cent., and running twenty years; and dispose of a whole or a portion of the issue whenever a fair price can be obtained. The Farmers' Loan and Trust Company, in the city of New York, has been selected as the trustee, and the mortgage provides for a sinking fund from the earnings of the road, which, we think, will be sufficient to redeem the bonds before their maturity, besides paying the stockholders fair dividends.

The road has already reached a paying point, and the property covered by the mortgage has already a fixed value of more than twice the amt of the bonds; besides this, the daily receipts already demonstrate the capacity of the portion now in operation to provide for the interest upon the whole issue from its net earnings. These bonds have been made convertible during the whole term, and there is not the slightest doubt of their being qualified for a banking basis, under the general banking law of Wisconsin, during the current year.

GENERAL ACCOUNT.

To stock receipts, net.....	\$921,906
To income acc't.....	12,004
To bills payable, including loans and discounts.....	380,715
	\$1,214,625
By grading, masonry, and bridging....	\$333,148
Superstructure.....	435,203
Engines and cars.....	155,818
Right of way, depot grounds, &c.....	133,504
Discount in city and town bonds, and interest.....	108,156
Miscellaneous, including cash on hand.....	148,796
	\$1,314,625

The Directors for 1856 are—Messrs. Henry S. Durand, Marshall M. Strong, John Dickson, Chas. Herrick, Alexander McClurg, Elisha Raymond, and Simeon D. Clough—all of Racine; William C. Allen, of Delevan; John Williams, of Darien; Wm. T. Goodhue, and Lucius G. Fisher, of Beloit; Francis W. Merrill, of Rockton; and Thomas J. Turner, of Freeport. H. S. Durand is President; A. H. Redburn, Secretary; W. M. Perrine, Treasurer; S. D. Clough, Auditor; and R. B. Mason, Consulting Engineer. Clark & Jessup are their agents in New York.

Muscogee Railroad.

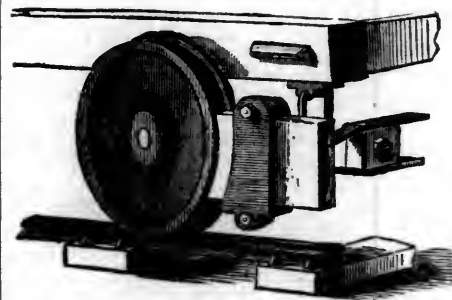
The Muscogee railroad company have declared a dividend of four per cent, payable 1st of March next. This road has been doing a profitable business for the last six months, as will be seen by the following statement:

Gross earning for the six months ending Jan'y 31st, 1856.....	\$104,900 78
Expenses.....	46,489 11
Net profits.....	\$58,411 62

Vicksburg, Shreveport, and Texas Railroad.

We are indebted to the gentlemanly and efficient Secretary of the company, O. D. Stillman, Esq., for some important information in regard to this great and momentous enterprise. It appears that Dr. C. G. Young, President of the company, has lately bought and paid for 500 tons of iron, which have been already delivered on the line of the road; and that 1,500 additional tons of iron have been contracted for, deliverable in equal lots

and at intervals of three months. Besides this, we learn that all the engagements with contractors have been paid up to the 1st January, 1856, and that about \$30,000 worth of work has been done by the present able contractors.—*Ouachita Register*, 26th ult.

PAIGE'S
ADJUSTABLE CAR BRAKE BLOCKS!

By this improvement the brake blocks or shoes are separate, removable, and adjustable heads of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

PAIGE'S ADJUSTABLE CAR BRAKE
COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RETLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

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DINSMORE'S RAILWAY GUIDE OFFICE, 9 Spruce st., N. Y.

Notice to Contractors.

LOUISVILLE AND FRANKFORT RAILROAD,
SUPERINTENDENT'S OFFICE.
Louisville, Ky., Jan'y 30th, 1856.

PROPOSITIONS are requested for the rebuilding of the masonry and superstructure of the bridge across the Kentucky river, at Frankfort, Ky. The superstructure will be near four hundred and fifty feet in length, and the depth of water in the river near thirty feet.

Parties offering designs must accompany same with detailed drawings.

Persons desirous of making propositions will please communicate immediately with the undersigned, at Louisville, Ky.

4th SAMUEL GILL,
Sup't L. and F. R. R.

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD,
No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

31st A. WILKINS.

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FOR SALE.

THE PROVIDENCE & WORCESTER R. R. CO. offer for sale two LOCOMOTIVE ENGINES, in good order and in daily use. Weight of Engines twenty tons each, with 14 by 18 inch cylinders. Drivers five feet diameter. For further particulars inquire of the undersigned, at PROVIDENCE.
JOHN B. WINSLOW, Superintendent.
PROVIDENCE, Jan'y 10th, 1856.

Lowell Machine Works.

WARREN ALDRICH (late ALDRICH, TYRE & Co.) makes and repairs and furnish to order, a thorough trade.

Machinists' Tools

of various description and with the latest improvements; as engine lathes, with swing 16, 20, 24, 28, 30, 36, 48 inches up to 7½ feet, and bed made to turn any desirable length; planing machines, to plane 3½, 6, 8, 10, 12, 18, 20, 22 feet long, and 18, 24, 28, 36, 40, 48, 60 inches square; also hand lathes, compound planers, slotting and shaping machines, vertical drills, bolt cutters, and many other tools used in railroad repair and machine shops.

Lowell, Mass., Jan'y 1, 1856.

41.17

Kerosene, or Coal Oil.

SECURED BY PATENTS.

THE undersigned beg leave to call the attention of the public to the annexed certificate of E. N. KENT Esq., Chemist, as a perfect answer to the now universal question, "What shall we use for light?"

AUSTENS, Agents
of the North American Kerosene Co.,
No. 57 Beaver st., New York.
LABORATORY, No. 116 John st.,
New York, Feb'y 6th, 1856.

The North American Kerosene Company.

GENTLEMEN—I have made a careful photometrical examination of your Kerosene Oil, in comparison with the various kinds of oil and burning fluids in use in this country, with the following results:—

MATERIAL.	LAMP.	Intensity of Light.	Consumption by weight.	Specific Gravity.	Consumption by measure.	Quantity of light in equivalent of oil.	Retail Price of the Oil per gallon.	Cost of an equal amount of light.
Kerosene....	Kerosene....	13.689	475	845	562	2.435	1 00	\$4 10
Camphe....	Camphe....	5.025	377	870	433	1.299	62	4 85
Sylvic Oil....	Resin Oil....	1.190	140	970	144	826	50	6 05
Rapeseed Oil....	Mechanical....	5.929	329	920	357	1.660	1 50	9 00
Whale Oil....	Solar....	1.892	211	925	227	833	1 00	12 00
Lard Oil....	Solar....	1.640	213	915	232	706	1 25	17 00
Sperm Oil....	Solar....	2.025	210	880	238	850	2 25	26 40
Burning Fluid....	Large Wick....	553	154	825	184	800	87	29 60

MATERIAL.	Intensity of Light.	Consumption per hour.	Gas equal to Intensity of oil.	Retail price of materials.	Cost of a light source Intensity per hour.
Kerosene Oil....	13.689	1,200 grs		\$1 per gal.	2.44 of 1 c.
Coal Gas....	4.970	5 C. ft.	13.75 C. ft.	\$3 per M.	4.12 of 1 c.

From the above statement it will be seen that Kerosene produces the most light, at the least cost, and that Burning Fluid produces the least light at the greatest cost.

I have also made a careful analysis of your Kerosene Oil, and find it to be remarkably pure and free from all substances which would otherwise render it unfit for burning in lamps. When thus purified by the process now in use, it is not explosive, even when heated to 212 deg. F., and being much less volatile than Camphe, it is not liable to smoke.

In view of the above facts, I am sanguine that your "Purified Kerosene" is destined to supersede all other oils or burning fluids, as a source of light for artificial illumination, and would recommend it as the most valuable material for that purpose with which I am acquainted.

Very respectfully, your ob't serv't,
EDWARD N. KENT, Chemist.

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IMPROVED OIL CUP.

PATENTED FEBRUARY 12TH, 1856.

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4m9

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NOTICE.

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November 12th, 1855.

Lord & Wright,

Counsellors at Law Cincinnati, Ohio.

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NOTICE TO

Railroad Contractors.

Memphis, Clarksville, and Louisville Railroad.
THE Board of the above Company invite bids for the construction of their road from the Kentucky State Line to the Cumberland river at Clarksville.

This road will intersect at the Kentucky Line, the Branch of the Louisville and Nashville Railroad from Bowling Green, Ky., and the Memphis and Ohio road at the Tennessee river. Other sections as well as the building of the bridge across the Cumberland river will be let hereafter.

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W. B. MUNFORD, Pres't M., C. & L. R. R.
CLARKSVILLE, Tenn., Jan'y 16th, 1856.

614

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Engineer and Sup't.

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U. S. Railroad Directory for 1856,

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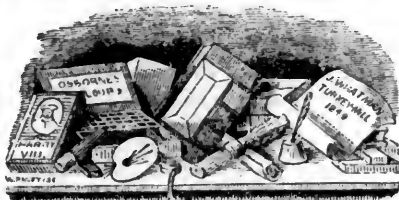
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6m46

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5. " 15 " 1 1/2 to 1.	17. " 25 " 1 1/2 to 1
6. " 15 " 1 1/2 to 1.	18. " 26 " 1 1/2 to 1
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10. " 18 " 1 1/2 to 1.	22. " 30 " 1 1/2 to 1
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THEODOLITES, TRANSIT COMPASSES AND LEVELS on a new principle, with Fraunhofer's Munich Glasses, Surveyors' Compasses, Barometers, Chains, Drawing Instruments, etc., all of the best quality and workmanship, for sale at unusually low prices by
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Draughtsmen.**

THE undersigned begs respectfully to inform Gentlemen in the above professions, that he has constantly on hand a great variety of instruments for Field and Office use.

JAS. PRENTICE,
Feb 1, 1863.

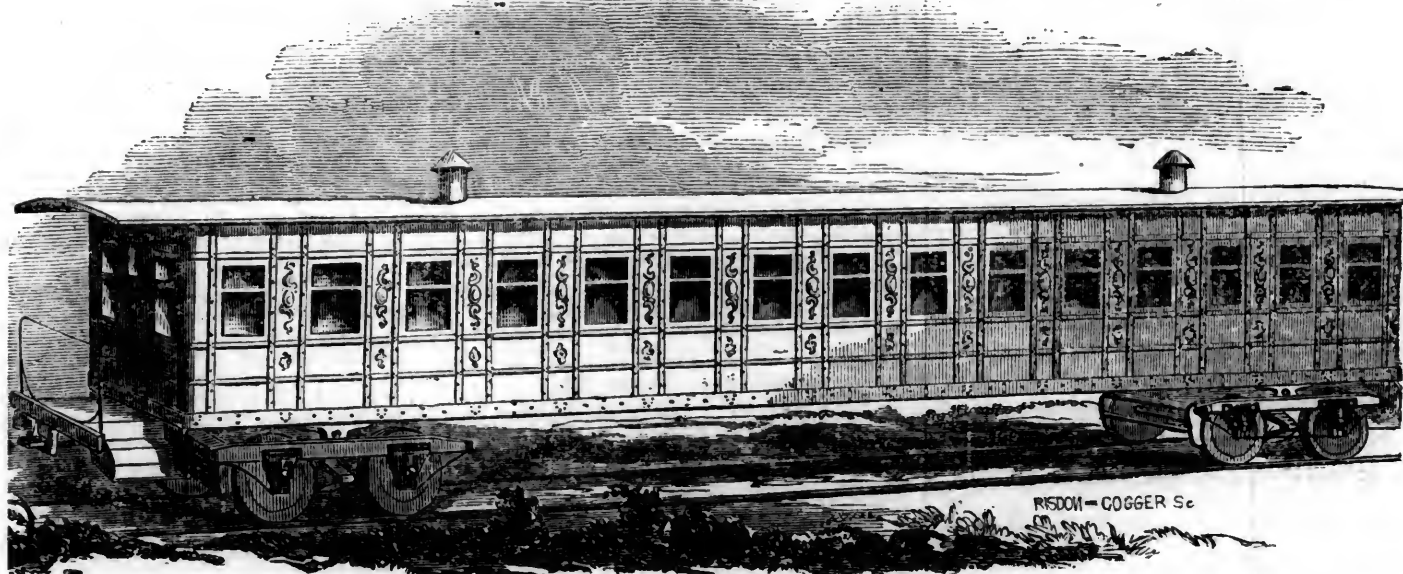
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**'TRANSIT FOR SALE
AT A BARGAIN.**

AN excellent Transit made in DRESDEN and which cost there (where instruments are much cheaper than here) \$250, may be had for \$150. The standhead will need some alteration to adapt it to railroad purposes. Address Transit at this office.

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LA MOTHE'S PATENT IRON RAILROAD CAR.



RISDON-COGGER & Co

WE are now prepared to furnish this Car to railroad companies at short notice and reasonable rates.

Notwithstanding its extraordinary advantages, the prices will be arranged wholly with reference to the cost of construction—without regard to patent rights.

We are now building passenger and freight cars for several companies; and it is desirable that parties ordering give early notice of their wants.

The striking features of this principle are:—simplicity—cheapness—durability—superior safety in cases of accident—facility of repairing when damaged—and less weight compared with the wooden cars of the same capacity; these cars for 60 passengers are more than two tons lighter than the ordinary cars, while the strength is immeasurably greater.

We guarantee these points in the acceptance of orders.

The advantages may be tested by personal observation in

this city. Detailed descriptions of the cars will be forwarded to parties wishing them.

ALFRED SEARS,

Civil Engineer and Architect,

Agent.

OFFICE—9 SPRUCE ST., NEW YORK.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c. JAMES PUNNETT and others, plaintiffs, against THE MAYSVILLE & LEXINGTON RAILROAD COMPANY and others, defendants.—By virtue of the Judgment of the Fayette Circuit Court, rendered in the above case, I will sell, at public auction, on Wednesday, the 23rd day of April, 1856, at the Public Square, in the City of Lexington, State of Kentucky—

THE MAYSVILLE & LEXINGTON RAILROAD; both that part of the road which is completed and the part unfinished; embracing the road bed, and superstructure where the same is laid down, the right of way, and all lots of land in and adjacent to the road track, with all the buildings, stations, car-houses, and improvements belonging to said railroad, together with the franchises of the Maysville and Lexington Railroad Company; all of which will be sold together, upon credits of six, twelve, eighteen, and twenty-four months, in equal instalments.

At the same time and place, I will also sell all the Lots of Land belonging to said Company, and not adjacent to the railroad track—consisting of a lot of land in the City of Lexington, a tract of land in Fleming County, and town lots in Paris and Millersburg, on credit of six and twelve months, in equal instalments.

And at the same time and place, I will sell all the Locomotives, Freight and Passenger Cars, Cross-Ties, &c.—consisting in part of two locomotives and tenders of twenty-four tons each, three passenger cars for sixty passengers each, one entirely new and all in good order; seven box freight cars, eleven platform cars, eleven tops for platform cars, five gravel cars, and a top for another; fifteen pairs of car wheels, a hand car, a lot of bridge and car irons; 9,500 cross-ties near Maysville, 1,380 of which are of locust and the remainder of oak; about 6,000 cross-ties along the line of the railroad between Lexington and Millersburg. The new passenger car, two freight cars, and the tops for platform cars, are in Maysville, all the other rolling stock is in Lexington, and the whole is of 4 feet 8½ inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the purchase money, having the force of Judgments, with good security, to be approved by me, of one of the following kinds, to wit:—1. Personal security. 2. First Mortgage Bonds of the Maysville and Lexington Railroad Company. 3. Mortgages in real estate in counties near this railroad or the Covington Railroad. 4. State and United States Bonds. 5. A First Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of purchasing, by the undersigned, who will be found in Lexington, Ky., or by A. M. JANUARY, at Maysville. Letters of enquiry, addressed to me, will be attended to. EBEN MILTON,

*Receiver and Commiss'r,
LEXINGTON, Kentucky*

Philadelphia, Wilmington & Baltimore Railroad. UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



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FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$13 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, *Sup't.*

New York and Erie R. R.

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PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

Lt.

D. C. McCALLUM, General Sup't.

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AND

COMMISSION MERCHANTS,

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FOR RAILROAD COMPANIES.

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All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

For Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

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Second Hand Locomotive

FOR SALE VERY LOW.

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ELLIOTT & CO.,
4 William st., N. Y.

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WM. A. WELLS, Agent.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

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SATURDAY, MARCH 8, 1856.

[WHOLE No. 1,038, VOL. XXIX.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, March 8, 1856.

Railroad Management.

ECONOMY.—LOCOMOTIVE FUEL.

Twenty five years ago the railroad system was in its infancy. It has drawn rapidly towards a mature manhood, and if we are to credit the signs of the times illustrated in the recent proceedings of some of the oldest companies in the country, we must believe it to have passed its prime and be tottering along in trembling dotage. To return at this day in the direction of stage coach prices in making up a passenger tariff, is certainly "disseminating into the dark age." We have supposed that as men grow older they grow wiser. But we were unsophisticated. We have learned better. Men do not even grow more cunning,—they become desperate, rash and imprudent. Of course, we mean railroad men. Once it was found that four cents a mile paid more dividend than the law allowed, and so they have fallen gradually till two cents a mile has in the most thickly settled parts of the country become a common rate for railroad travel. Some dividends have been earned at this rate, and under competent administration it has been supposed the price would pay.

In order to tempt travel and insure full trains it has been customary to sell season tickets at considerable discount to parties going to and fro daily. The principle is sufficiently correct. If a train must be run to accommodate 100 passengers at

2 cents per mile each, why not as well accommodate 200 at the same time for 1½ cent per mile. Moreover, if men can be tempted into the purchase of residences in the suburbs of the large cities, the railroads will do an increased freighting and passenger business in the dense suburban districts independently of the commuters' traffic. This seemed wise at the time and the effect produced was just what was anticipated. Thus for instance of one city—Boston—it is said that at night there are left within its borders more foreign than native residents, yet the suburbs for miles are as one living village. Now comes the retrograding. It is discovered to be poor policy to encourage this habit of peopling the neighborhood. A check must be put upon that sort of progress, and so the tariff as regards commuters must be raised.

Of course it would be unjust to say that accomplished swindlers had graduated from any of these railroad schools—to point at Schnyler or Tuckerman, as evidence of what these roads can produce in the way of dishonest dealings; we shall do nothing of that sort. Nor shall we even hint, that of all persons on whom the prices should be raised commuters are the very last, because they have been influenced to invest in land in the country by the bribe of commutation; because they have become pleasantly settled, have gathered themselves into the comfortable folds of a home, cheaper than city life as well as more wholesome. We shall not suggest that there is more than a tacit contract existing between the parties carried and carrying under such circumstances. If we did, unpleasant suspicions might be raised.

People, who do not own railroad stock, would be tempted to say, it has become unpopular for railroad officers to cheat their own companies and so they have turned on us. They have us safe in their clutches,—we have invested our money in lands and houses in the country, there are our homesteads and our families, while our business lies in the city; we must travel daily between the two points,—there is no help for it; *we must go and we must come*. The companies are sure of us. No rival lines can bring us protection as they protect through passengers. This is dishonest,—they have cheated us.

We say we fear the people might talk something after this sort. Such language would be harsh and disagreeable; we would prefer not to hear it. We shall therefore only say it is impolitic and utterly unnecessary, and betrays either a lack of capacity on the part of the officers of a company, or of energy and enterprise in the management and inspection of the company's business.

What we have hinted at as leading to the proposition, namely, that this is the *easiest* way to rescue a sinking concern, is undoubtedly the true statement of the case, though it is glossed over by specious reasoning. The commuters are in the power of the companies, and the management of that power ought to be in accordance with the nicest principles of honor. We do not assume the position of advocate for the commuter. The matter is one of fact. The Railroad companies having certain exclusive privileges granted by the public, agree to perform certain services in return therefor. The public cannot demand accommodations that will entail loss on the companies. Men have been seduced by the offers of cheap transportation to move their residences into the country. They are now permanently settled there. If, with *competent management*, the present tariff does not pay a fair profit, the companies are justified by every correct principle in abandoning, what we shall call, their contract with the public. Before they take this step they are under high obligations to analyse thoroughly the principles of management by which they have been governed.

To suggest an examination of this sort that may lead to a practical result in the economical working of a road, is our present purpose. Without indulging in loose guesses, let us attempt an analysis of the operations of certain roads, having in view at the same time a definite object, that our search be not at random.

We take the Reports of twelve important lines that have been in operation a sufficient length of time to impart value to their experience. The following tabular statement is compiled from the returns of the last year. It exhibits the great characteristics of the Roads sufficiently for purposes of comparison—gives the number of miles run by all the trains during the year, and the number of times every mile of the road may have been run over. The working expenses do not include

the salaries of President, Treasurer, &c., but do include wages of conductors, and all persons engaged in the practical operations. It does not include the amount paid for damages, taxes, insurance, interest, *new cars or new locomotives*. It is really as near as may be the actual cost of operating the road, supposing it fully equipped and stocked.

The column of Earnings exhibits the gross earnings for the year.

Another column shows for what percentage of the earnings the road has been operated, and is the ratio between the amounts in the two preceding.

The next, gives the cost of fuel per mile run, during the twelve months reported.

The last two columns show, first, what would be the cost of working if the amount spent for fuel were uniform at 20 cents per mile run, and second, what in that case would be the proportion of earnings used, in operating.

The Boston and Worcester Railroad, with a movement of over 12,000 miles per mile of length, has been worked for 50 per cent. of its earnings. This could never have been done without the commutation system, which has made the line of that road one vast village—filling profitably every train and multiplying their number over short lengths of the track. This class of passengers will be found to pay more for the work done on their account than any other department of the business.

Some of the roads indicated are subjected to a very moderate taxation for their fuel. It is interesting to notice this fact carefully. The Ogdensburg Railroad passing along the northern edge of a great wilderness, finds upon nearly the whole length of its line, the most abundant supplies, costing little more than the expense of preparation—the expense per mile being 6.9 cents.

The Erie Railroad, going through much wild country, but frequently entering large towns that demand the wood for their own uses, is subjected to hauling it considerable distances, and the price amounts to 13.8 cents per mile.

The New York Central, on the main stem—one village from Albany to Buffalo, but with its branches and feeders to bring in, and thus keep down the price of the home article, manages to supply itself this year for 16.1 cents per mile run.

The Fitchburg Railroad, running through a densely settled region while near Boston, sends its auxiliaries up into Vermont and Western New Hampshire, and draws thence its supply at a slightly advanced cost on the New York Central Railroad, preparing and distributing at 18.5. cts.

The Boston and Maine road condemned at the southern extremity to the expensive habits of its neighbors in this respect, but redeemed by the facilities for procuring wood at the Eastern end, manages to work along with a fuel bill of 20 cents per mile.

At this point every road should cease burning wood. Much sooner than this, indeed, but we mean that at this point experience is full and complete as to the use of coal.

If we refer to the Report of the Baltimore and Ohio Railroad for the year 1854, we shall find that the fuel bill was but 5.3 cents per mile run. The wood used cost \$1.79 per cord, while the coal was procured for 98 cents per ton, and an expense of \$32,722 was incurred for the preparation of fuel. Now we find that if we estimate coal at

\$6.00 per ton, and the wood \$6.00 per cord, the fuel bill would have been 20 cents per mile run; but if the wood had been held at this rate, the coal would have been exclusively used, and instead of 36,853 cords of wood, and 74,738 tons of coal for the year 1854, we should have had 66,747 tons of coal only, since one ton of the latter is found for purposes of vaporization to be worth $2\frac{1}{2}$ cords of the best pine wood, and the price of fuel per mile run would have been 12.5 cents. We might have stated this as the figure beyond which with wood we should not go; but as the number might have been conceived empirical, we choose to go further with wood in order to satisfy those intensely practical gentlemen who only see what merits them.

We might state a lower figure than 12.5 cts. per mile, if it were possible to estimate the amount of waste that occurs in the use of coal, in a country where its cost does not exceed \$1.00 per ton.—We know it is immense, though we should not presume to state its amount, since we do not desire to build up a theory, but simply present facts for practical operation. Nevertheless, we advise to bear this point in mind.

Another important consideration is to be found in the fact, that with a Cumberland coal fire the blast orifice of the Engine may be made much larger than in the ordinary case of a wood fire.—Thus, on the Centipede, a new Engine just built by Winans of Baltimore—cylinders, 22x22—the diameter of the exhaust nozzle is about 5 inches, whereas, in a wood Engine of the same dimension of cylinder, the orifice might be used of 3 inches diameter, but not more. Now, at twenty miles per hour, the back pressure, making waste of power when the Steam Gauge indicates 100 lbs. per square inch in the boiler, would be 3.2 lbs., or 3.2 per inch loss of the whole power; while with an orifice of 5 inches diameter, the loss would be but 0.5 lbs., or $\frac{1}{2}$ per cent., making on a piston of 22 inches diameter, a difference of 1,026 lbs. pressure; which, referred to the drivers of 42 inches diameter, amounts to 342 lbs., an amount of power wasted that would draw 56 gross tons on a level road. The same is true of Boardman's boiler and furnace. The Engine now in use on the Providence and Worcester Railroad is built with an Exhaust of 4 inches; whereas, $2\frac{1}{2}$ is common for that size of cylinder.

But we propose that these companies shall make no experiments. Let them take the coal machines as they exist now, and they can run them for less than 20 cents per mile. But suppose it to cost fully that amount, what will be the saving over the present cost of working these roads? This may be seen by reference to the last two columns of the table, in which, as previously remarked, the cost of fuel is assumed at 20 cents per mile.

The saving in the case of the Boston and Providence road amounts to 9 per cent. of the total operating expenses—and on the Hudson River road, to 2 per cent.; a large sum however, as the expenses for working this road are enormous.

To the Boston and Worcester Railroad, which does a heavier business than any road on the table, the saving is 4 per cent.

We do not design this statement for the purpose of instituting invidious comparisons between the management of the different roads. So many

modifying circumstances affect the figures on which operating expenses are founded, that the comparison of one road with another as to the skill of its management, amounts to little. However, here are the figures, and if any choose to speculate on the results shown, they are free agents.

NAME of COMPANY.	Length of Road in Miles.	Total Rise and Fall of Gradients in ft.	Total Curvature in Degrees.	Number of Miles run during 12 months.	Miles run per Mile of Length of Road.	Work's Expenses per Mile in Dollars.	Gross Earnings per Mile in Dollars.	Percentage of Earnings required to operate.	Cost of Fuel for Mile run, in Cents.	Work's Expenses per Mile in Dol. (The cost of fuel being supposed uniform at 20c. per mile run.)	Per cent. of Earnings required to operate.
Boston and Lowell.....	27.7	163	773	296,517	10,668	1,060	1,660	64	26.2	0.998	60
Boston and Maine.....	76.3	1,644	2,446	538,016	7,743	0,814	1,667	49	20.0	0.814	49
Boston and Providence....	66.5	822	768	316,288	6,700	1,090	1,766	62	34.8	0.942	53
Boston and Worcester....	44.6	1,030	3,203	641,528	12,142	1,020	1,861	64	28.0	0.940	60
Boston and Fitchburg....	67.8	896	2,985	451,944	6,866	0,932	1,572	59	18.5	0.947	60
Old Col. and Fall River....	87.3	1,631	1,710	408,107	4,674	0,865	1,601	53	22.5	0.830	52
Providence and Worcester..	43.4	582	2,547	196,183	4,520	0,968	1,588	63	24.3	0.915	58
Western.....	155.4	2,085	6,370	1,021,163	6,570	1,109	1,880	60	23.8	1.071	60
Hudson River.....	144	Not rendered.	929,748	6,457	1,222	2,011	26.4	58	1.168	1.168	58
New York Central.....	656	Do. do.	3,654,574	6,580	0,868	1,752	16.1	51	0.907	0.907	51
New York and Erie.....	464	8,056	22,252	3,181,878	6,860	0,781	1,706	45	13.8	0.843	49
Northern (Ogdensburg)....	122	2,445	751	320,316	2,525	1,100	1,625	67	6.9	1.231	76
Baltimore and Ohio.....	For the year 1854	.....	.....	.....	.....	.....	.....	.....	5.3	.....	.....
Reading.....	.....	.....	.....	.....	.....	.....	.....	.....	16.5	.....	.....

* Expense of Telegraph included in this acc't.

† Wood \$1.79 per cord } + \$32,722 for preparing Coal 98c. per ton }

‡ Wood and Coal together.—More than half the fuel bill on the Reading Railroad is for wood which is kept at a cheap rate by the competition of coal.

If the coal used had been \$5 per ton and the wood \$6 per cord, the cost of fuel would have been 22.2 cents per mile run.

Railroads in New York.

(Continued from Page 146.)

TROY & GREENBUSH R. R.

This line is leased by the Hudson River Company. No statement as to characteristics, &c., has been returned, as the books and papers were recently destroyed. On leasing the road the balance of construction above the amount of capital stock paid in, was paid out of the previous earnings. The whole indebtedness of the road was liquidated, and no debt has since been contracted.

Total length of line, six miles. No double track. One engine and one freight house. Six locomotives. Three passenger and three baggage cars.—No freight cars. Miles run by passenger trains, 47,706; and by freight, 11,772. Passenger carried, 216,193; tons of freight 80,245.

Passenger earnings.....\$29,527
Freight do.....48,990
Other sources.....3,142

Total.....\$81,659
Expenses.....52,008

Balance.....\$29,651

The annual rent paid by the Hudson River company is \$19,275, which is equal to seven per cent. on the capital of \$275,000. From this income two semi-annual dividends of 3½ per cent. each were paid.

One person was killed at a road crossing.

Jonathan Edwards is President, Philander Wells, Treasurer; H. R. Hubbell, Secretary; and E. S. Morgan, Superintendent. Principal office at Troy, N. Y.

TROY & UNION R. R.

The stock of this road is owned, one-fourth by each of the four railroads, running into Troy. By the terms of agreement, the city of Troy was to issue its bonds for an amount sufficient to construct the line, for which the Union company made a mortgage of their whole property in the place to the City of Troy to secure the latter for the bonds issued. The four railroad companies guarantee each the payment of one-fourth of these at maturity. Under this agreement the city issued \$707,000 six per cent. bonds, payable at various dates up to January, 1873. The company own no rolling stock or machinery. The tolls for the last year were \$84,878.

Capital authorized, \$30,000, of which have been paid in, \$3,000. Par value of shares, \$100. Funded debt \$707,000; floating do., \$17,344. The items of cost were—

Graduation, masonry, and bridges.....\$155,213
Superstructure, including iron.....47,634
Depots, stations, &c.....119,900
Land, damages, and fences.....394,375
Engineering, salaries, &c.....14,310

\$731,432

The length of road from Greenbush railroad to Hoosic bridge is two miles. Laid with double track. Weight of rail used, 65 lbs. per yard. Sum of ascents and descents, 57 feet. Maximum gradient, 94 feet per mile. Minimum radius of curvature, 500 feet.

George Gould is President; James Forsyth, Secretary and Treasurer; and Alexander McCoy, Superintendent. Principal office in Troy, New York.

TROY & BOSTON R. R.

Authorized capital, \$1,000,000, of which \$510,-

000 have been subscribed, and \$437,830 paid in. Par value of shares, \$100. Cash realized from sale of stock, \$351,493, exclusive of 880 shares issued in payment of work done. The funded debt amounts to \$497,000, and the floating debt to \$236,079, making a total of \$737,079. The first consists of \$300,000 seven per cent. first mortgage bonds, issued July 1st, 1851, and maturing in 1861; and \$197,000 seven per cent. second mortgage, issued in 1852, and falling due—\$20,500 in April, 1860, and \$176,500 in April, 1864. The floating debt also bears seven per cent. Cost of road and equipment, \$1,109,822. No estimate of present value is given. Length of road, 34¾ miles, of which 27¼ are laid, with 3¼ of sidings and double track. Weight of rail per yard, 65 lbs. The company own four shops, six locomotives, four first class passenger, four baggage and mail, and 78 freight and gravel cars. They have also leased 5½ miles of the Troy and Bennington road, from Hoosic Falls Junction to the Vermont State Line; and 1¾ miles of the Western Vermont road, making a little over seven miles in all. The longest bridge is 170 feet; and three others have an aggregate of 643 feet.

Sum of ascents and descents, 793 feet, or an average of 23 feet per mile. Maximum grade per mile, 40 feet for four and a half miles. Sum of straight lines, 25¼ miles. Degrees of curvature, 829. Minimum radius, 1,910 feet for nine and a half miles. Engines in use, six. Cars, 100 of all kinds.

During the year, 53,248 miles were run by passenger, and 23,374 by freight trains. Number of passengers carried, 191,514; tons of freight, 61,975. The earnings were—

Passengers.....\$70,617
Freight.....80,334
Other sources.....5,412

Operating expenses, rent, &c.....101,179

Net gains.....\$55,184

Appropriated as follows:

Interest on debt.....\$44,797
Amount carried to surplus fund. 9,363

54,150

Balance.....\$34

One employee was killed by falling from a freight train while in motion. No other accidents.

D. T. Vail is President; George Gould, Secretary and Treasurer; and Isaac V. Baker, Superintendent. Principal office at Troy, N. Y.

RENSSELAER & SARATOGA R. R.

The authorized capital of this corporation, is \$600,000—all paid in. Par value of shares, \$100 each. Funded debt, \$140,000 at seven per cent., secured by a first mortgage, and due July 1st, 1863. No floating debt. Total cost of road, equipment, &c., \$896,423. Length from Troy to Ballston, 25¼ miles, and of sidings, 2 miles. Rail, 58 lbs. per yard. Four engine houses and shops. Number of locomotives, 6; of first class passenger cars, 12; of baggage, mail, and express do., 12; of second class and emigrant do., 3; and of freight cars, 64. The company have leased the Saratoga and Schenectady road, 22 miles long.

Sum of ascents and descents, 510 feet, or an average of 20 feet per mile. Maximum grade, 34½ feet. Length of straight lines, 15½ miles. De-

grees of curvature, 1,151. Minimum radius, 415 feet, for a few yards only. Miles run, 62,392 by passenger, and 30,588 by freight trains. Passengers carried, 187,124. Tons of freight, 52,695.—The earnings, including those of the Saratoga and Schenectady road, were—

Passengers.....\$143,133
Freight.....67,180
Other sources.....30,836

Total.....\$241,149

Trans. expenses.....\$128,399

Interest.....9,800

Dividends, (7 per cent.).....42,700

180,899

Balance.....\$60,250

From this were paid for rents—\$29,798, to the Schenectady, and \$9,185 to the Troy Union railroad company.

Three fatal accidents—in all cases from trespassing on the track, while the train was in motion.

The principal officers for this present year are: Ed. Schriver, President and Treasurer; C. R. Richards, Secretary; and L. H. Tripper, Superintendent. Principal office at Troy, N. Y.

SARATOGA & SCHENECTADY R. R.

Authorized capital, \$300,000—all paid in.—Shares, \$100 each. Funded debt, \$109,000, consisting of two issues, each bearing seven per cent. interest, and payable at various dates. Cost of road, equipment, &c., \$480,020. Length, 21 miles, exclusive of 1½ of sidings. Rail, 56 and 65 lbs. per yard. Number of engine houses and shops, 2; of locomotives, 2; of passenger cars, 3; and of freight cars, 10. One mile of the New York Central, from Schenectady to the Junction, is leased by the company.

Sum of ascents and descents, 187 feet, or nine feet per mile. Maximum gradient, 22.7 feet. Sixteen miles are straight. Degrees of curvature, 563. Minimum radius, 500 feet.

The company receive annually, as rent from the Rensselaer and Saratoga road, \$30,150, from which were paid last year—

Trans. expenses, (salaries, &c.).....\$2,282
Interest.....7,805
Dividends, (five per cent.).....15,000

Surplus, (applied to payment of No. 2 bonds).....5,000

\$30,087

No accidents reported.

L. G. B. Cannon is President; Ed. Schriver, Treasurer and Secretary; and L. H. Tupper, Superintendent. Principal office at Troy, New York.

SARATOGA & WHITEHALL R. R.

Authorized capital, \$500,000—all paid in.—Shares, \$100 each. Funded debt \$395,000, consisting of the following issues, all bearing seven per cent.

No. 1—\$25,000, issued April, 1848, and maturing March 1st, 1858. Secured by mortgage.

No. 2—\$100,000, issued September, 1849, and maturing in September, 1856. Secured by mortgage on Rutland and Whitehall branch.

No. 3—\$45,000, issued in June, 1855, and maturing in March, 1858. No mortgage.

The property of the old company was sold in April last, on a foreclosure of the second mortgage, and purchased by the bondholders, who took possession of it on the 8th of June.

There is no floating debt.

Length of road, $41\frac{1}{4}$ miles; of double track and sidings, $3\frac{3}{4}$; and of branches owned by the company, $6\frac{1}{2}$ miles; making a total of $51\frac{1}{2}$ miles. Weight of rail per yard, 56 lbs. Number of engine houses and shops, 3; of locomotives, 8; of passenger and baggage cars, 16; and of freight cars, 80. The company lease $6\frac{1}{4}$ miles of the Rutland and Whitehall road from State line to Castle-ton.

Sum of ascents and descents, 826 feet. Other characteristics not given.

During the year, 18,174 miles were run by passenger, and 11,285 miles by freight trains. Number of passengers carried, 57,051; tons of freight, 18,019. The earnings were—

Passenger	\$51,774
Freight	17,860
Other sources	2,775

Total	\$71,909
Trans. expenses	\$49,820
Interest	7,830
To surplus fund	14,256
	<hr/> 71,909

No fatal accident reported. The breaking of a rail caused a train to be thrown off the track, by which several persons were injured.

John M. Davison is President and Superintendent; and Wm. H. Warren, Secretary and Treasurer. Principal office at Saratoga Springs, New York.

TROY & BENNINGTON R. R.

Authorized capital, \$80,000, of which \$75,600 have been subscribed, and \$74,100 paid in.—Shares, \$100 each. Funded debt, \$160,500, consisting of three issues, two of which amounting to \$116,900, at seven per cent., mature in 1862, and the third at six per cent., in 1871. The first two are secured by mortgage; and the third is convertible. The floating debt is \$13,015. Cost of road and buildings, \$248,261. The road is leased to the Troy and Boston company for 20 years, with the privilege of purchasing at cost. They keep it in proper repair at their own cost, and engage to return it in good condition at the end of the lease. Rent payable semi-annually, seven per cent. on \$100,000, and six per cent. on the balance of its cost.

Length of road, $5\frac{1}{2}$ miles. Rail, 60 lbs. per yard. No rolling stock. No double track.

Total ascents and descents, 166 feet, or 33 feet per mile. Maximum gradient, 44 feet. One-half consists of straight lines. Earnings, &c., included in the Troy and Boston road.

Lyman Bennett is President, and G. M. Selden, Secretary and Treasurer. Principal office at Troy, N. Y.

SACKETT'S HARBOR & SARATOGA R. R.

Capital authorized, \$6,000,000, of which \$4,600,000 have been subscribed, and \$254,100 paid in. Shares, \$100 each. The funded debt consists of \$400,000, seven per cent. bonds, secured by a mortgage on the road, its equipment, and 500,000 acres of land. Date of issue, Sept., 1854; and of maturity, August, 1879. The amount of floating debt is \$29,974.

The cost of road, equipment, &c., at date, is put at \$629,729. Estimated value, \$622,729. Length, when completed, 182 miles. Sum of ascents and descents, 3,029 feet, or 16.6 per mile. Maximum grade, 44 feet, for less than one mile. Minimum

radius of curvature, 1,146 feet for less than $1\frac{1}{4}$ miles. No other characteristics given.

The principal officers for the present year are: Charles A. Macy, Vice President; G. W. Stanton, Jr., Treasurer; Ed. D. Saxton, Secretary; A. F. Edwards, Chief Engineer; and J. B. Mills, Consulting Engineer and Superintendent. Principal office at 24 William-st., N. Y.

WHITEHALL & PLATTSBURGH R. R.

Capital, as by articles of association, \$1,000,000. Amount subscribed, \$94,000, on which have been paid in, \$9,390. Expenses for surveys, &c., \$6,385. Nothing further, beyond the preliminary surveys, has been done this present year.

SECOND-AV., (N.Y.) R. R.

Authorized capital, \$800,000, which has all been subscribed, and \$357,600 paid in. Shares, \$100 each. Funded debt, \$261,000; floating do., \$109,141; making a total of \$370,141, bearing seven per cent. interest. Few particulars regarding the first of these are given. Cost of road, equipment, &c., \$426,323. Estimated value of property, \$130,250. Weight of rail per yard, 72 lbs. Number of horses and mules, 300; and of passenger cars, 51. Length of main line, from Peck Slip to Harlem, 9 miles. Miles run by passenger cars, 98,550. Passengers carried, 3,547,660. The total earnings were \$174,883; transportation expenses, \$62,628, exclusive of the cost of repairs and renewal of pavement, &c., which are charged to construction; as also \$14,763 interest on funded and floating debts. The sum of \$6,300 from earnings, was applied to dividends. Of these, two were declared of four per cent. each, amounting to \$19,000.

Four persons were killed, and twenty injured. Denton Pearsall is President; William Coleman, Treasurer; Philip C. Rogers, Secretary; and D. J. Sherwood, Superintendent. Principal office at corner of Forty-second street and Second avenue, New York.

THIRD AVENUE (N. Y.) R. R.

Capital stock, \$1,170,000—all subscribed and paid in. Shares, \$100. Funded debt, \$40,000, at seven per cent., issued January, 1855, and due in 1870. Cash realized, \$32,500. Secured by mortgage on all the property. A sinking fund of \$7,000 per annum to be created after January, 1860. No floating debt. Cost of road and equipment, \$1,170,000, that being the amount for which it was purchased from a private partnership.

Length of road, from Broadway and Ann street to Harlem, $7\frac{3}{4}$ miles, of which $5\frac{3}{4}$ are laid. Weight of rail used, 72 lbs. per mile. Miles run, 923,076. Passengers carried, 5,770,078. Total earnings, \$292,475. Total operating expenses, \$217,838, besides \$6,838 for interest. The sum of \$104,136 was applied to the payment of floating debts. Total, persons killed, 2; injured, 4; two of the latter being passengers.

Wm. A. Darling is President; Amory Edwards, Treasurer and Secretary; and Wm. H. Schenck, Superintendent. Principal office at corner of 61st St. and 3rd Av., N. Y.

SIXTH AVENUE (N. Y.) R. R.

Authorized capital, \$750,000, in shares of \$100 each,—all subscribed and paid in. Funded debt, \$4,780. No floating debt. Total cost of road, equipment, &c., \$786,658. Estimated value, \$749,855. Length, $3\frac{3}{4}$ miles, all laid with double track. Rails, 74 lbs. per yard. Number of shops,

4; of horses and mules, 328; and of cars, 43. Miles run by passenger cars, 871,255; passengers carried, 4,237,583. Earnings, \$212,456. The various payments were—

Trans. expenses	\$165,235
Interest	505
Floating debt paid	11,000
Dividends ($3\frac{1}{2}$ per cent.)	26,250
Surplus	9,466

Total

Three persons injured, while on the track.

Sidney Mason is President; G. W. Leake, Treasurer; T. B. Myers, Secretary; and Wm. Ebbitt, Superintendent. Principal office at corner of 44th St. and 6th Av., N. Y.

NORTHERN (OGDENSBURG) R. R.

Capital stock, as by charter, \$2,000,000, which has all been subscribed, and \$1,633,022 paid in. Shares, \$50 each. The funded debt amounts to \$4,173,900; and the floating to \$250,374; making a total of \$4,406,874, bearing seven per cent. interest. The funded debt consists of—

No. 1—\$1,497,400, issued April, 1849, payable April 1st, 1859. Cash realized, \$1,441,129.

No. 2—\$2,676,500, issued in April, 1851, matures in April 1st, 1861. Cash realized, \$2,122,552.

Both issues are secured by mortgages on the real and personal property and franchises of the company. The floating debt has been due since September 30th, 1854.

Construction.

Graduation, masonry, and bridging	\$2,004,855
Superstructure, including iron	1,126,356
Buildings, &c.	410,770
Land, damages and fencing	140,006
Machinery and rolling stock	694,392
Engineering and agencies	129,705
Miscellaneous expenses	155,501
Wharves	72,268
Interest to stockholders	736,861

Total

The length of the main line is 118 miles, $17\frac{3}{4}$ of which are laid with double track. The company also own branches from Summit to Gravel Bed, from Champlain to River Landing, and from Pottsdam to Lumber Mills, the total length of which is $3\frac{1}{2}$ miles. Rail used, 56 lbs. per yard.—Number of engine houses and shops, 5; of locomotives, 27; of passenger and baggage cars, 23; and of freight cars, 615.

Road all ballasted. Cross-ties, 2,100 per mile. Chairs per mile, 586, of 22 lbs. each.

Sum of ascents and descents, 2,445 feet, or an average per mile of 20 $\frac{1}{2}$ feet. Maximum grade, 39.6 feet, for 12,800 feet. Total straight line, 89 $\frac{1}{2}$ miles. Total degrees of curvature, 751. Minimum radius, 2,000 feet, for one quarter of a mile.

During the year, 117,862 miles were run by passenger, and 194,039 by freight trains. Passengers carried, 78,868; tons of freight, 162,016. The earnings were—

Passengers	\$115,107
Freight	355,463
Other sources	49,853

\$520,153

Transportation expenses	\$384,399
Interest on 1st mort. bonds	54,417
Interest on float'g debt	1,963
Payment of funded debt	2,600
	<hr/> \$443,409

Balance

No interest was paid on the second mortgage bonds;

Two employees were killed, and two wounded.

W. R. Lee is President; George V. Hoyle, Vice President and Superintendent; S. C. F. Thorndike, Treasurer; and J. G. Hopkins, Secretary.—Principal office at Malone, Franklin county, New York.

EIGHTH AVENUE (N. Y.) R. R.

Authorized capital, \$800,000, of which have been subscribed and paid in \$762,500. Shares, \$100 each. The road with all its fixtures, rights, &c., and real estate valued at \$200,624, was purchased, in January, 1855, for \$800,000. Of the property an interest to the extent of 3-64th, has not yet been conveyed to the company. Its estimated value is—

Roadway and track complete	\$475,000
Real estate.....	200,624
Horses, mules, harness, &c.....	77,500
Cars	48,800

Total.....\$801,924

Length of road about 10 miles, of which nearly five are laid. Rail, 72 lbs. per yard. Number of passenger cars, 61. Miles run by cars last year, 655,000. Passengers carried, 4,311,676. Total earnings, \$215,583. The expenses were \$132,592 for transportation, and \$44,110 for dividends. One person was killed by jumping in front of the cars, while in motion.

George Law is President; David Palmer, Sec'y and Treasurer; and Oliver Charlick, Superintendent. Principal office at corner of 8th Avenue and 49th Street, N. Y.

NEW YORK & NEW ROCHELLE R. R.

Authorized capital, \$1,000,000, of which \$27,100 have been subscribed, and \$2,310 paid in. Shares \$100. Expenses, \$1,095, chiefly for charter purposes. The line has been surveyed, but nothing further done.

Oliver Slate jr. is President; and Geo. S. Robins, Treasurer. Principal office at 40 Wall st., N. Y.

FLUSHING R. R.

Capital stock, as by charter, \$200,000—all subscribed, and \$133,132 paid in. Shares, \$20 each. Stock paid to contractors, for right of way, &c., \$51,960. Funded debt, \$211,000; floating debt, \$39,866; making a total of \$250,866. The first consists of the following issues, bearing 7 per cent. interest:

No. 1—\$159,000, issued September, 1853; due Sept. 1st, 1868. Cash realized, \$145,500. Secured by first mortgage on road and franchise.

No. 2—\$52,000, issued November, 1854; due November 1st, 1864. Cash realized, \$31,600. Secured by second mortgage on road, equipment, &c., and made convertible into stock at par.

The floating debt bears ten per cent. interest, and is payable at various dates from one to thirteen months.

Cost of road, equipment, &c., \$310,962. Estimated value, \$308,987. Length, 7.8 miles. Rail, 56 lbs. per yard. No double track. Number of engine houses and shops, 2; of locomotives, 2; and passenger and baggage cars, 8; and of freight cars, 6. Two miles of the road are laid on pile work over salt marshes. Sum of ascents and descents, 167 feet, or 22 feet per mile. Maximum grade, 46¾ feet. Sum of straight lines, 5¾ miles. Degrees of curvature, 297. Minimum radius, 955 feet. Miles run by passenger trains, 30,048. None

by freight trains. Passengers carried, 235,525. Earnings, \$39,432. The expenses were—

Passenger and freight.....	\$21,313
Steamboat and stage expenses	17,589

Total.....\$38,902

Besides this, there were paid for interest on funded debt, \$11,203.16; and on floating debt, \$5,386. No dividends.

One employee was killed and one wounded from jumping off the cars while in motion. No other accidents reported.

William Smart is President; D. S. Williams, Treasurer; S. B. Parsons, Secretary; and W. M. Smith, Superintendent. Principal office at Flushing, N. Y.

Sunbury and Erie Railroad.

An interesting correspondence between a number of prominent citizens of Philadelphia, largely interested in this work, and S. V. Merrick, Esq., has lately taken place, resulting in changes of much consequence to the road. Mr. Merrick, from the success which attended his efforts in behalf of the Pennsylvania road, was strongly urged to assume the Presidency of the Sunbury and Erie. In his reply, he agrees to accept on the following conditions:

"First. The resignation of every Director elected at the recent annual meeting of the company.

Second. The surrender of all the existing contracts on work where payments were stipulated for in the stock or bonds of the company.

Third. An agreement on the part of the contractors not to vote the stock held by them at the meetings and elections of the company.

In these stipulations I intended neither disrespect for, nor censure of, any one hitherto connected with the administration of the affairs of the company; but they seemed to me to be necessary, because:

Partial changes of the direction had hitherto failed to accomplish the desired results.

Contracts, payable in stock or bonds, largely enhance the cost of any public work, and to the extent that they may be used in payment, diminish profitable returns on the cash capital.

The power of contractors to control elections and meetings of the company by the votes due to their stock, deters individuals and corporations from subscribing, and engenders feelings of jealousy and distrust that it is impossible to overcome."

These views have all been acceded to, and that gentleman is now about to undertake the chief management. On his qualifications for such a trust, and the prospects of the work, the *Commercial List* says:

"Mr. Merrick enters upon his career as President with a clear field for the exercise of those qualities with which he is so plenteously endowed. He is emphatically a practical man in the most comprehensive sense of that term. His education and training has been such as to fit him for all stations which require cool judgment united with comprehensiveness of perception, and accuracy of conclusions. In addition to these facts, Mr. Merrick was for several years connected with the Directorship of the Pennsylvania railroad, and thus had an opportunity of maturing those powers which are necessary in the chief officer of a great enterprise—such as the one he has now been called to preside over.

With such a President and Board of Managers as now control the affairs of the Sunbury and Erie railroad, there can be no question that it will receive a full share of public confidence and support. The letter of the President shows that his whole heart is in the work, and the basis on which the new administration is formed, justifies the con-

fidant belief that the road will be pushed forward with all possible despatch. The enterprise has always been a pet one with us, as well as the people of this city and State. That feeling is well founded. It must, when completed, reimburse in a most liberal manner all those who have contributed their means to aid it in its infancy. But above all will the opening of this avenue benefit the whole trade and commerce of this port. It will enable us to reach the Lakes at a point second to none on those vast inland seas, which are becoming the channels of communication between the East and West, and hence it is that the citizens of Philadelphia are so deeply and anxiously solicitous with reference to the management of the enterprise."

Population of St. Louis.

Full returns of the census of the population of this city have been made, and the following result is presented:

First Ward.....	20,286
Second do.....	17,704
Third do.....	15,342
Fourth do.....	18,549
Fifth do.....	16,344
Sixth do.....	20,395
Seventh District.....	4,889
Eighth do.....	6,186
Ninth do.....	2,233

Total population.....121,928

The population of the city, independent of that of the three districts added to it by the act of the late Legislature, is ascertained to be 103,620, and exhibits an increase within the last year of fully eleven thousand. We have not yet examined the returns with a view to determine the accuracy with which the census has been taken, but we suppose that the duty has been faithfully performed. At any rate, we are satisfied with the progress we are making towards becoming a great city, and are content with being reckoned as the seventh city in the Union, with the certainty of coming up if not surpassing three, if not four, of them by the year 1860.

Debts and Liabilities of Virginia.

The Committee on Finance of the Virginia House of Delegates have made a report relative to the revenues, liabilities, expenses &c., of the Commonwealth. From this we learn that the total outstanding funded debt, bearing interest, is \$24,489,400, the semi-annual interest on which is \$271,253. The State is pledged for various matters, and is guarantor for bonds issued by several cities and internal improvement companies; so that the total liabilities as principal and guarantor is \$35,068,689.

The demands upon the Treasury for the present fiscal year will exceed the probable receipts by \$1,659,606, which the committees propose to meet by way of taxation. The increase upon the present amount of taxes will be 84.7 per cent.

The State holds stock in banks and internal improvement companies to the amount of \$27,686,621, put down at their par value, but the actual income from them has only been, for 1844-5 the sum of \$413,628.

The committee urge the propriety of looking into the true condition of the Treasury, alleging that all the resources of the Commonwealth, with its sixty-one thousand square miles of fertile land its million and a half of industrious inhabitants, are ample to sustain a much larger debt." Vigorous remedies are therefore urged, on the ground that the first principle of a sound financial system is to provide for the ordinary and regular necessities of the year by taxation within the year.

A re-assessment of the lands of the State is likely to be made, a bill for that purpose having passed the Senate. A considerable amount will be raised from this source, but will not be collected until 1857-8. In the meantime the committee deem it a duty to place the Treasury beyond the possibility of failing in any of its obligations.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	6	68		Tennessee and Alabama.	30	246,486		679,906	In progr.			
Androscog. & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	none	18		Tennessee and Mississ.		170,931		176,340	In progr.			
Androscoggin.	20	91,192	232,193	343,317	29,996	12,807	none	20	Memphis and Charleston.	288	2,103,177	958,275	3,663,362	176,484	102,018		
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600		none	14		Mobile and Ohio.	227	2,300,000	1,510,666	3,663,362	In progr.			
Portl., Saco, & Portsmouth.	51	1,367,000	119,237	1,486,327	259,330	124,038	6		Miss. Central.	188	642,534	none	628,303	In progr.			
Boston, Concord, & Montreal.	93	1,808,093	1,059,512	2,771,310	233,234	120,834	10		N.O., Opelousas & G.W.	360	1,909,428	476,143	1,825,812	In progr.			
Cheshire.	53	2,083,825	946,919	3,131,907	372,592	131,016	17%		Victrola, Shreveport & Tex.		111,760	none	107,895	In progr.			
Concord.	35	1,485,000	none	1,412,576	329,744	158,632	8		East Tennessee and Ga.	111	1,000,000	2,600,000	1,033,781	In progr.			
Northern, N. H.	82	2,768,400	none	3,016,633	370,629	138,299	2%	41%	Nash. and Chattanooga.	161	625,425	1,497,081	3,843,694	264,673	112,177	none	
Con't & Passumps. Riv.	81	1,048,146	787,608	1,780,062	162,687	55,173	none		Oxington & Lexington.	98	431,091	159,299	635,363	90,930	34,864	none	
Rutland & Burlington.	120	2,233,376	2,662,396	5,378,428	394,971	214,793	none		Lexington & Frankfort.	29	540,117	61,525	628,067	In progr.			
Vermont Central.	117	5,000,000	3,550,236	8,463,366	820,119	479,453	32%		Lexington and Danville.	65	698,236	668,061	1,689,566	244,014	98,902	6	
Boston and Lowell.	27	1,830,000	325,635	2,188,595	489,754	140,377	7		Louisville and Frankfort.	254	866,839	77,294	913,231	In progr.			
Boston and Maine.	83	4,076,974	154,000	4,179,535	908,790	421,561	8		Atlantic & Gt. Western.	141	1,881,598	1,200,612	2,805,821	238,010	114,592	none	30
Berkshire.	21	600,000	none	600,000		42,000	7		Bellefontaine and Ind.	96							
Boston and N.Y. Central.	74	2,234,000	1,200,000	3,310,948	102,352	42,335	none	3%	Cleveland and Erie.	100	2,675,425	2,689,301	5,124,629	736,272	396,980	10	78
Boston and Providence.	55	3,160,000	350,705	3,611,821	558,671	201,678	none	65	Cleveland and Toledo.	209	2,686,570	2,518,162	4,818,163	540,215	255,868	67	
Boston and Worcester.	68	4,500,000	655,428	4,885,439	1,008,004	404,461	6%	87%	Clev. and Mahoning.	133	2,686,570	2,518,162	4,818,163	540,215	255,868	67	
Connecticut River.	52	1,591,110	254,043	1,802,244	277,770	102,942	4%	47	Cin. and Pittsburg.	60	2,100,000	1,464,364	2,961,978	483,620		60	
Eastern, Mass.	60	2,683,400	2,850,325	4,447,459	730,269	346,426	7		Cin. Wilm. & Zanesville.	131	1,129,450	131,265	2,326,459	1,481,733	356,365	187,513	85
Essex.	20	299,107	469,311	747,068	51,246	none	none		Columbus and Xenia.	55	1,484,550	149,000	1,440,447	240,781	168,949	64	
Fitchburg.	67	3,540,000	334,992	3,730,965	704,638	272,716	6	71%	Col. and Xenia.	64	1,413,350	311,032	1,400,447	240,781	168,949	64	
Fitchburg and Worcester.	14	238,140	74,099	333,884	42,047	19,274	6		Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	In progr.			
Lowell and Lawrence.	12	200,000	140,000	363,658	56,135	23,823	6		Dayton and Michigan.	140	1,076,692	398,011	1,185,826	In progr.			
Lowell and Lowell.	14	600,000	16,000	654,603	191,857	55,877	8		Faxon and Hamilton.	42	448,411	838,994	1,345,733	113,859	63,256	27	
N. Bedford and Taunton.	21	500,000	none	533,953	198,491	66,533	6%		Little Miami.	65	2,963,921	1,171,785	3,648,172	681,562	336,708	84%	
Old Colony and Fall River.	37	3,015,100	314,834	3,434,164	649,656	142,800	6	82%	Mad River and L. Erie.	205	2,451,650	2,672,932	4,446,601	Recently opened.	none		
Pittsfield & N. Adams.	18	450,000	none	413,677	50,896	25,619	6		Central Ohio.	138	1,520,927	3,485,076	5,670,700	1,111,626	662,117	9	65
Vermont and Mass.	77	2,232,540	1,046,626	3,307,867	275,523	66,383	none	11	Ohio and Penn.	187	2,451,700	3,219,000	343,882	In progr.			
Western, Mass.	155	5,150,000	6,689,520	9,963,268	1,768,944	718,703	7	90%	Pittsbg. Mayv. & Cin.	50	1,350,000	2,206,357	3,562,357	328,958	164,479	none	
Worcester and Nashua.	46	1,141,000	218,244	1,394,703	209,118	82,959	2%	45	Sand'y, Manst. & Newk.	127	1,350,000	2,206,357	3,562,357	328,958	164,479	none	
Worcester and Worcester.	43	1,622,200	351,500	1,843,332	316,616	131,312	7	70	Scioto & Hocking Valley.	135	403,975	509,650	888,856	In progr.			
Hartford and N. Haven.	72	2,350,000	939,000	3,313,932	730,012	352,799	10	22	Spring, Mt. Vernon & P.	113	1,000,000	950,000		In progr.			
Hart'd, Prov. and Fishkill.	123	1,845,610	2,090,124	4,060,869	258,685	119,011	none		Tol. Wabash & St. Louis.	242	2,500,000	4,530,000		In progr.			
Housatonic.	110	2,000,000	474,177	2,429,066	330,792	18,351	none		Cin. Log. & Chicago.	255	4,196,670	1,006,125	2,080,433	In progr.			
Naugatuck.	67	1,031,800	575,995	1,577,167	238,266	none	4		Evanov. & Crawfordsv.	109	706,945	1,177,556	1,844,541	127,400	64,552	67	
N. York and N. Haven.	62	2,992,000	2,252,647	4,980,407	906,018	335,611	none		Ind. and Cincinnati.	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	57
N. Haven and N. London.	50	734,268	735,165	1,450,318	103,968	217	none		Indiana Central.	66	611,400	1,261,179	1,907,911	350,176	134,375	48	
N. London, W. & Palmer.	60	508,600	1,007,523	1,527,827	137,060	3,717	none		Ind., Clev. & Pittsburg.	83	834,157	1,101,971	1,671,544	none	20		
Norwich and Worcester.	66	2,122,300	796,856	2,596,488	304,651	95,456	6	33	Jeffersonville.	64	1,014,252	694,000	206,544	94,318	none		
Buffalo, Conn. and N. Y.	100	1,482,768	1,402,244	2,597,963	123,147	60,752	none		Lafayetteville and Indianapolis.	66	1,647,500	1,589,881	3,237,381	none			
Buffalo and N. Y. City.	92	798,339	2,587,819	3,401,868	254,770	52,000	none		Madison and Indianapolis.	67	2,535,121	5,281,848	6,643,189	645,827	371,402	none	10
Buffalo and St. Lino.	81	1,300,000	1,030,000	2,343,849	507,618	264,855	10		New Albany and Salem.	288		858,314	150,000	90,000	none	15	
Cayuga & Susquehanna.	35	687,000	531,318	1,038,494	120,849	58,589	none	21%	Peru and Indianapolis.	73		858,314	150,000	90,000	none	15	
Hudson River.	144	3,757,891	8,933,804	12,391,363	1,753,966	608,010	34%		Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	95
Long Island.	58	1,875,148	626,958	2,518,261	279,820	102,057	none	33	Chicago and Rock Is'd.	182	3,141,500	2,587,155	5,214,152	In progr.			
New York Central.	534	24,154,890	14,492,742	25,523,913	6,653,581	3,102,126	8	92%	Chicago and St. Louis.	220			1,077,312				
New York and Erie.	404	10,024,958	15,126,669	33,439,431	5,488,993	2,627,118	none	58	Chic. St. Paul & F'd du Lac.	178	2,300,000	1,825,000	3,625,000	In progr.			
New York and Harlem.	133	5,716,050	3,627,505	8,127,388	942,394	154,854	none	21%	Galena and Chicago.	298	4,334,800	1,189,304	5,666,263	1,506,710	942,231	17	112%
Northern, N. Y.	119	1,611,527	4,622,413	5,435,505	518,527	145,733	none	2%	Illinois Central.	707	1,419,440	18,001,426	17,098,099	1,532,118		97%	
Oswego and Syracuse.	37	734,920	219,594	677,754	106,764	53,380	none		Peoria and Oquawka.	93	569,889	818,454	1,388,342	In progr.			
Rensselaer & Saratoga.	25	610,000	140,000	888,182	201,348	76,327	5		Ohio & Miss. (W. Div.).	147	1,780,295	3,292,408	4,870,556	Recently opened.			
Saratoga and Washington.	51	899,000	1,053,234	1,891,933	183,959	37,666	none		Terre Haute and Alton.	173	2,231,420	1,256,000	3,537,424	In progr.			
Syracuse & Binghamton.	71	731,614	1,118,751	1,636,117	1,682,496	552,456	12		Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.			
Troy and Boston.	27	439,492	493,500	1,107,733	152,618	66,407	none		Mich. Central.	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656	93%	
Watertown and Rome.	97	1,370,428	854,768	2,040,543	393,954	152,752	5		Green Bay, M.L. & Ch.	475	6,928,900	6,319,224	11,645,208	2,410,000	815,000	10	94
Belvidere and Delaware.	50	1,000,000	1,177,376	2,177,376	1,244,301	44,825	none		Milwaukee and Miss.	106	1,826,428	2,467,589	3,678,757	691,543	417,443	17	84%
Camden and Amboy.	94	1,500,000	1,177,376	2,177,376	1,244,301	44,825	none		Milwaukee & Water'n.	72	354,861	132,000	514,238	In progr.			
Camden and Atlantic.	60	240,125	1,269,223	1,499,185	60,673	61,700	none		Milwaukee and Horicon.	62			31,000	In progr.			
New Jersey.	31	3,253,925	798,596	4,306,338	824,032	440,447	10	23%	Milwaukee & La Crosse.	99				In progr.			
New Jersey Central.	73	2,030,000	1,632,055	3,506,226	378,145	180,796	7		Racine and Miss.	47	921,906	380,715	1,289,321	In progr.			
Morris and Essex.	62	1,158,715	351,500	1,549,622	233,596	99,377	6		Hannibal & St. Josephs.	205	292,351	580,000	823,310	In progr.			
Allegheny Valley.	44	1,637,867	342,564	1,988,317	219,253	52,450	none		North Missouri.	13	1,138,208	684,294	1,093,336	In progr.			
Cataw. W. & E.	63	1,700,000	1,940,000	3,640,000	146,381	66,994	none		Pacific.	130	2,808,692	3,908,174	6,463,726	160,000	In progr.		
Cumberland Valley.	56	1,099,500	12,211	1,191,833	In progr.				St. Louis and Iron Mt.	40	445,170		186,115	In progr.			
Dol. Lack. & Western.	109	2,865,175	1,865,897	4,140,365	In progr.				Panama.	40	3,743,000		6,564,852	62,850	416,766	9%	104
Erie and North East.	20	600,000	150,000	750,000			10										
Philad. & Sunbury.	34	600,000	1,200,000	1,348,812	89,535	53,335	none										
Little Schuylkill.	28	2,660,100	546,222	3,407													

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N. Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October.	"	1866	90	95
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	95
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1858	87 1/2	90
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859	87 1/2	90
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	87 1/2	90
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	87 1/2	90
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	80	83
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1869	75	80
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1868	75	80
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	90	92 1/2
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August.	"	1861	90	92 1/2
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	90	92 1/2
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	86 1/2	89
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.	"	1863	86 1/2	89
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October.	"	1862-72	86	86
Do. do.	1,200,000	Do. inconvertible	7	April, October.	"	1862-72	86	86
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	90	91
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	90	92 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	90	100
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.	"	1863	90	101
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90	101
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	88	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	92	92
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	92	92
Lake Erie, Wabash, and St. Louis	950,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	75	78
Little Miami	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1863	78 1/2	78
Michigan Central	1,500,000	Do. inconvert.	6	2 May, 2 Nov.	Post.	1860	99	100 1/2
Do. do.	600,000	No mortgage, convertible	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	Do. do.	8	Jan'y, July	N. Y.	1862	96	97
Do. do.	650,000	Do. 2d do.	8	April, October.	"	1863	94 1/2	95
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	90 1/2	91
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1858-62	101	101
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	80	80
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Feb'y, August.	"	1865-66	92	95
Do. do.	2,000,000	Income, convertible	7	April, October.	"	1872	80	82 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	93	95
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	N. Y.	1861	83 1/2	83 1/2
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	88	88
Terre Haute and Indianapolis	1,000,000	Do. do.	7	March, Sept.	"	1866	88	88
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	79 1/2	80 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	79	80

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84 1/2	85
Do. do.	1,125,000	Do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N. Y.	1870	92	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107 1/2	109
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	94	94 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	90	90 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	84 1/2	84 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	86	89
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	86	87
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	69	69 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1875	88 1/2	88 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs—priv 7 shars	7	March, Sept.	"	1860	87 1/2	88 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	96
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	86 1/2	87
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	88 1/2	89
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	97 1/2
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	92	92
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	84 1/2	85
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	88 1/2	89
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	102	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	104	106
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	104	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	83	84
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October.	"	1870	87	88 1/2

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.
New York 7 per ct. 1857	Feb'y, May,	100	----	Milwaukee 7 per ct. coup.	X	Divers	87
Do. 5 do. 1858-60	August and	97	98	New Orleans 6 per ct. cp. R. R.	X	Do.	73
Do. 5 do. 1870-75	November	97	98	Philadelphia 6 per ct. 1876-98	X	Jan'y, July	92 1/2
Albany 6 per ct. coup. 1871-81	X Feb'y, August.	96	98	Pittsburgh 6 per ct. coup.	X	Divers	76 1/2
Alleghany 6 per ct. coup.	X Jan'y, July	96	98	Quincy 8 per ct. coup.	X	Jan'y, July	94
Baltimore 6 per ct. 1879-90	Quarterly	97 1/2	98 1/2	Racine 7 per ct. coup.	X	10 Feb'y, Aug.	81
Boston 5 per ct. coup.	X April, October.	99	100	St. Louis 6 per ct. coup.	X	Divers	79
Brooklyn 6 per ct. coup.	X Long Jan'y, July	101	102	Do. do. Municipal	X	Do.	79 1/2
Clev'Pd, 7 per ct. cp. W. W. 1879	X Do. do.	101	102	Sacramento 10 p. ct. cp. 1862-74	X	Do.	79 1/2
Cincinnati 6 per ct. coup.	X Divers	89 1/2	90	S. Frisco 7 p. ct. cp. 1865, pay. N. Y.	X	May, Novemb.	82
Chicago 6 per ct. coup. 1873-77	X Jan'y, July	89	90 1/2	Do. 10 p. ct. cp. 1871	X	Do. do.	95
Detroit 7 per ct. cp. W. W. 1873-78	X Feb'y, August.	101 1/2	102	Do. 10 do. pay. N. Y.	X	Jan'y, July	103
Louisville 6 per ct. cp. 1880-83	X Divers	78 1/2	80	Wheeling 6 per ct. coup.	X	Divers	67 1/2
Memphis 6 per ct. coup. 1882	X Jan'y, July	65	70	Zanesville 7 do.	X	April, October	87 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending February 26th, 1856.

BONDS.	Per ct.
Hillsboro' & Cin., 7 per ct. 1st Mort.	50
Marietta & Cincinnati, 7 per ct. 1st Mort.	70
Indianap. & Cin., 2nd Mort. 7 per ct.	78
Cin., Wil. & Zanes 2nd Mort. 7 per ct.	60
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	42
Covington & Lexington, 10 per ct. Income	60
Little Miami, 6 per ct. Mort.	79
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	87

STOCKS.	Per ct.
3 Cin., Wil. and Zanesv., 18—Cin., Ham. and Dayton, 63—	—
Col. & Xenia, 83—Cincinnati & Chic., 7 1/2—Central Ohio, 16—	—
Covington and Lexington, 18—Dayton and Western, 20—	—
Eaton and Hamilton, 27—Fort Wayne and Southern, 10—	—
Indiana Central, 48—Indianapolis and Cincinnati, 67—Little	—
Miami, 90—Mad River and Lake Erie, 18—Marietta and Cin.,	—
17—Ohio and Mississippi, 5 1/2—Hillsboro' & Cincinnati, 17—	—
Junction (Indiana), 10—Peru and Indianapolis, 15.	—

BY HEWSON & HOLMES.

For the week ending February 27th, 1856.

BONDS.	Per ct.
\$5,000 Cov. & Lex., 6 per ct. Income	41
2,000 Cov. & Lex., 7 per ct. 2nd Mortgage	65
1,000 Little Miami, 6 per ct. due in 1883	80
5,000 City of Massville, 6 per ct., issued to Maye-	—
vile and Hocking R. R.	21
1,250 Scioto and Hocking Valley, 7 per ct. Dom'tic	16
2,000 Col. Piquan & Ind., 7 per ct. Dom'tic	8
500 "	7 1/2
2,000 Ohio & Miss. 7 per ct. 2nd Mort.	42 1/2
1,000 Cin., Wil. & Zanesv., 7 per ct. Income	45
4,000 Cin. & Chic., 8 per ct. Real Estate, George	30
Mine, Trustee, due in 1859	80
225 Little Miami, Dividend Scrip. new	80

STOCKS.	Per ct.
144 Shares Ohio & Mississippi	5 1/2
100 " " (30 days)	6
50 " Little Miami	90
20 " "	91
30 " Central Ohio	20
172 " Covington & Lexington	18
200 " Cin. & Chicago	7 1/2
126 " Terre Haute and Richmond	95
20 " Indianapolis and Cincinnati	57
113 " Columbus & Xenia	86
60 " Peru and Indianapolis	15

Extract from the Circular of Robt. Benson & Co., per America.

LONDON, Feb. 15th, 1856.

No new circumstances of moment bearing upon the Russian question has transpired during the week. The Plenipotentiaries have not yet all assembled at Paris. The prevailing opinion still continues to be, that the conference will end in the establishment of peace. On the other hand, the dispute between our Government and that of the United States, has latterly obtruded itself more upon public attention from the apparent unwillingness of the latter Government to facilitate a solution of the question.

The undue magnifying by political parties in the United States of one question of such minor importance, and the disinclination to terminate an altercation about a grievance which has ceased to exist, have given rise to feelings of some irritation on this side. The discussions of these parties in Congress would undoubtedly have had considerable effect in checking the demand for American securities on this side, were it not for the confident belief entertained here, that they do not truly represent the feelings of the American people, and had the declarations of our own Government been of a less candid and pacific character.

Consols, which were quoted in our last circular at 91 1/8 for money, and 91 1/4 for the acc't, have gradually but steadily improved up to yesterday forenoon, when they reached 92 for money, and 92 1/2 for the account. In the early part of this forenoon there was a rapid decline of about 1 1/2 per cent., on a rumor having become current of the intention of the Government to fund a portion of the floating debt; since which it has been announced by the Chancellor of the Exchequer, that the Government will be prepared to state on the 18th current, the amount and terms of a new loan, and the conditions on which they are prepared to fund a portion of the outstanding Exchequer bills. The new loan is generally expected to be for £15,000,000.

During the week, money has continued in active demand, and in the Stock Exchange, yesterday, very high rates were paid for continuation of loans, even on Government securities. The last publish-

ed returns of the Bank of England, showed an increase of £359,773 in the stock of bullion. The future returns are expected to be of a favorable character.

Transactions in American securities have been chiefly confined to certain State stocks, and such Railroad bonds as have obtained a ready currency. Of the latter, we quote Pennsylvania 1st mortgage at 87½; the 2d mortgage sterling bonds have been sold at 91 per cent., and the Dollar bonds at 75 per cent. Illinois Central Construction bonds have changed at 79½ and 80; and the six per cts. at 75. The Freedland bonds are very firm at 84a 85 per cent; the shares of this company may be quoted at 3 to 1 discount.

We have not much change to notice in the price of State stocks. There has been a forced sale of Maryland sterling bonds at 85, and 86 is now asked for them. There has been some enquiry for Tennessee at 84 per cent; Virginia 6 per cents at 86; and the sterling 5 per cent. bonds at 84. So. Carolina bonds of long dates are freely offered at current prices, but those of 1858 are in request at par.

ROBT. BENSON & CO:

Marie & Kanz' Money Circular for the European Steamer of the 5th Inst.

[TRANSLATED EXTRACT.]

New York, March 4, 1855.

Since our advices of 25th ult., the stock market has been held in check by the rumors circulated on the enlistment difficulties now occupying the British and American Governments. Business, in consequence, has been restricted, and quotations unsteady. Since the official correspondence has been made public, more confident feeling has prevailed, but thus far without giving more life to the stock market. Money continues abundant, and the export of coin unimportant. On the 1st of June, the United States Government will pay out the \$7,750,000 reserved for the Texas creditors.—The steamer America, whose mails were delivered last night, brought out considerable orders for American stocks. The news per Baltic, received this day, has produced but little impression on the market. State stocks have been dull, with a slight decline. Illinois Internal Improvement, of 1847, in demand at 110. City and County bonds are in active and increasing demand, both for home and foreign account. By the America and Baltic the orders in these have been quite important. St. Louis City has been active at former quotations. Milwaukee have been more largely dealt in than for some time past, with a further rise of 3 per ct. San Francisco 10 per cents are wanted, but the supply is limited. Some County bonds of Kent'ky have been dealt in, without change of prices. R. R. bonds are generally higher, but not active; Erie, 1883, ½ per cent. higher; Hudson 3d mortgage 1½; Illinois Central, 1; Freedland, 1; New York Central 6 per cent., 1½. In bonds not quoted at the Stock Exchange we note some sales of Galena and Chicago 2d mortgage, Delaware, Lackawanna and Western 1st mortgage, and Terre Haute and Alton 1st mortgage. Railroad shares are generally firmer, without much speculation, except in Cleveland and Toledo, and Reading. Exchanges are firm, with a small supply. Transactions not large; Sterling, after selling as high as 109¾, closes at 109½; Francs, 5.17½.

MARIE & KANZ.

Muscogee Railroad.

It will be seen, says the Columbus Sun, by their advertisement in another column, that the Muscogee Railroad Company have declared a dividend of 4 per cent., payable the 1st of March next. This road has been doing a profitable business for the last six months, as will be seen by the following statement:—

Gross earnings for the six months,	
ending Jan'y 1, 1856	\$104,900 73
Expenses	46,489 11

Net profits

This road extends east from Columbus, Ga., some 50 miles, and there connects with an arm of

the South-western railroad running to Macon. These earnings are quite large for a road of 50 miles, as new as the Muscogee and through so poor a country; but they will be very much larger in a short time. The position of the road is a good one for a large through business.

American Railroad Journal.

Saturday, March 8, 1856.

To Correspondents.

"M" of Georgetown, D. C. will find a letter in the Post Office containing a solution of his question.

We are always glad to hear from our friends. But unless their diagrams are accompanied by wood-cuts they cannot be illustrated. And when an answer by mail is called for courtesy appears to have established the principle that the writer's name should be signed.

Strength of Compound Beams.

A "Young man" must be destitute not only of personal experience in building, but of a habit of careful thought when he says what follows.

"Many excellent Engineers and practical Mechanics think the oftener a beam is sawed through (lengthwise) the stronger it becomes. The height being the same, they tell me, it is putting them apart with blocks between them, which gives the strength. Now how far apart should they be? Perhaps the closer the better, and if so, why not let them touch, and if so, how can their being in one solid piece weaken them?"

"Young Man."

The custom of building compound beams for the Chords and Arch Braces of Bridges and for various other positions where not only great strength but durability is required and where truss combinations are to be made, has so long obtained, and is evidently so superior to the primitive mode of laying down a single huge stick of timber, that it seems almost unnecessary to enumerate the reasons that have led to its adoption. Nevertheless, that the younger members of the profession may understand that while there is no magical *hocus pocus*, not even an apparent paradox in the actual practice of builders, we state briefly the philosophy of the principle.

But first, it is a mistake to suppose that any Engineer claims that timber is strengthened by sawing it open and then simply closing it together with tree-nails or bolts. No Engineer or Mechanic, no matter how illiterate he may be, ever uttered such a thought. Suppose the case; a stick of timber of any length or depth and say 12 inches wide is sawed into 6 planks of equal thickness—each plank will be less than two inches thick, the waste depending on the gauge of the saw plate which is governed by the depth of the stick. Let us suppose each plank to be 1⅞ inches thick. Now close the beam, and we have a stick of timber 11¼ inches wide instead of 12 inches. Of course, no mechanic ever supposed such a piece as strong as the original.

But let us see how the builder proceeds in fact, and then we may understand his reasons for the mode he adopts.

Compound beams are of various sorts. The simplest is the *solid built beam*. It is thus constructed:—Planks of the requisite depth and thickness but without regard to length are selected. The imperfections, such as knots, shakes, spots of dry root, &c., are cut out and the planks

are then laid, the ends abutting together so as to make up the required length, and side by side to make the required thickness, care being taken to break joints with adjacent courses and to lay the grain in opposite directions. Tree-nail, spike, or strap. The beam is correctly made and the reason is obvious. In the first place, it is sound as to quality. It was impossible to procure a stick of clear timber of the size demanded, for anything like a reasonable amount of cost, whether it be labor of search, or money, and so, secondly, the beam is the most economical, the cheapest as to cost. Thirdly, the beam is stronger than a simple stick, if it has been properly constructed. And this point we proceed to illustrate, premising however, that we are uttering no empiricism, but that the fact is so well established by every Engineer's experience as to require no demonstration. Of course, the superior soundness of the beam is an element of strength, but we wish now to consider only the effects of laying the grain in opposite directions.

Draw a straight chalk line across the floor.—Prepare a number of pieces of inch stuff two feet long by three inches wide, lay them down flat upon the floor and let their edges incline to the right making an angle of 45° with the chalk line to which set one corner of each piece; lay the pieces close together across the floor. Then on these, lay similar pieces inclining to the left and making the same angle, 45° with the chalk line—the second series will be at right angles to the first. Now nail the upper layer strongly upon the lower, letting the separate pieces represent the grain of two boards; you have a combination illustrating the effect of placing one plank against another with the grain in opposite directions. You form indeed a system of lattice bracing.

If this beam be entirely constructed of the same stick of timber, as is frequently the case, you have still an advantage besides crossing the grains. By splitting and turning each alternate plank, end for end, you disperse the defects and splice by the weak points with sound timber, as it is hardly possible that two unsound spots should come together on adjacent planks. Moreover, if the middle of the wood be shaky, the openings are bound as with cleats.

It is very customary to construct wooden arches in this way, but for another reason which is, simply, that with planks of usual widths a comparatively short segment only can be secured with the given radius.

We have known arches built without compounding the segments. The Burr Bridge is the common structure for highways in Pennsylvania and wherever the single arch to the truss is in use, it will be found to be simply spliced at the ends of the segments; or more commonly, one factor of the arch abuts squarely against its neighbor without a splice and is kept in place by its combination with the posts and braces of the truss.

The finest timber in the country will be found in the noble bridge built by the Cheshire Railroad Company over the Connecticut river at Bellows Falls, by the CAMPELLS. It is an improved Burr double track—span 175 feet. The contractors bought timber land up the river and culled the material for the structure from a large forest. Nothing can surpass the beauty of the pine of which that bridge is constructed.

Each truss is embraced between two arches, simple beams—short segments of course, but abutting to each other with square joints. Some of the posts are enormous, measuring when dressed and framed, 18×21 inches. This, however, is a rare case; it is seldom such material is found for our bridges.

Sometimes *solid built beams* for arches are differently arranged. In the plan mentioned, the plank occupies a position that brings its width into a vertical plane, the edges forming the Extrados and Intrados of the Arch, and these curves are sawed on the plank. But frequently it is laid upon one side and bent transversely to its thickness to correspond with the required curvature. Several layers are made use of and the whole buttied together or more often strapped with iron bands that compass the entire cluster forming the arch.

This method is common on bridges of long span. It is easy to see that with less weight a greater degree of strength is secured. For the fibres being curved to the line of the arch receive the compression resulting from the load in the direction of their length, which is unbroken, and transmits the effect from end to end. Whereas, in the other mode the curve being sawed out, the inner and outer fibres are cut off, and we have to depend on their lateral adhesion for transmitting the pressure communicated to them.

An example of this form of beam is seen in the famous design of JULIUS W. ADAMS, the Cascade Bridge of 275 ft. span on the Erie railroad, the largest single span of wood in the world.

Another illustration is afforded in the Market street Bridge over the Schuylkill in Philadelphia.

The bridge over the Lackawaxen river and Delaware and Hudson Canal on the Erie railroad presents a most striking illustration of each different sort of compound beam.

We have considered the solid built beam. It is sometimes customary to separate the parts forming the chords of bridges by blocks or keys. There are many reasons for this. Lateral strength is gained by increasing the width of the stick supposing it properly braced and bolted. And this lateral stiffness is an important item in all bridges, whether we consider the effect of the wind or the wabbling motion of trains.

Another reason for spreading the chord timbers is to get bearing surface for the braces and a solid stick of necessary width would be heavier than required and therefore poor economy.

Again, this arrangement allows a more perfect ventilation of the timber, the mass being kept in a more uniform situation as to the atmosphere and its changes.

Facility of repair constitutes another argument in favor of this method of construction. If dry rot enter one stick it does not necessarily attack and destroy the whole chord. The offending member is easily taken out and replaced while the structure is undisturbed.

The practice of leaving spaces between the component parts of the chord, allows placing the vertical rods and bolts without cutting away the timber, while the insertion of keys produces a uniformity in the lateral distribution of the weight, since aided by bolts they form the means of communication between the different pieces transmitting pressure from one to the other.

Other reasons present themselves, but the subject being so simple, it seems unnecessary to spend more time in its discussion.

New Car Factory at Harrisburg, Penn.

A Company has been organized in Pennsylvania for the Manufacture of Railroad Cars of all sorts.

They start under circumstances to a degree favorable. Having the experience of past days to govern them—having the advantage of all the improvements that have been made in Machinery, it is impossible they should not be able to furnish work of a superior character, and at as cheap a cost as other companies. Their works are extensive—located in the midst of the Iron, Coal, and Lumber region of the State—with a large stock of well seasoned lumber on hand—an Eastern Superintendent, thoroughly experienced in every department of the business—so that their facilities are very superior.

We recommend Mr. Wm. T. HILDRUP, the Superintendent, to the notice of Companies wishing Cars—or Wheels.

NOTICE TO

Civil and Mechanical Engineers, Land Surveyors, Architects, and Draughtsmen.

We are preparing a Register of the names of these gentlemen to be kept in this office for the benefit of our correspondents and friends.

This Register will at all times be open to the inspection of parties calling here and will be an assistance to us in answering the many calls for information concerning these gentlemen that we receive.

Please send us your names and addresses and the same of all others whom you know,—if you have time. At any rate send your own names.

Description of Engineers' Instruments.—80 pp. 12mo. GRATIS.

We have just received from the Messrs. GURLEY of Troy, a book of 80 pages describing in detail the instruments and appliances for Field Work, constructed at their extensive manufactory in Troy.

The book is a good thing. With this before him, the Engineer has a description of each instrument to aid him in making selections or, if he prefer to employ another manufacturer, he has an excellent guide for his specifications.

The book contains the simplest rules for adjusting instruments, and will on this account be valuable to every young assistant.

It gives the method of using each instrument, and of the most minute adjustments, with instructions to assist the Engineer in making his own repairs,—as for instance, replacing the cross-wires, centering the eye-piece, replacing the compass glass, the levels; lacquering, re-magnetizing the needle, to turn off the variation of the needle, to ascertain the magnifying power of the instrument. The book is illustrated with correct engravings of the most important subjects. We advise our friends to send for it. The cost is nothing. Mr. GURLEY thinks it a good way to advertise. But whether you want an instrument or not you can have this in your pocket for the trouble of sending for it and will find it of use.

During the last year when business was the duller, the Messrs. GURLEY kept twenty-five men employed in the department of railroad instruments.

They have lately remodeled many of their patterns and will furnish only the newest, unless otherwise ordered. The enterprise of these gentlemen is commendable. When they have improved their patterns, they do not retain for sale the old pieces, but cast them away entirely, so that every customer is served of the latest.

We give in a short extract a simple rule.

"It may sometimes happen that the needle has lost its polarity, and needs to be re-magnetized; this is effected in the following manner:

The operator being provided with an ordinary permanent magnet,* and holding it before him, should pass with a gentle pressure each end of the needle from centre to extremity over the magnetic pole, describing before each pass a circle of about six inches radius, to which the surface of the pole is tangent, drawing the needle towards him, and taking care that the north and south ends, are applied to the corresponding poles of the magnet.

Should the needle be returned in a path near the magnetic pole, the current induced by the contact of the needle and magnet in the pass above described, would be reversed, and thus the magnetic virtue almost entirely neutralized at each operation.

When the needle has been passed about twenty-five times in succession, in the manner above described, it may be considered as fully charged."

Send for the book at once!

We wish to call the attention of the Engineer, and indeed of all practical men of common sense, to the following article on "Wind as a Motive Power"—by Dr. Johnson.

It is indeed strange, that while the entire mechanical genius of the age is devoted most untiringly to economizing labor and the power that saves labor, as well as the materials for furnishing that power and arranging its application, we have yet permitted a power that is almost constantly on hand—costing nothing but that we stretch forth and take possession of what it offers—that we permit a mighty power, free as the winds, to sport about us and flee away unused—wasted.

This is the economy of the 19th century—an economy that needs reforming.

Wind as a Motive Power.

BY FRANK G. JOHNSON, M. D.

It must be evident to all that the wind is one of the most powerful physical forces in nature; blowing everywhere, at all seasons, and for everybody. Its unlimited capacity and usefulness as a motive power, is demonstrated in its application to the propulsion of vessels. It makes the huge and heavy burdened ship to "walk the sea like a thing of life," driving the noble clipper from wave to wave with a velocity that outstrips the steamer, and wafts innumerable burdens from port to port, over seas and oceans, which all the spare capital of the world could not drag along with the power of steam.

It is evident, too, that the power of the wind is as great and universal on the land as on the water; and the reason why it has not been more generally used as a motive power on land, is because the facilities of appliance have not been so great on land as on sea. Consider the forests of masts, pulleys and spars, the thickets of shrouds and halliards, cordage and ropes, that surround every sea-port city of the world; besides the uncounted crafts that are scattered over every sea, lake and ocean, holding out on their long giant arms a mil-

* A magnet suitable for this purpose costs from 12 to 25 cts.

lion broad-spread sails—myriads of yards of canvas—and all to reap the advantages of that power, universal and mighty, that makes the ocean roar, piles up the endless water-hills and tumbles them over the sea. Yet, on land, an instrument, apparatus or machine—Windmill—designed to reap profit and advantage from the same power, is met with so rarely, save in few countries, that it is looked upon as a curiosity.

It not being important for vessels to move with uniformity of speed, alternately strong and light winds will answer the purpose on water as well as an even wind; and this is the reason why the wind has been so much more readily adapted to their propulsion; whereas, it is usually necessary that machinery be moved with uniform velocity. Now as the velocity of the wind is so variable, and its force much more so—being as the square of its velocity—it is not reasonable to expect it would be very readily applied to machinery, as some apparatus must first be devised to obviate this objection, which has not, hitherto, been very effectually accomplished. Even without such an apparatus, however, the wind has been quite successfully applied to the working of machinery; sufficiently so, at least, to demonstrate the practicability of working a Windmill, as a first mover, so far as to give it a more prominent place among the motive powers than it now occupies. But when we consider that, from earliest times, wind has been successfully made use of in navigation; and when we consider, too, the present advanced state of the mechanic arts in general, together with the great, and ever-increasing demand that has always existed for some cheap, simple, and universal motive power, it seems strange that the facilities for adapting and applying the wind as a stationary motive power on land, should be deficient—so inferior to the means for applying it as a locomotive power on the seas.

Whatever may be the true account of their origin, it is well known, that windmills were most numerous and flourishing about a century ago; being more common in the Netherlands and Holland,—as also they now are—than any other part of the world. About this time they were quite extensively used, and attracted considerable attention of scientific men. Among others, who made similar examinations, Nicholson, in his "Operative Mechanics," states that M. Colomb, (Mem. de l'Acad. Roy., 1781,) made a practical and scientific examination of fifty windmills, all in the neighborhood of Lisle; each of which he found to be about sixty feet in diameter, having four arms and fans, the fans being rectangular, and six feet wide; the shaft and arms, where they entered the shaft, being from four to six feet in diameter. The lattice work in each fan would cost as much as a whole mill, of fair size, in these times. Every other part of the mill he found to be equally heavy, crude, and expensive. Such a mill as this, together with the entire building, several sets of stones, and all other apparatus of a flouring mill, was built and pivoted on a single post or trunk of a tree set deep in the ground and braced, and on which it was turned to the wind by levers, pulleys, horses, &c. These were termed "Post-mills." Others, of which there were several kinds, were built on stone or brick towers, with a revolving cap or dome, and were called "Smock-mills," and were equally unfeasible. In Russia, the entire

mill and building are built on log wheels, so as to be turned to the wind by levers and horses.

So, as an important branch of the mechanic arts, windmills seem to have been, in device and construction, very inferior to all other machines of any importance. And even now, in this age of mechanical wonders, when a labor-saving machine can be found for all kinds of work; imitating almost every possible manipulation,—thereby, too, a thousand-fold augmenting the necessity of a cheap and simple motive power,—still the windmill, with hardly an exception, is just where it was seventy-five or a hundred years ago. And the wind, that great power gift, that comes everywhere and for everybody, is still allowed to pass by unemployed; whereas, with suitable means of appliance it could be made, for many purposes, one of the most convenient and economical motive powers in the world, and consequently a general and substantial benefit to the race.

The reason why so little attention, for the last fifty years, has been given to the wind as a motive power, and, consequently, so little progress made in the improvement of windmills, must be owing to the fact, that just at the time when windmills began to attract scientific and mechanical observation, and to be somewhat extensively used, but still while yet they were in a crude and unperfected condition, and therefore, their practicability, applicability, and usefulness, but very partially tested, the steam engine came to be used, and thus coming in competition with windmills, while yet they were so imperfectly developed, at once outstripped and superseded them; since when, inventors and mechanicians have been so much taken up with this one, great modern power—steam that they have too much neglected the thing that went before, and thus have overlooked the utility of the wind.

The numerous attempts, however, recently made to render the Windmill automatic or self-regulating, mark a new era in its history. The first nominal self-regulating windmill invented in this country was patented about the middle of the year 1853; previous to which time no general effort was ever made by practical and scientific mechanics to bring the windmill into general use by rendering it automatic in its operation.

True, the wind would not answer the purposes of steam as a locomotive power on land, or as a stationary power even, in the majority of cases where steam is now used; but with perfected means of appliance, it would answer every use of steam in many instances where steam is now employed, besides being infinitely cheaper, and more easily managed; and the instances are innumerable in which such a mill might be applied, where now steam cannot be afforded.

The want of appreciation of the economy, universality, and other advantages of the wind, does not seem to be at all in keeping with the spirit of the present age. Estimate for a moment, the amount of force that can be obtained from an acre of land by converting its vegetable produce into muscle or steam, and see how small it is compared with the force of the wind that sweeps over that acre during a year. The aggregate force of the wind that rushes like a universal river of air, over every city and village, if equalized and applied, would propel every machine, and elevate all the public water,

And though such an equalization and application is not possible, yet its possible application and feasibility as a motive power, especially for the farmer, and also for that class of mechanics, and for those purposes which require not constancy so much as quantity of power must be apparent to every mechanic.

In Holland 475,000 acres are kept dry by 815 windmills. The water to be removed is, of course the fresh water from rain, springs, and rivers; and some doubtless from the infiltrations of the sea.—The work of one windmill is sufficient to keep six hundred acres sufficiently free from water.

Among the uses which may be made of the wind, a very useful application of it would be in elevating water and sawing wood for railroad stations. All that is needed to render it wholly adequate for this purpose is to economize the working of the mill by enlarging the tank.

Such a power possesses advantages over steam or horses in being more economical in its first cost; in being self regulating so as to require no attendance, in its exemption from liability to get out of order so as to require extensive repairs; in consuming no fuel, eating nothing, entailing no risk by loss of fire, explosion or death, and in being available at all times when the wind blows, whether night or day.

Journal of Railroad Law.

Weed vs. The Saratoga and Schenectady Railroad Co. 2 Am. R. R. Cases, p. 470.

The Saratoga and Schenectady railroad connects at Schenectady with the Mohawk and Hudson railroad which continues the route to Albany. The lines are owned by separate companies.

Mr. Barnes, who was the collecting agent of the plaintiffs, started in the Saratoga and Schenectady railroad for Albany. He bought at the defendants' ticket office in Saratoga a through ticket to Albany, and deposited his baggage in the baggage car directed to that place. When he arrived at Albany his trunk was gone. He sued the Saratoga and Schenectady railroad company, and the question arose whether they were liable for the loss of the trunk, it not appearing whether it was lost on the route between Saratoga and Schenectady, or between Schenectady and Albany. The Court held that they were liable for the safe transportation of the trunk to Albany.

The Court said—

"The defendants having undertaken to carry from the Springs to Albany, cannot now be allowed to say they were in truth carriers no further than Schenectady, the termination of their own road. As to the parties for whom they may thus undertake, they are estopped to deny that they are carriers for a distance commensurate with what they engage for. In order to limit their liability to a part of the route, they should at least have given to Barnes notice that after the car struck the track beyond Schenectady, he must look to another company, if that were the fact.—But it was not even in proof that this was so.—Non constat that the Mohawk and Hudson company had agreed to be accountable for the losses from cars which the defendants might run on their road. On the contrary, the agent of the defendants himself proceeded through; and he does not say that he was employed as agent for any part of the distance, by the other company. At any rate, the defendants induced the plaintiff's agent to give

them credit as carriers for the entire distance; and should be bound on the principle laid down by Mr. Justice Nelson, in *Welland Canal Co. vs. Hathaway*, 9 Wend., 488.

The rule laid down in this case in regard to the liability of a railway company for the loss of goods beyond the limits of its own line, is the same which prevails in England. The question was first presented in that country in the case of *Muschamp vs. The Manchester and Preston railroad company*; 2 Eng. R. R. Cases, 607. A box was carried into a station of the defendants marked for transportation to a place beyond the limits of their line, but on the line of a road connected with their own, and was lost after it had passed beyond the limits of their road. The declaration alleged a contract to carry to the place designated, and upon the trial it was proved that the agent of the company who received the box, upon an offer of payment of the price of carriage, suggested that the payment had better be made at the place of delivery. The judge charged the jury, "that when a common carrier takes charge of a parcel directed to a particular place, and does not by a positive agreement limit his responsibility to a part only of the distance, that is *prima facie* evidence of an undertaking to carry to the place to which it is directed, although that place might be beyond the limits of his trade as carrier." The jury found for the plaintiff, and upon a motion for a new trial for misdirection, the Court of Exchequer held the ruling to be correct, and that the jury were justified in finding their verdict. The liability of the defendants was determined by their contract, and it was for the jury to ascertain the nature and extent of that contract as a matter of fact. The rule thus laid down, was affirmed by the judges of the Queen's Bench in *Watson vs. The Ambergate, Nottingham, &c., railroad company*; 3 Eng. Law and Equity, R. 497. The Court of Exchequer again affirmed their previous decision in *Scotthorn vs. The South Staffordshire railroad company*; 18 Law and Equity, R. 558. Baron Alderson in giving his opinion says: "The whole question is, what was the contract between the parties? and that actually amounts to a question of fact." See also *Wilson vs. The York and North Midland, &c., railroad company*, in a note to the last mentioned case.

In *Crouch vs. The London and Northwestern railroad company*; 25 Eng. Law and Equity, R. 287; the question came before the Court of Common Pleas in a new aspect. The plaintiff sued the defendants for refusing to carry packed parcels from London to Sheffield and Glasgow. The defendant's road extended only a part of the way from London to the respective places, but they had arrangements with the intermediate companies, so that the cars from their road passed over the whole distance, without interference of the other companies. The defendants were in the habit of receiving packed parcels to carry to Sheffield and Glasgow, and they had agents in those places to distribute the parcels when received.—The defendants refused to receive parcels from the plaintiff to carry to those places, though they offered to carry them to the terminus of their line. The plaintiff brought an action for their refusal, and the defendants contended that they were not bound, as common carriers, to carry beyond the limits of their own line. But the Court held that,

like natural persons, railway companies were bound to discharge the duties of the character which they assumed, and if they held themselves out as carriers to a place beyond their line, they were liable for refusing to carry.

The English Courts have thus refused to consider the liabilities of railway companies, as being in any way limited to the line of their road, but hold them liable upon their contracts, which are to be ascertained by the verdict of the jury.

The American cases are not so uniform upon this point. We shall have occasion to speak of them in our issue of next week.

New Orleans, Opelousas and Great Western Railroad.

A short time since we analyzed the Directors' report of the New Orleans, Jackson and Great Northern Railroad. We shall now proceed to do the same with the report of the New Orleans, Opelousas and Great Western Railroad, a copy of which has been handed us by the President.

This work was commenced under favorable auspices in 1850; a series of misfortunes and discouragements, all of them uncontrollable, after the lapse of less than a year, then ensued. But notwithstanding these drawbacks, and others arising from the failure of contractors to perform in good faith their engagements, the road was built from Algiers to Terrebonne, a distance of fifty-four miles, and placed in good running order in the winter of 1854-55. It was at this period of heavy indebtedness, diminished resources, and impaired credit, that the present Board commenced their labors, a statement of which is given in the report now before us.

The first move on the part of the new Board was to abrogate the contract system; a system by which the Company had been most egregiously duped and swindled, and brought to the verge of bankruptcy. The Vice President of the Road, Mr. Segur, an intelligent, driving, go-a-head man, about the 25th of last March, took the work in hand; he was provided with the requisite funds, with which he furnished himself with laborers, clothing material, and working tools, and with the co-operation of a skillful Engineer, Mr. G. W. R. Bayley, the track was laid, and the road completed to Tigerville, on the Bayou Black, on the first day of October. "In fifteen days afterwards the line was complete between that place and Algiers; passenger and freight trains running daily; communication opened with Attekapas, by steamboat connection; so that a journey formerly of three days, and in every way inconvenient, is now performed in ten hours with ease and comfort; and means for uninterrupted transportation of produce and merchandise, to and from New Orleans, provided for a rich section of country hitherto almost inaccessible, excepting at very uncertain periods of high water."

Encouraged by the success accompanying this enterprise, so expeditiously and economically accomplished by themselves on "their own hook," without the intervention of contractors, they immediately set about extending the road to the Bayou Boeuf, seven miles beyond Tigerville, and where they meet tide water, which point they expect to reach next month. The cost of these two sections (exclusive of iron, etc.) from Terrebonne to Tigerville, 11½ miles, and from Tigerville to the Bayou Boeuf, 7 miles, under the direction of the Board, is set down at \$199,799, which is one hundred thousand dollars less than the sum agreed to be given to the contractors a year ago, for the same work, thus saving that amount to the company.

In the course then of a few weeks, a month at farthest, we shall have a first class and paying road of 5½ miles to the Bayou Lafourche, a rich sugar region—3 miles further to the Terrebonne, a very important station, and 11½ miles to Tigerville, on the Bayou Black, from which last two stations, we receive the produce of the Parish of Terrebonne—thence 7 miles to the Bayou Boeuf, to tide water—in all 78 miles from New Orleans.

This terminus, which is designed to be merely a temporary one, is a most important point, and which must be the depot of a surpassingly rich and increasing trade. The Bayou Boeuf, with banks eight feet above tide water, has a width of over 600 feet, with a depth of water at all times of not less than 15 feet. It is only 45 miles from the entrance of the Atchafalaya Bay and about 245 miles from Galveston, to which place, passengers from New Orleans by this route (steamship connecting at Bayou Boeuf) may be conveyed in 24 hours.

The monetary affairs of the Company, although not as promising of immediate realization as desirable, are nevertheless hopefully encouraging. The entire cost of the 73 miles of road from New Orleans to the Boeuf, with depots, bridges, equipments, etc. and all put in the best running order, will be about \$2,500,000. The resources for continuing the work nominally amount to \$1,403,363. Of this sum there are \$195,136 uncollected of individual stock, and \$476,475 uncollected of the tax on parishes; excess of par value of bonds hypothecated on loans \$478,822, and \$253,000 of bonds, bills receivable, cash, materials, etc. The overdue debt of the Company is entirely paid, or satisfactorily provided for, and their credit re-established. By a contract recently made for ten years for the performance of ferry service between the two banks of the Mississippi at this city, there will be an annual saving to the road of \$6,475. A contract has also been made with the Postoffice Department for carrying a tri-weekly mail to Tigerville, for \$3,400 per annum. The Company have been persecuted by vexatious suits for frivolous claims, amounting in all to \$386,737. One of these suits for \$234,000 was a few days since decided by a jury in favor of the Company for the whole amount, and they expect favorable decisions in all of them. The net earnings of the road may be estimated at \$1,000,000 per annum, and the rolling stock on hand, comprising engines, cars, etc., is all sufficient for the business of the road for the next twelve months.

We infer that it is the intention of the Direction to rest awhile at the Boeuf for a breathing spell; to retrace their steps the length of the road finished, and put it in complete running order for the accumulated business that will meet them at tide water from every portion of the richest region in Louisiana within striking distance. After recuperating, and refreshing their energies, and girding up their loins, and fortifying themselves with the sinews of all enterprise, they will be ready to prosecute the work according to the spirit and intention of the charter. But an interesting, and apparently a perplexing, question presents itself; How and where shall the proposed extension of the road beyond the Boeuf be commenced? Some contend that Boeuf should be bridged at once, and the road finished to Berwick's Bay. Others advocate a continuance thence across the Bay, through the parish of St. Mary to New Iberia, and so on in continuous line to Washington. Some suggest stopping at the Boeuf, and commencing on the west side of the Bay, and others that the extension should begin at Franklin. The Board of Directors are disposed to favor the idea of commencing at New Iberia, and constructing the road thence through the parishes of Lafayette and St. Landry to Washington.

Each of these plans has its respective advocates; and we are not wide of the mark when we say, that these respective classes of champions are influenced by considerations of interest in making their choice of plans. Should the Board of Directors give heed to their representations, the consequence would be, that they never would come to conclusions, and the road would never be extended beyond its terminus at Bayou Boeuf. There is only one course to pursue; the Board, in spite of memorials, representations, and threatening protests from interested sources, must take the responsibility of conducting the work according to their best judgment. The Board comprise some of our best citizens; and they are men of unimpeachable probity, and enjoy the unqualified con-

fidence of the community. The President is universally recognized as a sterling citizen, of great energy, and active, industrious habits; and with his efficient Vice President, skillful Engineer, and faithful Clerk, backed by the counsel and advice of an intelligent Board, no fears are to be entertained that the interest of the enterprise will be sacrificed, or in any wise compromised.

But to extend the road at or from any point, and according to any of the before mentioned plans, requires money. Some of the resources stated in this report are to be made available. The Parishes and stockholders that are in arrears must pay up; and the planters, that class of our people who are beyond all others to be benefitted by this road, must no longer be laggards, and subject themselves to the reproach of being stolidly blind to, and ignorant of, their own interests. Every planter, within striking distance of this road, can, by a most striking arithmetical rule, ascertain the difference between the cost of transportation of his crop by railroad and by the primitive, old fashioned, tardy process. The saving of expense and of time is so much made, with the other still greater consideration, that the certainty of transportation gives him the advantages of a favorable market. The same principles apply to his return supplies, and the sum saved, as we have before said, is a matter of calculation. But by what process, or according to what standard is he to estimate the increased value of his lands? Here he will find himself entirely adrift; for the owner of lands, rich and productive as they may be, but situated remote from market and almost inaccessible, can form no conception of the enhanced value the same lands acquire by being brought into speedy and certain communication with market. We have no hesitation in saying, and we do so after due deliberation, that the planters within striking distance of the line of route from Bayou Boeuf to Washington, might build the entire road at their own cost, and their lands would be enhanced in value from one hundred to five hundred per cent. We can, and will prove to a demonstration, that such is the fact.—*N. O. Bulletin.*

La Crosse and Milwaukee Railroad.

The fourth annual report of this company, bearing for the fiscal year ending 31st December last, shows that very considerable progress in construction has been made during the year. At date of previous report no part of the road was in operation; though considerable expenditures had been incurred for various objects, as right of way, grading, iron, ties, &c. The directors early set to work, in order to have the 95 miles between Milwaukee and Portage City completed before the close of 1856. An issue of \$950,000 of first mortgage bonds had previously been made on this division. Their efforts have been so far successful that the road is now open to Horicon, 51 miles, whence it was to be extended ten miles farther last February, leaving only 34 miles to be finished this present year. No doubt is entertained of their ability to accomplish this. The road is thoroughly ballasted for 34 miles. For nearly all the distance to Beaver Dam, 61 miles, the right of way has been obtained 100 feet in width. Most of this, with depot grounds, has been donated them. They own ample and commodious depot grounds at Milwaukee, with the requisite piers, &c., erected.—Warehouses and an engine house capable of holding eight engines, have been put up, with machine and blacksmith shops, turn tables, &c.

So far, everything has been made of first class character; and it is determined that in this respect, the road shall have no superior in the Western country. The company own 12 locomotives, (10 of which have been received), 10 first class passenger, 2 baggage, and 193 other cars of vari-

ous kinds. The equipment is also said to be of a very superior character. A large increase to this will be needed in spring.

The road, when definitely located, is expected to be 198 miles long, 95 of which form what is called the Eastern Division. The cost of this is estimated at one half of the whole work. The total expenditures to 31st December last, were \$1,883,963, of which \$1,787,650 were upon the Eastern Division. The sum of \$769,520, it is estimated, will complete the latter, making a total of \$2,557,170, or \$26,917 per mile. The means from which the present outlay has been derived are—

Stock subscriptions.....	\$1,037,832
City of Milwaukee.....	314,000
First mortgage bonds.....	450,000
Floating debt, (maturing in 1856, 1857, and 1858.....)	82,131

\$1,883,963

The means for completing the Eastern Division are—

Total stock subscription applicable....	\$1,607,700
Less stock already collected.....	1,037,832

Balance.....	\$569,868
Stock to contractors.....	200,000
Portage City.....	75,000
Mortgage bonds unsold.....	500,000

Total.....\$1,344,868

Deducting from this the estimated cost of completing the Eastern Division, \$751,651, there is left \$593,217, most of which, after allowing for contingencies, will be applicable to the Western Division.

The business of the road so far has much exceeded the expectations of its friends. On account of the nature of the country traversed, little business was expected before reaching Horicon. Some difficulty had been experienced with a contractor, by which its opening was necessarily somewhat delayed. It is believed that during the present year, it can be opened to Newport, 112 miles from Milwaukee. Much, however, will depend upon the punctuality with which the stockholders will meet the requisitions made upon them.

The first section, 30 miles, was opened in August last. Horicon, 21 miles farther, was reached on the 31st December. The receipts for that period were \$32,134. Two daily passenger and two freight trains each way, will in future be run. For 1856, the receipts are estimated at \$400,000, from which it is believed a dividend of 16 per cent. can be declared, after meeting all necessary charges. It is proposed to create a sinking fund of \$11,500 per annum for meeting the \$500,000 bonds yet to be sold, at maturity.

The route selected is unusually direct. Owing to the formation of the country, it is stated that no competing line can be run between this line and that of the Milwaukee and Mississippi road, without grades of 100 feet to the mile. The highest on this is fifty feet. The course of the Mississippi river above La Crosse makes it equally favorable as to competition on the north. With its connections through Michigan and Canada West, the road will afford a very direct route from the Upper Mississippi to the eastward.

In reaching Portage City, on the Wisconsin river, the road will derive an important traffic from

the lumber business carried on down that stream. At Iron Ridge, 45 miles from Milwaukee, it strikes one of the richest and most available deposits of iron ore in the world. This has already been turned to valuable account.

Several connections are already in progress, all of which will become important feeders. The principal of these are—the Chicago, Milwaukee, and Green Bay; the Milwaukee and Fond du Lac; the Horicon and Berlin; the Oshkosh and Wau-pun; the Chicago, St. Paul, and Fond du Lac; the Beaver Dam and Madison, &c.

The Directors for 1856 are—

Messrs. Stoddard Judd, S. L. Rose, Hiram Barber, E. D. Clinton, Moses M. Strong, James Ludington, Byron Kilbourn, Edwin Townsend, Moses Kneeland, Hugh McFarland, R. T. Kneeland, S. T. Smith, C. A. Stevens, and Stephen H. Alden.

Mr. Judd is President; M. Kneeland, Vice President; James Ludington, Treasurer; L. Burnell, Secretary; W. R. Sill, Chief Engineer; B. Kilbourn, Superintendent; M. M. Strong, Attorney; and S. H. Alden, General Agent.

Explosion of Steam Boilers.

CURIOUS PROPERTY OF WATER DIVESTED OF AIR.—In a lecture recently delivered before the Royal Cornwall Polytechnic Society, by Robert Hunt, F. R. S., attention was directed to some most remarkable points in connection with the action of heat on water that contains no air, stating that, arising from this circumstance, as well as from the spheroidal condition of the steam generated, we have two very active and predisposing causes of boiler explosions. Water we know in three conditions—as a fluid, as steam, and as ice—or as solid, liquid, and aeriform. Water is frozen by the loss of heat necessary to maintain its fluid state; ice formed during agitation contains no air-bubbles, but, under ordinary circumstances—as Wenham Lake ice—the upper portion is filled with air-bubbles, in straight lines, as if in endeavoring to make their escape, they became entangled among the crystals. It is a remarkable fact that water in the process of congelation has the power of rejecting everything; consequently, all the air the water contains is expressed. If we get water which contains no air, and prevent the access of air to it, it will not boil at 212° Fahrenheit. In this state, we see the temperature increasing to 230°, 240°, or even 250°, and advancing to between 270° and 280°; about these points the whole mass will explode with the violence of gunpowder.

This condition of water is not unfrequently found formed in steam boilers, and that during the process of ebullition, the steam carries off with it the air, the water in the boiler containing very little remnant of the air itself. It often happens that a steam-boiler explosion occurs after a rest of the engine, and that, when the men return, the feed-water being applied to the water, explosion takes place. Prof. Donne has found that, if we take water of this peculiar character, bringing it up to 230°, and place a single drop of ordinary water into it, the whole will boil with extreme violence. Supposing that ordinary water contains no air, and the feed-water is turned on, the entire quantity will then burst into explosive ebullition. We shall probably find, therefore, in connection with boiler explosions that, to the absence of air may be attributed many boiler explosions, so frequently happening, which otherwise cannot possibly be accounted for. It may be further stated, that if we take a glass of water and add any poison—say corrosive sublimate, or a strong acid, or even an ardent spirit—and then freeze the water, agitating during the process, we shall find the ice get tasteless, colorless, and inert, and that the poison, the acid, or the spirit will be gathered into an intense drop

in the centre of the ice, and all the body will be perfectly pure. To a knowledge of this fact may be attributed the practice of the Russian nobles, who, when they desired to have a more ardent and intoxicating drink than usual, plunged their bottles of wine or spirits into their frozen rivers, till the contents became solidified, and then drank the ardent drop which remained within the centre of the glass.

Atlantic and Gulf Railroad.

This is the name of a road, recently chartered by the Legislature of Georgia, which is designed to extend from a point near Waresboro, on the Satilla river, to the western boundary of the State, at any point between Fort Gaines and the junction of the Flint and Chattahoochee rivers; so as to open up a speedy and direct route with the Gulf of Mexico at Mobile or Pensacola. By the terms of the charter, it is made the duty of parties named to open books for subscription in Milledgeville.—After the sum of \$600,000 shall have been in good faith subscribed, the Governor is authorized, on behalf of the State, to take \$500,000 additional. In case the subscription from other sources should exceed \$600,000, the State to increase her quota in like proportion. No part of the superstructure to be laid until the Brunswick and Florida, or the Savannah, Albany and Gulf road is in running order to some point where a connection may be made with this road. The capital may be increased to \$5,000,000; but in no case is the State subscription to exceed \$1,000,000. Board of Directors to consist of nine shareholders, each owning at least \$2500 of stock. In payment of the State subscription, the Governor to use money unappropriated, and for meeting deficiencies, to issue six per cent. coupon bonds, and having 20 years to run. By the sixth section, either the Savannah, Albany and Gulf or the Brunswick and Florida road may connect with the Atlantic and Gulf line, with equal privileges to both, it being the intention to provide a Main Trunk railway across the territory connecting the Atlantic with the Gulf of Mexico, that any Railroad in this State shall have the privilege and right to join the said Atlantic and Gulf Railroad Company, without any discrimination for or against such railroad adjoining thereto; provided, that the stockholders thereof build said road with their own money. The President is required to make semi-annual reports.—Produce of the State to have precedence over through freight coming from other States, so long as the State of Georgia remains a stockholder.

Ohio and Mississippi Railroad.

The Cincinnati Gazette gives the following abstract of the ordinance, recently passed by the city council for the relief of the Ohio and Mississippi railroad:

The preamble recites that, whereas the Ohio and Mississippi railroad company had entered into a contract with Wm. H. Aspinwall, Joseph W. Alsop, Henry Chauncey and others for the completion of the road, therefore,

Sec. 1. Remits the interest on the loan of \$600,000 until 1861.

Sec. 2. Leases the wharf property without rent until 1861, and \$30,000 per annum thereafter, with the privilege of purchase for \$500,000.

Sec's. 3 and 4 Release the company from filling and grading the wharf property until 1861.

Sec. 5. Authorizes the purchase of \$5000,000 of the bonds retained by the city on the wharf purchase,

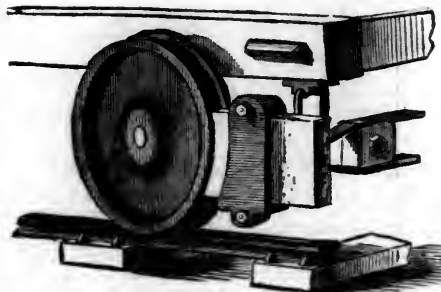
Sec. 6. Permits the Company to occupy West Front street for their railroad, and with the 3d rail.

Sec. 7. Authorizes William H. Aspinwall, et al, to vote the city's stock until 1861, but obliges them to select one director designated by the City Council, not however, to be a member of the Council.]

Sec. 8. Binds Mr. Aspinwall to pay all ground rents on the wharf property, and all liens on the same, and to finish the railroad by the 1st of Nov., 1857.

Sec. 9. Provides that this ordinance shall go into effect as soon as Messrs. Aspinwall, Alsop et al, signify their acceptance in writing filed with the City Auditor.

PAIGE'S ADJUSTABLE CAR BRAKE BLOCKS!



BY this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cup to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent.
DINSMORE'S RAILWAY GUIDE Office, 9 Spruce st., N.Y.

Lord & Wright,
Counsellors at Law Cincinnati, Ohio. 16t

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK. (ONE DOOR SOUTH OF BEAVER STREET.) RAILROAD AGENTS AND COMMISSION MERCHANTS, PURCHASE AND SELL ON COMMISSION FOR RAILROAD COMPANIES.

RAILROAD IRON.—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,

No. 4 William st., N. Y.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO. Office Nos. 8 and 10 Wall st., ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVEETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company.

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.

CHARLES MONROE, Esq., { Baltimore Md.

DAVID BURBANK, Esq., { Baltimore Md.

JOHN J. SPEED, Esq., { Detroit, Mich.

HON. J. V. C. SMITH, Mayor of Boston, Mass.

L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.

HON. H. F. FRENCH, Associate Judge, Superior Court, Exeter, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against THE
MAYSVILLE & LEXINGTON RAILROAD COMPANY
and others, defendants.—By virtue of the Judgment of the
Payette Circuit Court, rendered in the above case, I will sell,
at public auction, on Wednesday, the 23rd day of April, 1856,
at the Public Square, in the City of Lexington, State of Ken-
tucky—

THE MAYSVILLE & LEXINGTON RAILROAD;
both that part of the road which is completed and the part
unfinished; embracing the road bed, and superstructure where
the same is laid down, the right of way, and all lots of land in
and adjacent to the road track, with all the buildings, stations,
car-houses, and improvements belonging to said railroad,
together with the franchises of the Mayville and Lexington
Railroad Company; all of which will be sold together, upon
credits of six, twelve, eighteen, and twenty-four months, in
equal instalments.

At the same time and place, I will also sell all the Lots of
Land belonging to said Company, and not adjacent to the rail-
road track—consisting of a lot of land in the City of Lexing-
ton, a tract of land in Fleming County, and town lots in Paris
and Millersburg, on credit of six and twelve months, in equal
instalments.

And at the same time and place, I will sell all the Locomo-
tives, Freight and Passenger Cars, Cross-Ties, &c.—consisting
in part of two locomotives and tenders of twenty-four tons
each, three passenger cars for sixty passengers each, one en-
tirely new and all in good order; seven box freight cars, eleven
platform cars, eleven tops for platform cars, five gravel cars,
and a top for another; fifteen pairs of car wheels, a hand car,
a lot of bridge and car iron; 9,500 cross-ties near Mayville,
1,350 of which are of locust and the remainder of oak; about
6,000 cross-ties along the line of the railroad between Lexing-
ton and Millersburg. The new passenger car, two freight cars,
and the tops for platform cars, are in Mayville, all the other
rolling stock is in Lexington, and the whole is of 4 feet 8½
inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the
purchase money, having the force of Judgments, with good
security, to be approved by me, of one of the following kinds,
to wit:—1. Personal security. 2. First Mortgage Bonds of
the Mayville and Lexington Railroad Company. 3. Mortgages
in real estate in counties near this railroad or the Covington
Railroad. 4. State and United States Bonds. 5. A First
Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of pur-
chasing, by the undersigned, who will be found in Lexington,
Ky., or by A. M. JANUARY, at Mayville. Letters of enquiry,
addressed to me, will be attended to. EBEN MILTON,
Receiver and Commissary,
LEXINGTON, Kentucky

2m3

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice
PASSENGER TRAINS
will leave Pier foot of Duane street,
as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without
change of baggage or cars. At Hornellsville this Train con-
nects with a Way Train for Dunkirk and all stations on the
Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, with-
out change of cars.

BOOKLAND PASSENGER, at 4 p.m., via Suffern's, for Pier-
mont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate
stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and inter-
mediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira &
Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dun-
kirk with the Lake Shore Railroad for Cleveland, Cincinnati,
Toledo, Detroit, Chicago, etc.

L. D. C. McCALLUM, General Supt.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of
Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and
11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$13 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00

An extra charge will be made for meals and state rooms on
board the boat. GEORGE A. PARKER, Supt.

Lowell Machine Works.

WARREN ALDRICH (late ALDRICH, TYRE & Co.) man-
ufacture and furnish to order, a laborer's tool,
Machinists' Tools

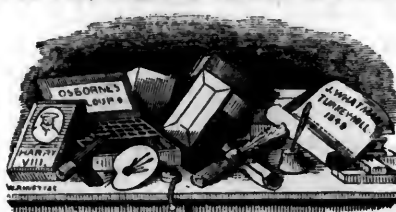
of various description and with the latest improvements; as
engine lathes, with swing 16, 20, 24, 28, 30, 36, 48 inches, up to
7½ feet, and bed made to turn any desirable length; planing
machines, to plane 3½, 6, 8, 10, 12, 18, 20, 22 feet long, and 18,
24, 28, 36, 40, 48, 60 inches square; also hand lathes, compound
planers, slotting and shaping machines, vertical drills, bolt
cutters, and many other tools used in railroad repair and ma-
chine shops.

Lowell, Mass., Jan'y 1, 1855.

41.1y

STATIONERY.

Hufty's Engineers, Architects and Draftsmen's STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER,
Tracing paper, Plan and Profile, Protractors, Drawing
Pins, Faber's Jackson's and other makers' Pencils; Field,
Level, and Memorandum Books of various patterns; Mathe-
matical Instruments, Tape-lines, Mouth Glue, Cross Section
paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red
Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent
Binders for letters, Portfolios, etc., together with a general
assortment of Stationery and Blank Books.

All goods packed with care, and forwarded to any part of
the United States.

JOSEPH HUFTY,

Successor to H. L. Lipman,
185 Chesnut St. Philadelphia.

May 15, 1854

FINANCIAL.

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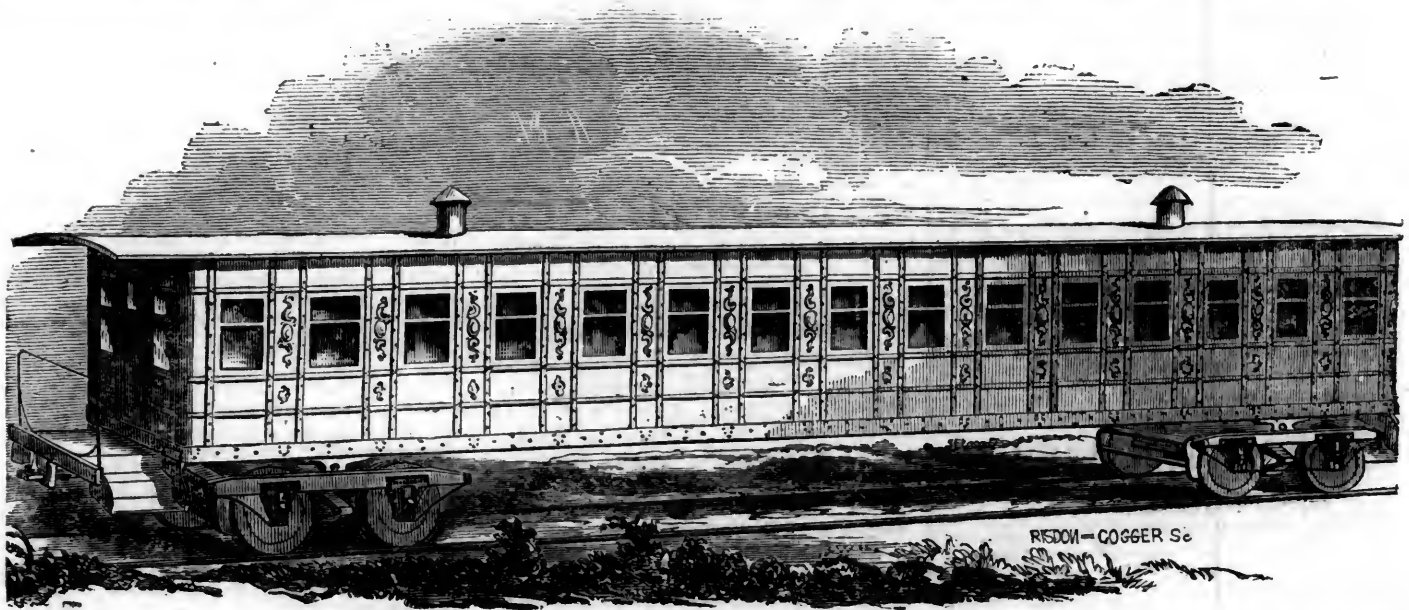
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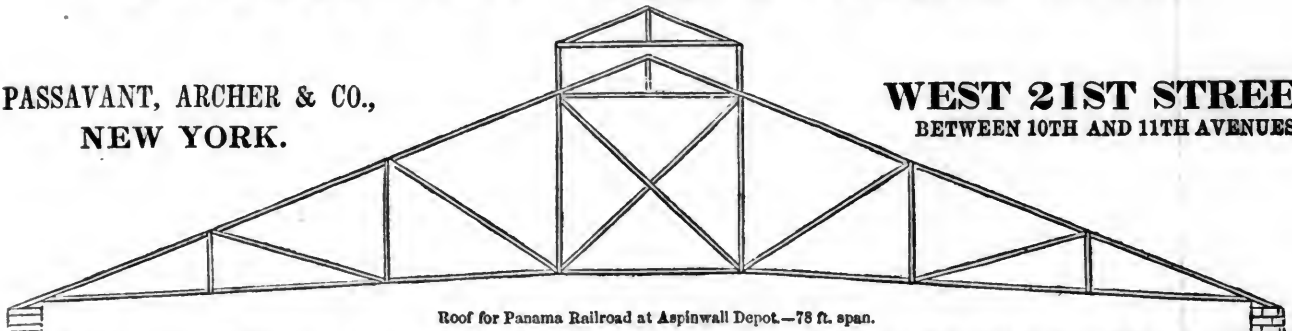
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SECOND QUARTO SERIES, VOL. XII., No. 11.]

SATURDAY, MARCH 15, 1856.

[WHOLE No. 1,039, VOL. XXIX.]

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, March 15, 1856.

ERRATUM IN LAST NUMBER.—146th page 2d col. end of first paragraph for "gentlemen who only see what merits them," read: "gentlemen who only see what hurts them."

In the advertisement of PASSAVANT, ARCHER & Co. published last week their address should have been given as West 25th Street instead of West 21st Street.

Railroad Management—"Economy in Operating."

The Railroad Companies of Massachusetts are just now very much exercised over the fact that their lines are not as profitable for investment as at one time they promised to be. They have with great unanimity proposed an expedient; and so far as any degree of earnestness is concerned, they propose but one—namely, to raise the prices for doing work. In a further discussion of this question, we repeat what we said last week; that, "before they take this step they are under high obligations to analyse thoroughly the principles of management by which they have been governed." We do not start with any assumption that this duty has been neglected, but

*In an article on this subject in last week's issue, we made an error in calculation. On page 146, second column, near the top, "66,747 tons of coal of only," should have been 89,480 tons; and the price of fuel should have been 16.5 cts. instead of 12.5.

we shall carefully and fairly examine certain statements that have lately been issued by the officers of those roads, and ascertain from them what has been the real course adopted, in making investigations into the causes that produce the universal depreciation in stocks. The stockholder has every right to know if the money he invests be properly protected by *competent management*. These statements are in every case official, and bear the unfortunate evidence of having emanated from parties not truly familiar with the practical operations of a railroad. So that although very honorable intentions characterise the recommendations of Reform, we are met with a painful amount of ignorance as to what any branch of labor performed by the roads may be costing or earning.—The loosest guesses are made as to the actual expense of carrying a ton of freight or a passenger. And throughout these papers we are met by constant acknowledgements of a want of accurate information, or, when we do not find this we observe assumptions independent of particular facts, and founded on general impressions. We do not wish to be misunderstood. We are not prepared to condemn the advice given as unnecessary, but we do wish to impress on all parties the necessity for a more decided attention to details, the importance of accuracy when dealing with figures; more especially when the amount to be arrived at is so minute as the value per mile of transporting freight or passengers.

We wish with others to ascertain what is of value in the opinions to which railroad men have committed themselves, and we wish further to ascertain if the reforms proposed are comprehensive—whether improvements may not yet be made in the operating of roads, that should be more particularly indicated than is expressed in the statements under consideration.

In order to do this, we propose:—

First,—To point out some of the errors and fallacies that have crept into these Reports.

Second,—To direct attention to those portions that are in any manner reliable.

Third,—Suggest some more definite, if more trifling reforms in the details of operating the Roads.

We observe, as already remarked, a general indefiniteness in the statement of facts from which deductions are drawn. They are broad assertions,

unsupported by nicely ascertained truths. And, consequently, the inferences, besides being in many cases hastily drawn, are in others fallacious. Much of this sort of mischief comes from *averages* which are so extremely dangerous as to warrant their use only when there is no alternative *unless the elements be of the most perfectly homogeneous character. Thus in Mr. Appleton's remarks at a meeting of stockholders, that the rail has to "be re-laid in from five to ten years," is a difference between extremes of 100 per cent. If the first figure be correct the track must be re-laid twice in ten years. But perhaps Mr. Appleton means that there is a figure between these two that indicates the average durations of the rail. If so there is no value in the statement, to any *particular company*. Is the rail of the Fitchburg Road to be renewed once in 7.5 years? The State Report shows that they have done an amount of work the last year equivalent to running over the whole track 6,666 times. Of what value is the formula to the Worcester Company, who have made 12,142 complete transits over their line?

In the same manner, Capt. Swift (page 9) has aggregated the work done by the roads, and presents us with the average expense of carrying a ton of freight, or a passenger one mile. Now, so far as this method is used to show a general falling off in net earnings it is well enough, but when from such a cluster he deduces a principle to govern the management of all the roads, he is certainly in error—as is sufficiently illustrated in the previous instance of comparison between the Fitchburg and Worcester.

This system of averaging in the gross, cannot be too strongly condemned. It invariably tends toward fallacies if there is any attempt to found on it laws for particular cases. Each of the most important roads in Massachusetts has an experience that should long ere this have been made available for the elucidation of complete formulae for its separate individual management.

How has it happened that such use has not been made of the data close at hand, that the roads have been suffered to go rapidly down hill, and no manager has discovered it?

We have no means of knowing unless we find it in the words and confessions of those gentlemen

Massachusetts Railroads 1842—1855.

themselves. Happily we are not left in the dark by reason of the lack of such testimony.

We have it in detail in the letter of Capt. Swift, than whom there can be no better authority. We are told plainly, but not squarely, that the same looseness characterised the administration of Railroad managers in times past, as now, their defence of that administration. We are told simply that Railroad Companies did not know what work they were doing, nor what it was costing. The Legislature had not demanded the return of their accounts for the benefit of stock and bond holders, and so long as dividends were paid—the detail of their work was a matter of no importance—and rather than drive the managers of Railroads to such hard duty as a truly energetic and economical administration of affairs would require, let matters slip quietly along. And they have done so till the unguent is exhausted, and they refuse to slide so smoothly.

But let us hear what Capt. Swift says—

"It was not until the year 1846, that these returns were required in their present detailed form, hence the number of passengers, and the number of tons of freight carried one mile, cannot be stated prior to that year; but from 1846 forward, they can be stated."

"It is obvious that no proper comparison can be made of the work of one year with another year * * * * * without such data."

In 1846, then, the stockholders began to help the officers study Railroads—the result was what might have been expected, and just what followed—and what we see by the first page of the pamphlet in hand, was the cause of this recent demonstration on the part of the companies—"the present great depression of value in that species of property"—Railroad stock.

We have, then, two important facts elucidated, first—Railroad managers were careless in attention to their duties, and did not provide themselves with information necessary to an intelligent and economical working of the road, and a wise appreciation of future demands, until forced to such labor by the law of the State.

Second,—when armed with the necessary statistics, they neglected to use them until the stock depreciated in a frightful ratio, and stockholders becoming clamorous, gave them no peace.

We shall find, presently, that notwithstanding this clamor, and the present demonstrations, the statistics have been neither skillfully nor fairly used; that the same characteristic shiftlessness attends the manner in which they have been handled, as well as the performance of those popular comedies known as "Investigations," that they have constantly exhibited.

If any other indications than those already named were needed to demonstrate the truth of our point, that the Reform Reports exhibit "a general indefiniteness in the statement of facts," that "they are broad assertions unsupported by nicely ascertained truths," we have no difficulty in their discovery.

We may find it profitable to turn to the Report of the Providence Railroad Investigating Committee, January 9th, 1856. On the 10th page we read,—
"The cost of carrying freight and carrying passengers is not separated on this, or any other road, so far as your Committee are informed, and therefore the relative deficiency in these two classes of business cannot be accurately ascertained; but your

Committee recommend that in all cases where the road is not restrained by contracts, the prices of freight be materially advanced."

"As regards the price of transient passenger tickets, considering that the cost of carrying passengers will probably increase in future years, we recommend that an advance of twenty per cent. be made."

On the same subject Capt. Swift says: (page 12.)

"At this time we do know what it costs to do the aggregate work of a railroad, but in consequence of the manner in which the greater number of companies keep their account of expenses, the exact cost of transporting one passenger one mile, or one ton of freight one mile, cannot be stated separately; to do this, rigidly, would require an account to be kept with each engine upon the road, her consumption of fuel, expenses, repairs, &c.

Hence the apportionment of the cost of these repairs and of those of the roadway to any one department cannot be correctly made, and the same is to be said of the miscellaneous or general expenses." This is another acknowledgement of incompetent management. Still more, it is acknowledging another important error, which is, that the recommendation of expedients to force these roads into a paying condition are not well or carefully considered. They betray the fact that it is sought to bring up the stock by the easiest method and not by the most correct, just, or efficacious. We have work of all sorts huddled together, with a clumsiness unworthy the men whose shrewdness in every matter, save railroad management, has made that great State to be a model to men of enterprise.

We read (page 23 Prov. Inv. Com. Rept.) of some important tables that give certain facts concerning the "cost of transporting one passenger or one ton of freight one mile."

Now it seems to be entirely lost sight of that such a table can be put to only the most mischievous uses. Is it sought to arrange prices by such a table? In what manner shall it be done?

Let it be borne in mind that it costs one price per mile to carry through express passengers; another for way transient, and another for commuters. That through or express freight is one thing and way freight another.

These points have all to be remembered when we attempt to regulate the tariff for a single road. Now one of the "tables" mentioned includes the items of this kind for six roads in the aggregate. Here then looking at the necessity of classification alone are thirty chances for error and injustice.

But if we attempt to regulate the tariff of all the roads included in the "table" to one common standard, we have another source of error and one of great magnitude. Observe in the table published in last week's JOURNAL the different physical characteristics of the Massachusetts railroads.

The rise and fall of the grade line of the Boston and Worcester railroad amounts to about 23 ft. per mile, while that of the Lowell is less than 4 ft. per mile.

The curvature of the former is 71° per mile, while that of the Lowell is but 28° per mile.

These are important considerations and if the Massachusetts railroads had been properly man-

aged, there have been time and experience enough in each to have precisely determined the cost to the company of every single ton and of every individual passenger. The nearest we get to any thing of this sort is a bald assertion by Capt. Swift unaccompanied by any of the details of his analysis, and therefore (if it is to receive just the value we would give to every scientific theory with the same degree of support,)—good for nothing. Says Capt. Swift (page 13): "My own experience, and certain information of a tolerably exact nature, which exists on this subject, has led me to the conclusion that in general with us, it does cost just about twice as much to move a ton one mile as it does to move a passenger the same distance. I shall so assume it here."

We have, perhaps, said sufficient to redeem our first promise which was "to point out some of the errors and fallacies that have crept into these Reports." But we must be pardoned if we dwell another moment on the same topic.

When we reflect that the companies have sought to increase their rates on the strength of these various Reform Reports, we are surprised that no greater accuracy has been sought than is implied in a random guess. For what else can be such statements as the following:—

Capt. Swift, page 14th, estimates the cost of carrying one passenger one mile at 1¼ cents.

The Providence R. R. Inv. Com. (page 5,) estimate the same duty to cost 1¼ cents.

Mr. Joel W. White, President of the Norwich and Worcester road, in a long letter to Mr. W. Farnham says, "three cents per mile for a speed of 20 miles per hour will prove remunerative for passengers on all the New England roads, but four cents per mile is wholly unremunerative, when running at 35 or 40 miles the hour."

Now whom shall we believe? They agree in the general statement, that it costs more per mile to carry a passenger than they are receiving, but they do not present one item of detail, in propounding this oracular decision. What proof is there then, that they are not sufficiently paid for their work? That there may be an abundance of it we do not dispute,—but we have not been permitted to see it. Nor do we find, the gentlemen responsible for the assertions any more familiar with the existence of such proof.

If we can learn nothing of the expense of carrying passengers in Massachusetts, perhaps we shall be permitted to go elsewhere for information, provided we take cases, between which and the roads in question a fair parallel can be drawn.

We think such may be found. It seems to us the line of road now constituting the New York Central will be as fair a criterion as can be demanded. These roads in times past have had competent management and, consequently, have been eminently successful. We may, by reference to the State Reports, gather some valuable information as to the cost of transporting one passenger a mile, before and after their consolidation.

Cost in cents of conveying one passenger one mile during each of five years.

NAME OF COM'Y.	1850.	1851.	1852.	1853.	1854.
Albany & Schenect.	1.009	1.11	0.97		
Utica & Schenectady	.781	0.66	0.49		
Syracuse & Utica	1.056	0.82	0.63		
Rochester & Syrac.	0.789	0.78	0.82	0.58	0.65
Buffalo & Rochester.	0.779	0.50	0.49		

The annual report of the New York Central

Railroad for 1854 being the first after the consolidation (page 8,) reports after so much experience, the rate of fare per mile charged to passengers in respective classes at one to two cents, while the rate of speed adopted by the ordinary passenger trains, when in motion, was 32 miles per hour and the rate of express trains 40 miles.

We do not believe that any of these gentlemen have intentionally misrepresented the item of cost of transportation, but they are mistaken, and their mistakes are of the sort that, viewing matters from the point of view at which they stand, would seldom be avoided. It was necessary to the support of their position that the public should be made to believe in the necessity for advancing fares. The discovery of such mistakes may not always be in the power of outsiders, "for"—to quote from the late Report of J. Dutton Steele to the Reading Railroad Company—"although the reports of the various railroad companies are accessible to all, they are not unfrequently misunderstood by those, who desire to make use of the statements, owing to some peculiarity in the system of accounts with which they are not familiar."

But we may leave the line of the New York Central Railroad for information of the same kind. It has been customary for some years in the Reading Railroad Reports to present in detail such estimates as the following made up from the work of a whole year. We shall find it in the last Report at page 41. "Statement K.—Items of cost, in detail, of running passenger trains on the Philadelphia and Reading Railroad, for the year ending November 30th, 1855."

Using wood fuel exclusively, per daily trip of 93 miles.

ITEMS OF COST.	NO.	DE- SCRIPTION.	AVER- AGE RATE.	AM'T.
Wages of Engineer.....	1	Day	....	\$2.48
Do. Fireman.....	1	Day	....	1.35
Do. Conductor.....	1	Day	....	1.80
Do. Baggage Master.....	1	Day	....	1.40
Do. Brakeman.....	1	Day	....	1.25
Wood for fuel, including firing up.....	3.2	Cords	4.60	14.72
Water used.....	4	M Gals.	6	.24
Oil for engine and tender.....	1.2	Gals.	1.60	1.92
Oil and grease for cars.....	....	....	....	.40
Repairs of engine.....	96	Miles	9.1	8.73
Do. and refitting cars.....	....	....	....	8.76
Hands at depot, extra en- gines, &c.....	....	....	....	4.90
Sundries for trains.....	....	....	....	3.84
				\$51.79

—Equal to, at 61.8 through passenger per train
84.49 cents per passenger.

—Which amount of 84.49 cents is for a trip of 93 miles, so that the price per passenger per mile is, 0.908 cents.

It must be evident to every man that we cannot pretend to any elaborate analysis of those Reports within the limits of one article, and no apology can be needed for extending our consideration of a subject of more importance than all others to the great interests in whose service we are engaged—the correct management of railroads in this country.

We must, therefore, defer any further remarks till next week. From what we have already said, the fact is apparent that the managers of Massachusetts railroads felt called upon to defend a system that is bringing their companies to ruin. The Reform Reports amount to nothing but a

defence of past management. In the last year, before this subject was mooted, we predicted the state of things now existing. In an article published in the JOURNAL of November 17th, we wrote as follows:

"The unproductive roads, having a reasonable income, are badly managed. In one case, failure will be ascribed to unremunerative rates of charges. This admits incompetency, for the managing party should have known whether he was doing business at a profit or loss. In another case, elegant structures will be pointed to, which have cost too much for the business of the road. But this does not help the matter. A merchant would think it a poor excuse for failing, to say that he put all his capital into the building he occupies. His excuse would be a confession of incompetency. A man engaged in any kind of business is presumed to be master of his calling, and success is the only test of his competency."

Mobile and Ohio Railroad.

The Report of this company for the year ending December 31st, 1855, just published, states the whole number of miles of road in operation from Mobile, at the above date was 153,—showing a progress within the year of fifty-six and a-half miles. Of the track of this, thirty-three miles were laid after the 8th of June. On the 29th of January, the rails were down to the Gainesville Junction, 162½ miles north of Mobile, and about seventy miles from Columbus. If the track-laying be continued, it is estimated by the Chief Engineer that the work will be finished to the Noxubee line by the 1st of June; to Macon about the first of July; and to Columbus about the close of August.

The earnings of the transportation department during the year 1855, it is stated, are very satisfactory, and, notwithstanding the loss of a month by floods and other accidents, they are in excess of the estimates formed last Spring. The whole number of passengers during the year was 32,607. And the average distance traveled by each passenger was forty-eight and a-half miles—equal to 1,578,533 carried one mile. Of these 24,404 were first class and 8,203 second class.

The gross earnings of the transportation department within the year were from passengers \$18,084 60, for freight \$149,350 74; from mails and express \$2,497 62. Total \$199,932 66. The total earnings for 1854 were \$59,367 45. These earnings are exclusive of charges of freight for the company—namely, iron, lumber, &c. If these were added, the total would be \$253,498 96 for 1855.

The total expenses of the transportation department during the year were \$90,696 72, which is equal to 45 per cent. of the earnings from the public traffic; or adding the company's freight, a little less than 35 per cent. For 1854, the ratio of expenses was forty-seven and nine-tenths per cent. of the gross earnings, thus showing that while these earnings have increased nearly three-fold upon an increased distance of ninety-eight per cent. of the road, the expenses have diminished in the ratio of from forty-seven and nine-tenths to thirty-five per cent. upon the income.

The total amount invested in the construction of the road from the beginning to the 31st of December, 1855, as far as has been reported at the Mobile office, is \$4,536,412.—This amount has been derived as follows—

From payments on capital stock, including city tax bonds of 1856 and 1857.....	\$2,568,555
From revenue of the road in operation, nett.....	164,936
From income bonds, state loan, and sundries, payable.....	1,802,921
	\$4,536,412

The following shows the amount of the outstanding debt of the company, December 31st,

1854, together with the payments made thereon in 1855; and also the new debt created up to December 31st, 1855.

Amount of indebtedness to December 31st, 1854, as per last annual report.....\$1,987,666 15
Of which has been paid, in 1855..... 467,008 58

Leaving unpaid Dec. 31, 1855.....\$1,470,662 57
New liabilities created during the year, unpaid..... 602,268 45

Total debt Dec. 1, 1855.....\$2,072,931 02
Being an increase of indebtedness over the previous year, of..... 135,264 57
And, after deducting city taxes of 1855 and 1856, pledged for the redemption of the tax bonds of 1856-'57, leaving a balance of.....\$1,644,931 02

Of this amount \$400,000 due to the State of Alabama, has been extended for two years by a recent act of the Legislature, and will be payable in March, 1858. The remainder, \$1,244,931 02, will mature in all the present year, the greater portion before first June next, and upon the next Board will devolve the duty of making provision for its further extension or liquidation.

This statement does not include the income bond issue payable July 1st, 1861, nor \$20,000 six per cent. mortgage bonds payable 1883, which have been disposed of, but embraces all other obligations of the company, excepting a purchase of rails now coming forward, and which will appear in the accounts of 1856.

This purchase is part of a contract made by the President in London in the Spring of 1855, for 20,000 tons rails to be delivered in 1856, of which 16,000 tons are payable in Tennessee bonds at par, and 4,000 tons in the company's obligations at twelve months with interest. A portion of this contract has been delivered, and will become payable early in 1857.

If track-laying is to be continued, after the present stock of iron out of bond is exhausted, it will require for duties and custom-house charges, the sum of\$75,000
Will also be required for freights, insurance, &c., on cargoes in port and to arrive 40,000
—which must be provided for during the next three months.

In the programme put forth by the company in March last, in reference to raising means by an issue of income bonds, the amount required to pay floating indebtedness and build the road to Columbus, was stated at\$1,090,000

It was proposed to obtain this sum from—

1st. An issue of income bonds.....\$1,000,000
2nd. The net earnings of road in operation to Macon (198 miles) estimated at..... 150,000

Making a total of.....\$1,150,000

And leaving a surplus of \$60,000 for contingencies. The amount actually realized from these sources to 1st of January, 1856, (to which are added instalments due after 1st of January, and amounts not yet collected) is as follows:

Income bonds—From instalments paid to 1st of January, 1856.....	\$397,025
" " From loans Mobile b'ks. 120,000	
" " " instalments due & collected, Jan'y, 1856.....	40,000
" " Uncollected city and country subscriptions estimated.....	42,975

Total from bonds.....\$600,000

From net earnings of road in operation to Marion (130½ miles) 85,000

Leaving a deficiency of means of.....\$405,000

The President of the Company made temporary provision for supplying a part of this deficiency,

by procuring a loan in New York, on a deposit of income bonds of \$100,000

And by opening a credit with a banking house in New York for \$150,000, of which has thus far been drawn against the sum of..... 125,000

—Leaving a balance of \$180,000 still required to carry out the programme as originally stated.

The Report of the Chief Engineer furnishes in detail the progress of construction upon the several divisions of the line to 1st February, which may be summed up as follows:

	Miles.
Total length of road from Mobile to Columbus, Ky.....	473
Of which laid and in use February 1st, '56..	153
" " not yet open, Feb'y 20, '56....	9½
" graded ready for track.....	262¾
" in progress not ready.....	47¾

From Columbus, Ky., to Cairo, 24½ miles not yet graded. Of Paducah Branch, 59 miles in length, 7 miles of track are laid, 20 miles more are ready for track, and 32 miles in progress of graduation.

Comparing these figures with the last Annual Report, the total amount of progress made for the year 1855, is:

56¾ miles of track laid and added to road in use. 64 " more completed ready for track on the main line and Columbus, Mississippi and Kentucky branches; and on the Paducah Branch, four miles laid and four miles graded, ready for track during the year.

Upwards of one million dollars of solvent local subscriptions are yet due and uncollected in the States of Mississippi and Tennessee, all of which will be required as rapidly as they can be made available, to defray the expenses of local work in those States—for which they will be fully adequate.

The want of a suitable freight depot is severely felt in the operations of the Transportation Department, not only by the inconvenience which is occasioned in the regular transaction of business, but from the fact that the company is paying considerable amounts for lost freight, which there is good reason to believe is stolen from the station in its present exposed condition. To erect a building for this purpose, a section of engine house, and furnish the machine shop at Whistler, will cost by the Engineer's estimate, \$30,000, and to improve the track below Citronelle, \$80,000.—All of which should be expended in the present year, 1856.

Referring to the statement of indebtedness already given in this report, of which is matured and will be due this year..... \$1,244,931 Add expenditures for station house and track indispensable to safe operation of present length of road..... 110,000 And for freight, &c., on iron arriving at Mobile, payable in cash..... 40,000

Total..... \$1,394,931

We have in round numbers the sum of \$1,400,000, which will be needed, most of it within the next six months, to relieve the company from obligations already incurred, provided expenditures be at once stopped, and the work of construction in Mississippi entirely suspended.

Should track-laying be continued, however, \$150,000 additional will be needed to take rails out of bond and lay them in track to Columbus.

To meet this large indebtedness, the resources of the company are:

1st. The entire issue of first mortgage bonds.....	\$6,000,000
Less to protect an issue of \$1,000,000 income.....	1,000,000
	\$5,000,000
2d. Income bonds undisposed of.....	400,000
And 3d, the donated lands of the company, 1,500,000 acres.	

The Chief Engineer's Report furnishes some

suggestions with regard to a disposition of these lands; but as differences of opinion exist concerning the proper course of policy on this subject, no settled conclusions have yet been adopted by the Board concerning them. It will, however, soon become a matter demanding careful consideration and action.

The net earnings of the Transportation Department are not included in the estimated resources, for the reason that unless the road shall be extended to Columbus, these earnings will not much more than pay the interest on State loan and other indebtedness. From the lands—while they constitute a valuable security and basis of credit—nothing can be realized in season to satisfy present engagements.

From the facts herein set forth, therefore, of the company's resources and liabilities, we arrive at one of three obvious and unavoidable conclusions:

1st. The mortgage bonds must be sold abroad; or, 2d, the stockholders must come forward and take them themselves, in sufficient amounts to pay off the liabilities; or, 3d, their interests must be sacrificed by the failure of the road to meet its obligations.

It is true it is believed by the President that further extension will be granted on the iron debt abroad, which makes up so large a proportion of the indebtedness, but this rests only upon verbal understanding, and no Company can afford to borrow money or extend debts for any length of time at exorbitant rates of interest.

The work has (with exception of the debt unpaid) so far been prosecuted upon local means, a very large proportion of which have been furnished by the city of Mobile, including nearly the whole amount realized from income bonds for continuing the work since last spring. From year to year since 1853 various efforts have been made to put the mortgage bonds in a train for a negotiation, but no propitious season has been found for offering them in the financial markets. The proposed change from sterling to dollar bonds payable in New York, may facilitate their sale in that city, but the disappointments heretofore, should prevent too much reliance from being placed upon aid from foreign sources, as a means of dependence from present indebtedness.

It would be indeed extraordinary, if a road offering such securities for its bonds as the Mobile and Ohio, could not command capital in their investment were it not that the value of money has been so much enhanced by its withdrawal from the ordinary channels for war purposes in Europe—that older works and better known in financial circles, suffer under like depression, in the cities which decide their marketable quotations. The intrinsic merits of the Company's bonds are not disputed; their abundant security is not questioned; the immense carrying power of the road when completed is foreshadowed by the rapid increase of its receipts as it progresses. Yet the bonds are not sold—all other available resources are exhausted, and the stockholders must come forward for the protection of their own interests, either by taking these bonds at a rate which will give them an equal income with other investments; or by purchasing an enlarged issue of income bonds, maturing at five to ten years, upon a more extended basis of earnings; or by adopting some other plan upon which the necessary means may be secured by home effort. The only remaining alternative is submission to all the sacrifices consequent upon discredit.

The ability of the city and country is fully equal to the absorption of two millions of these bonds, the proceeds of which with a prudent financial management would release the Company from the incubus now embarrassing all its efforts, and enable it to continue progress steadily to Okolona. From thence to Tennessee line, a gap of 73 miles only would remain unfilled. The Tennessee bonds for superstructure will be saved by an extension of time granted by the last legislature of that State, and as reported by the Chief Engineer, the advanced stage of the road-bed, will enable

the Company to comply with the terms and receive the bonds the coming summer, so that the 73 miles above mentioned, would be the only link wanting to complete the chain from Mobile to the Mississippi river at Columbus, Kentucky.

Report of the Auditor of the New York Canals for 1855.

The whole amount of tolls collected upon the several canals of this State, during the last season of navigation, was \$2,805,076.10, which amount is composed as follows:

Tolls on boats and passengers.....	\$194,657
Tolls on products of the forest.....	489,666
Tolls on products of animals.....	55,263
Tolls on vegetable food.....	1,094,128
Tolls on other agricultural products....	3,438
Tolls on manufactures.....	133,935
Tolls on merchandise.....	660,105
Tolls on other articles.....	173,885

Total..... \$2,805,077

The whole amount of tonnage transported on the canals during the last season of navigation, ascending and descending, was in tons, 4,022,617, which was composed as follows:

	Tons.
Products of the forest.....	1,534,934
Products of animals.....	43,691
Vegetable food.....	993,175
Other agricultural products.....	5,478
Manufactures.....	281,873
Merchandise.....	374,402
Other articles.....	784,064

Total..... 4,022,617

The value of such tonnage is estimated as follows:

Products of the forest.....	\$10,545,615
Products of animals.....	9,677,099
Vegetable food.....	47,486,450
Other agricultural products.....	1,058,165
Manufactures.....	10,467,559
Merchandise.....	113,572,523
Other articles.....	11,582,136

Total..... \$204,390,147

The total movement of freight or number of tons carried one mile during the last season of navigation, was 619,170,651. The total movement of the several classes composing such total tonnage, are as follows:

	Tons.
Products of the forest.....	178,223,492
Products of animals.....	12,952,058
Vegetable food.....	221,550,135
Other agricultural products.....	741,000
Manufactures.....	36,822,226
Merchandise.....	95,073,750
Other articles.....	73,808,000

Total..... 619,170,651

The whole amount of tonnage arriving at tide-water by way of the Erie canal from the Western States or Canada, during the season of navigation, was 1,092,876 tons. The whole amount of tonnage arriving at tide-water, the produce of this State, during the same period, was 327,839 tons.

The whole number of barrels of flour arriving at tide-water through the canals, during the last season of navigation, was..... 1,290,156

The whole number of bushels of wheat arriving during the same period, was 5,426,266, which, turned into flour, calculating five bushels to the barrel, would make..... 1,085,253

Total in barrels..... 2,375,409

The whole number of bushels of corn arriving at tide-water during same period, was 9,843,785. The total number of new boats registered during the last year, is 471, with a total tonnage of 48,220 tons, making an average tonnage of 102.4 tons.

The number of lockages at Alexander's lock for the season, was 30,873, and the greatest number of lockages at any one lock, was 33,241, at lock No. 45, Frankfort.

Such is a brief summary of the trade and revenue of the canals, as exhibited in the accompanying tables, during the last season of navigation. It exhibits, as compared with the season of 1854, an increase in revenue of \$31,509 75. A decrease in tonnage of 143,245 tons.

Decrease in lockages at Alexander's lock, 5,108. In flour and wheat comprised in the returns of vegetable food, there has been an increase in tonnage the past year, as compared with 1854, of 138,433 tons, and an increase in tolls of \$185,183. In corn and oats there has been a decrease during same period of 75,420 tons, and a decrease in tolls of \$108,261. Under the head of products of the forest, there was a decrease in tonnage upon shingles, boards and scantling, as compared with 1854, of 198,725 tons, and a decreased tonnage upon timber, staves and wood, of 34,753 tons, and a decrease in pot and pearl ashes of 794 tons. Under the head of "other articles," there was an increase in the tonnage of mineral coal for same period of 15,113 tons, and a decrease of sundries of 13,364 tons.

STATEMENT of the quantity in bushels of Wheat and Flour shipped at Buffalo and Oswego by Canal, from 1835 to 1855, inclusive, the Flour being reckoned at five bushels to the barrel.

Year.	Buffalo.	Oswego.	Total.
1835.....	672,427	669,067	1,341,494
1836.....	999,980	585,559	1,585,539
1837.....	1,084,475	340,035	1,424,510
1838.....	2,321,217	440,200	2,761,417
1839.....	2,405,849	658,160	3,064,000
1840.....	4,081,265	665,389	4,746,654
1841.....	4,450,565	735,249	5,185,814
1842.....	4,500,265	643,157	5,143,422
1843.....	6,104,064	1,154,909	7,258,973
1844.....	6,042,004	1,895,494	7,937,498
1845.....	4,964,451	2,016,487	6,980,938
1846.....	10,069,784	2,790,036	12,859,770
1847.....	15,533,117	3,766,001	19,099,118
1848.....	10,182,790	3,874,430	14,057,270
1849.....	9,115,040	5,104,997	14,057,270
1850.....	8,226,847	5,575,742	13,802,589
1851.....	9,199,765	6,116,868	15,316,633
1852.....	9,554,851	7,315,424	16,870,275
1853.....	8,250,638	8,783,293	17,033,931
1854.....	4,252,307	1,861,265	7,113,572
1855.....	7,633,531	4,691,662	12,325,193

TONS of MERCHANDISE going to other States by way of Buffalo from 1842 to 1854 inclusive.

States.	1842.	'43.	'44.	'45.	'46.
Penn.....	539	763	725	1,040	1,260
Ohio.....	10,038	14,528	12,390	14,286	17,302
Michigan.....	4,915	8,252	9,389	10,141	9,950
Indiana.....	785	2,256	2,332	2,085	3,491
Illinois.....	2,490	3,476	4,320	4,220	5,789
Wisconsin.....	1,410	2,890	3,272	3,985	2,704
Kentucky.....	295	423	205	634	473
Missouri.....	14	65	14	345	302
Tennessee.....	6	35	13	92	55
Alabama.....	—	2	—	16	—
Iowa.....	4	28	7	1	28
Canada.....	29	25	100	217	133

Total.....	20,525	32,792	32,767	37,713	44,487
States.	1847	'48	'49	'50	'51
Penn.....	2,685	3,051	4,989	5,323	3,823
Ohio.....	20,326	21,450	15,147	14,302	33,919
Michigan.....	13,461	13,136	10,002	12,246	22,021
Indiana.....	4,458	5,186	6,519	6,666	9,334
Illinois.....	7,935	9,127	9,557	41,899	14,373
Wisconsin.....	6,909	11,224	9,408	11,629	11,379
Kentucky.....	706	665	1,372	1,979	1,668
Missouri.....	276	355	4,234	5,254	1,223
Tennessee.....	—	14	695	1,706	873
Alabama.....	—	44	—	2	—
Iowa.....	26	—	4,119	6,157	1,015
Canada.....	357	76	1,924	2,243	240
Total.....	57,590	64,428	67,966	79,406	99,918

States.	1852	'53	'54	'55
Penn.....	4,615	6,099	2,396	1,573
Ohio.....	28,969	23,407	22,799	22,051
Michigan.....	20,893	15,252	18,113	21,308
Indiana.....	25,164	21,194	20,900	6,772
Illinois.....	35,199	67,876	70,248	52,579
Wisconsin.....	22,877	21,124	25,015	33,589
Kentucky.....	1,516	1,777	1,722	1,045
Missouri.....	2,561	2,056	2,809	1,187
Tennessee.....	341	294	337	543
Alabama.....	—	—	—	—
Iowa.....	389	1,371	1,274	2,672
Canada.....	1,418	2,742	1,877	1,701
Total.....	143,787	163,192	167,550	145,530

A COMPARATIVE STATEMENT of the total tons shipped on the Canals of this State, and the total tons arriving at tide-water in the year 1855.

	Tons arriving at tide-water.	1855.
<i>The Forest.</i>		
Fur and peltry.....	344	22
<i>Product of Wood.</i>		
Boards and scantling.....	821,505	674,239
Shingles.....	15,433	3,918
Timber.....	134,273	63,168
Staves.....	106,107	99,892
Wood.....	452,389	58,520
Ashes, pot and pearl.....	4,884	8,046
Total of the forest.....	1,534,934	877,805

<i>Agriculture.</i>		
<i>Product of animals.</i>		
Pork.....	16,266	11,299
Beef.....	9,955	9,141
Bacon.....	4,350	4,765
Cheese.....	5,614	4,753
Butter.....	2,458	2,121
Lard, tallow, and lard oil.....	3,380	4,729
Wool.....	2,830	2,164
Hides.....	3,338	226
Total product of animals.....	48,691	39,198

<i>Vegetable Food.</i>		
Flour.....	169,485	139,337
Wheat.....	302,676	161,788
Rye.....	21,233	18,971
Corn.....	309,236	261,626
Corn meal.....	1,226	283
Barley.....	52,391	40,187
Oats.....	78,706	72,592
Bran and ship stuffs.....	34,478	22,019
Peas and beans.....	1,865	2,721
Potatoes.....	21,559	20,671
Dried fruit.....	320	161
Total vegetable food.....	993,175	741,326

<i>All other Agricultural Products.</i>		
Cotton.....	2,869	48
Unmanufactured tobacco.....	1,237	1,172
Hemp.....	248	221
Clover and grass seed.....	391	410
Flax seed.....	417	99
Hops.....	316	130
Total all other ag'l prod..	5,478	2,080

Total ag'l products.....	1,047,354	782,504
<i>Manufactures.</i>		
Domestic spirits.....	6,710	5,909
Oil meal and cake.....	5,089	5,572
Leather.....	4,355	3,443
Furniture.....	3,408	638
Bar and pig lead.....	1,329	1,398
Pig iron.....	46,904	15,560
Bloom and bar iron.....	8,887	7,491
Castings and iron-ware.....	21,311	1,048
Domestic woollens.....	147	186
Domestic cottons.....	718	553
Domestic salt.....	179,732	3,017
Foreign salt.....	3,283	29
Total manufactures.....	281,873	41,344

<i>Merchandise.</i>		
Sugar.....	50,963	1
Molasses.....	21,067	4
Coffee.....	10,381	—
Nails, spikes and horse shoes.....	11,474	2,765
Iron and steel.....	23,944	937
Flint, enamel, crockery & glass ware.....	7,661	200
All other merchandise.....	169,985	11,489
Railroad iron.....	78,027	173
Total merchandise.....	374,402	15,559

<i>Other articles.</i>		
Live cattle, hogs and sheep.....	138	63
Stone, lime and clay.....	297,129	78,419
Gypsum.....	52,934	3,439
Mineral coal.....	290,775	18,033
Copper ore.....	155	116
Sundries.....	141,933	74,711
Total other articles.....	784,064	174,781
Total.....	4,022,617	1,895,593

The Nova Scotia Railway.

A circular has been issued from the Railway Office, Halifax, showing the amount received and expended by the Railway Board to 31st December, 1855. From it we learn that the Board have received up to that time, from the Receiver General, £206,075 17s. 8d.; have paid £202,482 7s. 6d.; have cash on hand, £3,593 10s. 1½d. It is stated that to pay all outstanding claims, and complete all the contracts [some of which extended into 1857] £220,648 2s. 6d. will be sufficient. Taking the cost of the road completed and equipped—the contracts entered into, and the prices paid for materials, as bases for calculation, the Board are warranted in believing that the cost of 61 miles finished and contracted for will not exceed £5,873 per mile. This amount includes the maintenance of way of 50 miles of the road for twelve months from the periods of completion, but does not include depots or rolling stock.

The receipts upon the road for six months ending 31st Dec., were:

Passengers.....	£1,659	13	2
Freight.....	94	18	1
Do. of iron.....	38	9	1
Contractors for use of locomotive.....	105	0	7
			\$1,898 1 2
Running expenses.....	£845	12	11
Paid for repairs occasioned by accident.....	15	01	0
			996 2 11
Net revenue paid Receiver General.....	\$901	18	3

South-Western Railroad.

At a meeting of the Board of Directors on the 14th ult., the President submitted a statement of the business of the company for six months, ending 1st inst.

The earnings of the road for the six months am'ted to \$195,508. Showing an increase of \$65,370 over the corresponding months of the previous year.

The current expenses, including amount expended for new cars, were..... 84,789

Leaving as net profit..... \$110,719. The Board declared a semi-annual dividend of 4 per cent., amounting to..... \$33,884. And paid for interest..... 16,442

\$60,326

The balance of earnings is appropriated to pay for 500 tons rails, now being received, and for additional motive power.

At the annual election held on the same day, the following gentlemen were elected officers of the company, viz:

President—R. R. Cuyler.
Directors—J. W. Anderson, W. A. Black, W. S. Holt, T. M. Furlow, Robt. A. Smith.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	6	68	
Androscoggin & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	none	18	
Androscoggin.	20	91,192	232,193	343,317	29,396	12,807	10	
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,000		none	24	
Portl., Saco, & Portsm'th.	51	1,367,000	119,237	1,486,237	259,330	124,088	8	
Boston, Concord & Montreal.	93	1,808,093	1,059,512	2,771,310	233,234	120,834	10	
Onondaga.	53	2,085,925	899,813	3,179,637	390,221	144,555	2	
Onondaga.	35	1,485,000	none	1,412,576	329,744	158,932	6 1/2	
Northern, N. H.	82	2,768,400	none	3,016,633	370,629	138,299	2 1/2	
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	102,677	55,173	2 1/2	
Rutland & Burlington.	120	2,233,376	2,662,396	5,378,428	394,971	214,793	none	
Vermont Central.	117	5,000,000	3,550,296	8,463,366	820,119	214,793	none	
Boston and Lowell.	27	1,830,000	325,635	2,188,665	439,754	140,377	6	
Boston and Maine.	83	4,076,974	150,000	4,179,535	584,420	339,000	6 1/2	
Boston and N.Y. Central.	74	2,240,300	1,518,671	3,463,181	60,917	8,740	none	
Boston and Providence.	55	3,160,000	359,132	3,677,154	558,611	219,689	6 1/2	
Boston and Worcester.	68	4,600,000	655,428	4,865,428	1,008,004	404,461	6 1/2	
Cape Cod.	47	681,690	290,598	997,252	119,221	65,327	3	
Connecticut River.	52	1,591,110	273,241	1,862,244	286,603	104,757	5 1/2	
Eastern, Mass.	60	2,583,400	2,947,737	4,021,016	647,281	305,998	4 1/2	
Fitchburg.	67	3,540,000	154,700	3,765,998	681,193	223,071	7 1/2	
Nashua and Lowell.	14	600,000	10,000	654,003	191,887	55,877	8	
N. Bedford and Taunton.	21	500,000	none	533,953	198,491	60,553	6 1/2	
Old Colony and Fall River.	57	3,015,100	292,650	3,362,949	683,499	295,738	6 1/2	
Vermont and Mass.	77	2,232,541	1,033,670	3,269,727	208,726	87,313	7	
Western, Mass.	155	5,150,000	996,420	10,495,905	1,869,673	633,013	10 1/2	
Worcester and Nashua.	46	1,141,000	205,565	1,611,271	294,760	75,700	2 1/2	
Worcester and Worcester.	43	1,510,020	338,461	1,806,690	311,490	138,057	7 1/2	
Hartford and N. Haven.	72	2,359,000	939,000	3,313,932	730,012	352,799	10 1/2	
Hartf., Prov. and Fishkill.	125	1,945,610	2,090,124	4,060,869	268,635	119,011	none	
Housatonic.	110	2,000,000	474,177	2,424,067	300,792	18,351	none	
Newark.	57	1,031,800	573,995	1,577,167	238,266	none	4	
N. York and N. Haven.	62	2,992,140	2,264,656	4,900,784	936,025	341,607	none	
N. Haven and N. London.	60	738,258	736,165	1,450,318	103,086	217	none	
N. London, W. & Palmer.	66	609,200	1,073,073	1,694,363	124,044	66,331	none	
Norwich and Worcester.	66	1,222,300	874,489	2,597,138	304,236	58,458	2 1/2	
Albany Northern.	32	439,005	1,925,098	1,840,095	117,716	9,904	none	
Black River and Utica.	35	645,330	317,559	974,323	19,323	none	none	
Buffalo, Conn. and N. Y.	100	1,487,871	1,011,182	2,819,096	172,476	66,333	none	
Buffalo and N. Y. City.	92	798,439	2,657,849	3,401,868	288,392	31,896	none	
Buffalo and St. Line.	69	1,800,000	1,040,000	2,494,364	679,760	355,763	10	
Canandaigua and Elmira.	47	434,111	922,393	1,276,796	174,089	69,506	none	
Canandaigua & Niagara Falls.	93	1,815,000	2,270,854	3,495,832		none	33 1/2	
Cayuga & Susquehanna.	56	887,000	606,699	1,493,699	135,433	48,649	none	
Hudson River.	144	8,758,466	9,250,362	12,737,898	1,812,067	603,946	none	
Long Island.	95	1,675,148	601,949	2,655,986	301,793	116,402	none	
New York Central.	534	24,164,860	14,462,742	28,528,913	6,563,581	3,102,126	8	
New York and Erie.	464	10,021,965	20,128,669	33,439,431	5,488,993	2,827,118	6 1/2	
New York and Harlem.	150	5,717,100	4,099,769	8,758,208	1,635,571	234,126	2 1/2	
Northern, N. Y.	118	1,633,022	4,400,874	6,470,714	620,153	135,754	none	
Oswego and Syracuse.	36	399,000	216,681	723,683	126,540	59,982	3 1/2	
Potomac and Watertown.	25	467,200	204,159	749,633	In progr.	none	none	
Rensselaer & Saratoga.	25	610,000	140,000	896,423	241,149	82,600	7	
Saratoga and Whitehall.	48	500,000	395,000	719,000	71,909	21,089	none	
Syracuse & Binghamton.	80	763,369	1,678,804	2,272,777	159,484	22,503	none	
Troy and Boston.	27	437,830	737,079	1,109,822	166,363	55,184	none	
Watertown and Rome.	97	1,670,378	700,979	2,068,063	404,374	172,474	3 1/2	
Belvidere and Delaware.	50	1,000,000	1,177,376	2,177,376	124,301	44,825	none	
Camden and Amboy.	94	1,600,000	4,703,164	1,682,486	552,456	12	12 1/2	
Camden and Atlantic.	60	240,125	1,269,223	1,499,185	69,673	61,790	none	
New Jersey Central.	31	3,253,925	798,596	4,306,338	824,032	440,447	10	
New Jersey Central.	75	2,000,000	1,632,085	3,606,226	378,145	180,796	7	
Morris and Essex.	62	1,157,715	351,500	1,649,622	233,696	99,377	6	
Albany Valley.	44	367,567	342,564	1,988,377	Recently opened.	none	none	
Cataw. W. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	none	
Cumberland Valley.	56	1,099,500	12,211	1,191,833	146,381	66,994	none	
Del. La. & Western.	109	2,865,175	1,865,897	4,140,365	In progr.	none	10	
Erie and North East.	20	600,000	150,000	750,000	99,636	63,335	none	
Phila. & Sunbury.	33	600,000	1,200,000	1,348,812	99,636	63,335	none	
Little Schuylkill.	28	2,606,100	546,222	3,407,651	353,301	255,980	9	
Northern Penn.	19	2,630,855	731,492	3,287,678	3,633,335	1,829,277	6	
Pennsylvania.	236	12,355,525	7,519,096	18,483,439	4,321,792	2,593,915	10	
Phil. and Reading.	96	1,030,309	1,438,800	19,004,180	1,006,638	353,573	3	
Phil. W. & Baltimore.	98	5,000,000	3,069,723	7,452,062	206,981	113,443	9	
Phil. Germ. & Norristown.	38	899,350	376,800	1,274,150	In progr.	none	63 1/2	
Pittsburg and Connelleville.	147	1,339,661	111,493	1,369,630	3,711,453	1,601,090	none	
Sunbury and Erie.	206	2,093,740	262,886	2,075,650	309,229	124,981	6	
Baltimore and Ohio.	382	13,118,907	10,809,659	22,218,849	558,427	282,182	6	
Washington Branch.	41	1,650,000	25,000	1,650,000		none	25	
Norfolk Central, Md.	84	1,880,000	2,630,000	5,544,733		none	25	
Manassas Gap.	165	2,300,000	none	In progr.	211,505	111,363	none	
Orange and Alexandria.	97	1,457,500	638,622	2,754,047	123,466	69,710	none	
South Side.	123	1,371,700	1,489,012	2,739,362	In progr.	none	63 1/2	
Pottsville & Stenbenville.	32	1,221,277	2,000,000	914,695	379,366	172,391	none	
Virginia Central.	138	2,800,600	1,051,248	4,184,516	255,920	126,329	none	
Virginia and Tennessee.	119	2,500,000	2,969,780	5,469,780	316,309	144,662	none	
Richmond and Danville.	127	2,000,000	1,200,000	3,200,000	139,438	47,003	none	
Richmond & Petersburg.	22	685,600	272,086	1,060,405	232,172	120,212	7	
Richd. Fred & Potomac.	130	1,000,000	730,506	1,768,109	Recently opened.	none	none	
North Carolina.	228	4,000,000	4,235,000	8,235,000		none	none	
Wilmington & Manchester.	171	1,070,775	1,378,989	2,330,877	339,800	161,064	none	
Raleigh and Gaston.	97	973,300	120,673	1,135,451	173,923	103,392	2 1/2	
Blue Ridge.	67	679,275	345,929	956,610	In progr.	none	none	
Charlotte & S. Carol.	109	1,201,000	380,000	1,719,045	291,219	138,875	6	
Greenville & Columbia.	165	1,293,444	968,800	1,999,080	214,865	206,774	none	
South Carolina.	203	4,188,020	2,731,545	7,133,848	1,585,991	883,402	9	
Atlanta and La Grange.	87	719,842	225,000	1,092,222	251,076	161,193	7 1/2	
Georgia.	211	4,166,000	260,991	4,416,991	906,094	532,110	8	
Georgia Central.	191	3,833,140	none	3,833,140	1,280,570	645,774	9	
Macon and Western.	102	1,239,580	167,712	1,647,045	350,802	96,104	10 1/2	
Montgomery & W. Point.	116	1,274,600	664,816	1,929,416	249,128	118,824	8	

U. S. GOVERNMENT SECURITIES.

OFF'D.	ASKED	OFF'D.	ASKED
Per ct.	Per ct.	Per ct.	Per ct.
Loan, 6 per ct. 1856-103 1/2		Loan, 6 per ct. 1868-117 1/2	
Do. 6 do. 1862-111 1/2		Do. 6 do. coupon 1868-117 1/2	
Do. 6 do. 1867-117 1/2		Do. 6 do. Tex. ind. 1866-107	

STATE SECURITIES.

Maine, 6 per ct. 1870-101	104	Indiana, Can. Loan, 6 per ct. 1868-117 1/2	20
Massachusetts, 5 per ct. 1859-97	99	Do. do. pref. 5 do. 1868-117 1/2	80
Do. 5 etc. 1860-100	101	Kentucky, 6 per ct. 1869-72-102	88
New York, 6 per ct. 1860-62-107	109	Do. do. do. cp. long. 1868-117 1/2	90
Do. 6 do. 1864-65-112	111	Maryland, 5 do. cp. 1870-90-105	107
Do. 6 do. 1866-67-114	111	Do. 5 do. cp. 1870-90-105	107
Do. 6 do. 1872-73-117	119	Missouri, 6 do. cp. 1872-86 1/2	87
Do. 5 1/2 do. 1860-61-104 1/2	105	N. Carolina, 6 do. cp. 1873-97 1/2	99
Do. 5 1/2 do. 1865-104 1/2	106	Ohio, 6 do. 1866-100	103 1/2
Do. 5 do. 1868-69-64	100	Do. 6 do. 1860-103 1/2	103 1/2
Do. 5 do. 1866-104	106	Do. 6 do. 1870-107 1/2	109
Do. 4 1/2 do. 1858-59-64	100	Do. 6 do. 1875-110	109
Alabama, 5 do. coupon 1870-89	90	Do. 5 do. 1865-100	84 1/2
California, 5 do. coupon 1870-89	90	Penn., 5 do. 1865-100	84 1/2
Georgia, 6 do. do. 1872-100	90	Do. 5 do. cp. 1877-88	80
Illinois Int. Imp. 6 per ct. 1847-112	75	Tennessee, 5 do. cp. 1868-117 1/2	80
Do. do. 6 do. Int. Imp. 70	75	Do. 6 do. cp. 1868-117 1/2	96 1/2
Indiana, 5 do. 1868-84 1/2	84 1/2	Virginia, 6 do. cp. 1868-96 1/2	96 1/2
Do. 2 1/2 do. 1868-84 1/2	84 1/2		

Railroad Bonds.

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7 1st Jan. 1st July	N. Y.	1872		85	
Buffalo and State Line	500,000	Do. inconvertible	7 April, October	"	1866		95	
Bellefontaine and Indiana	600,000	Do. convertible	7 Jan'y, July	"	1868		92½	
Do. do.	200,000	Real estate, convertible	7 Jan'y, July	"	1868		90	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7 Feb'y, August.	"	1869		87½	
Central Ohio	1,250,000	1st mort. conv. cast. sec.	7 Divers	"	1861-64		77	
Do. do.	800,000	2d Jo. inconvertible	7 March, Sept.	"	1865		93	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7 20 Jan. 20 July	"	1867		90	
Do. do.	465,000	2d do. do.	7 May, Novemb.	"	1860		75	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7 Jan'y, July	"	1868		90	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7 May, Novemb.	"	1862		95	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7 Feb'y, August.	"	1861		90	
Cleveland and Pittsburgh	800,000	Do. convertible	7 Feb'y, August.	"	1860		95	
Do. do.	1,200,000	Do. on Branches	7 March, Sept.	"	1873		75	
Cleveland and Toledo	525,000	Do. inconvertible	7 Feb'y, August.	"	1863		86½	
Chicago and Mississippi	800,000	Do. conv. till 1857	7 April, October	"	1862-72		86	
Do. do.	1,200,000	Do. inconvertible	7 April, October	"	1862-72		86	
Covington and Lexington	400,000	Do. do.	6 April, October	"	1862		73	
Do. do.	1,000,000	2d mortgage, convertible	7 March, Sept.	"	1853		91	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7 April, October	"	1875		92½	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7 Jan'y, July	"	1873		98	
Galena and Chicago	2,000,000	Do. inconvertible	7 Feb'y, August.	"	1863		90	
Do. do.	2,000,000	2d mortgage, do.	7 May, Novemb.	"	1875		90	
Great Western (Illinois)	1,000,000	1st mortgage, do.	10 April, October	"	1868		98	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8 10 April, 10 Oc.	"	1863		93	
Jeffersonville	300,000	Do. 2d sec. inconv.	7 April, October	"	1873		75	
Indiana Central	600,000	Do. convertible	7 May, Novemb.	"	1866		90	
Indianapolis and Bellefontaine	450,000	Do. do.	7 Jan'y, July	"	1860-61		82	
Indianapolis & Cin'ti (for Lawd. & U. M.)	500,000	Do. conv. till 1857	7 March, Sept.	"	1866		82	
La Crosse and Milwaukee	950,000	1st mort 1st sec. conv. till 1864	8 May, Novemb.	"	1874		75	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7 Feb'y, August.	"	1865		76½	
Little Miami	1,500,000	Do. inconv.	6 2 May, 2 Nov.	"	1863		79	
Michigan Central	1,000,000	No mortgage, convertible	8 April, October	Bost.	1860		99	100½
Do. do.	600,000	Do. do.	8 March, Sept.	"	1869		100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8 Jan'y, July	N. Y.	1862		96	97
Do. do.	650,000	Do. 2d do. 1858	8 April, October	"	1863		94½	95
Do. do.	1,250,000	Do. 3d do. 1860	8 June, Decemb.	"	1877		90½	91½
New Albany and Salem	500,000	Do. 1st section	10 April, October	"	1868-62		80	
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8 May, Novemb.	"	1864-75		86	
Northern Cross	1,200,000	1st mortgage, convertible	8 Jan'y, July	"	1873		92½	95
Ohio and Indiana	1,000,000	Do. do.	7 Feb'y, August.	"	1867		90	
Ohio and Pennsylvania	1,750,000	Do. do.	7 Jan'y, July	"	1865-66		93	97½
Do. do.	2,000,000	Income, convertible	7 April, October	"	1872		80	82½
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6 Jan'y, July	Phila.	1860		95	96
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7 May, Novemb.	N. Y.	1861		83½	
Steubenville and Indiana	1,500,000	Do. convertible	7 Jan'y, July	"	1865		78	
Terre Haute and Indianapolis	600,000	Do. do.	7 March, Sept.	"	1866		79	80
Terre Haute and Alton	1,000,000	Do. do.	7 Feb'y, August.	"	1862-77		79	80
Do. do.	2,000,000	2d do. do.	8 Feb'y, August.	"	1870		75	76

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6 April, October	Balt.	1865		84	85
Do. do.	1,128,500	Do.	6 Jan'y, July	Balt.	1875		87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7 10 Jan. 10 July	N. Y.	1870		93	93½
Erie Railroad	3,000,000	1st mortgage	7 May, Novemb.	"	1867		107½	
Do. do.	4,000,000	2d mortgage, convertible	7 March, Sept.	"	1869		95	97
Do. do.	6,000,000	3d mortgage	7 March, Sept.	"	1863		93	94
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7 Feb'y, August.	"	1875		90½	90½
Do. do.	4,351,000	Convertible, Inscription	7 Feb'y, August.	"	1871		83½	84
Do. do.	3,500,000	Convertible	7 Jan'y, July	"	1862		86	86
Hudson River	4,000,000	1st mortgage, Inscription	7 Feb'y, August.	"	1860-70		99	99½
Do. do.	2,000,000	2d do. do.	16 June, 16 Dec.	"	1860		87	89
Do. do.	3,000,000	3d do. convertible	7 May, Novemb.	"	1870		68½	68½
Illinois Central	17,000,000	Mortgage, inconvertible	7 April, October	"	1875		88½	88½
Do. (Free Land)	3,000,000	M'ge \$45,000 acrs-priv. 7 shars	7 March, Sept.	"	1860		90	90½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7 May, Novemb.	"	1860		92	95
New York and Harlem	1,800,000	Do. do.	7 May, Novemb.	"	1861-72		85	86
New York and New Haven	750,000	No mortgage, do.	7 June, Decemb.	"	1855-60		97½	
New Haven and Hartford	1,000,000	1st mortgage, do.	6 Jan'y, July	"	1873		91	92
Northern Indiana	1,000,000	Do. do.	7 Feb'y, August.	"	1861		91	92
Do. do.	1,500,000	Do. do.	7 Feb'y, August.	"	1868		84½	85
New York Central	8,287,000	No mortgage, do.	6 May, Novemb.	"	1863		88½	88½
Do. do.	3,000,000	No in'g conv. from June 57-59	7 15 June 15 Dec.	"	1864		101½	102
Panama, 1st issue	900,000	Convertible till 1856	7 Jan'y, July	"	1866		103½	105
Do. 2d do.	1,478,000	Do. till 1858	7 Jan'y, July	"	1866		103½	105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6 Jan'y, July	Phila.	1860		93	94
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6 Jan'y, July	"	1860		93	94
Do. do. 1849	3,469,000	Do. inconvertible	6 April, October	"	1870		87	88

CITY SECURITIES.	Int't payable.	On'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int't payable.	On'd p. ct.	Ask'd p. ct.
New York 7 per ct. 1857	Feb'y, May,	100	100	Milwaukee, 7 per ct. coup.	Divers	87	90
Do. 5 do. 1858-60	August and	97	98	New Orleans, 6 per ct. cp. R.R. X	Do.	75	78
Do. 5 do. 1870-75	November	97	98	Philadelphia, 6 per ct. 1876-78	Jan'y, July	92½	93
Albany, 6 per ct. coup. 1871-81	X Feb'y, August.	97	98	Pittsburgh, 6 per ct. coup.	Divers	77	78
Alleghany, 6 per ct. coup.	X Jan'y, July	97	98	Quincy, 8 per ct. coup.	Jan'y, July	91	91
Baltimore, 6 per ct. 1879-90	Quarterly	97½	98½	Racine, 7 per ct. coup.	10 Feb'y, Aug.	83	85
Boston, 5 per ct. coup.	X April, October	99	100	St. Louis, 6 per ct. coup. Long X	Divers	79½	80
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101	102	Do. do. Municipal. X	Do.	79	80½
Clev'nd, 7 per ct. cp. W.W. 1879 X	Do. do.	100½	102	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	80½	81½
Cincinnati, 6 per ct. coup.	X Divers	89	90	S.F. & P. 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	80	82½
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89	90½	Do. 10 p. ct. cp. 1871 X	Do. do.	97	98
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August.	101½	102	Do. 10 do. pay. N.Y. X	Jan'y, July	104	
Louisville, 6 per ct. cp. 1880-83 X	Divers	78½	80	Wheeling, 6 per ct. coup.	X Divers	67½	67½
Philadelphia, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do.	X April, October	97½	

Cincinnati Stock Sales,

By KIRK & CHEEVER.

For the week ending March 4th, 1866.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	79
Covington & Lexington, 2d Mort. 7 per ct.	65
Ohio & Mississippi, 2d Mort. 7 per ct.	43
Marietta & Cincinnati, 7 per cent. 1st Mort.	70
Indianap. & Cin., 2d Mort. 7 per ct.	78
Hillsboro' and Cin., 7 per ct. 1st Mort.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	80
Cin., Wil. & Zanes 2d Mort. 7 per ct.	60
Covington & Lexington, 10 per ct. Income	60

Cin., Wilm. and Zanesv., 18½—Cin., Ham. and Dayton, 65—
Col. & Xenia, 83—Cincinnati & Chic., 8½—Central Ohio, 18—
Covington and Lexington, 18—Dayton and Western, 20—
Eaton and Hamilton, 28—Fort Wayne and Southern, none.
Indiana Central, 47—Indianapolis and Cincinnati, 58—Little
Miami, 91—Mad River and Lake Erie, 18—Marietta and Cin.,
17½—Ohio and Mississippi, 7—Hillsboro' and Cincinnati, 17½
—Junction (Indiana), 10—Peru and Indianapolis, 16.

Marie & Kan's Money Circular for the
European Steamer of the 12th inst.

[TRANSLATED EXTRACT.]

New York, March 12th, 1855.

Since our advices of 4th ult., the stock market has been very inactive, and notwithstanding a few slight fluctuations, has been well sustained, railroad shares excepted. The effect of the great ease in the money market is neutralized by the revival of specie shipments, as well as by the state of our relations with Great Britain, and the anxiety to learn the issue of the European Conferences at Paris. The advices from Liverpool to the 23d ult., received yesterday, announcing the opening of the Congress, and the general confidence that peace would be the result, have not checked the downward tendency of speculative stocks. State stocks slightly up, Virginia alone active; Indiana ½ per cent. higher; Illinois Internal Improvement, 2; Missouri, ½; Tennessee, ½; Virginia, ½. City and county bonds firm, little doing. We note a few sales in Cincinnati, Philadelphia, Pittsburgh, Racine, San Francisco 10 per cent. and St. Louis City. We quote also the first small sale in this market of San Francisco 6 per cent. bonds, (new) at the low price reported in our last. Railroad bonds inactive, without much change, but rather weak. Freeland bonds have been active, with 2½ per cent. advance, (sales at 85½ ex privilege); Illinois Central Construction bonds also brisk at ½ advance; Erie 1875, up ¾; Erie 1871, down ½; Harlem 1st mortgage, 1; and New York Central, 6 per cent., ½ per cent. lower. Bonds not dealt in at the Stock Exchange. With the exception of \$300,000 Racine and Mississippi 1st mortgage 8 per cent. bonds, negotiated this week, sales have been small, being confined principally to Milwaukee and Mississippi 1st and 3d sections, and Galena and Chicago 1st and 2d mortgages. Railroad shares inactive, generally lower. Cleveland and Pittsburgh 1 per cent. down; Harlem, 1½; Hudson River, 1; Michigan Central, 1½; Michigan Southern, ½; New York Central, ¾; Panama, ½; Reading, 2½ per cent. Erie has fluctuated between 58½ and 57½, the closing price. Money continues plenty. Loans on call 6½. First class paper, 7. Names less current, 8½. Exchanges are higher, with limited sales, except in Sterling, which has been taken in considerable amounts at 109½ to 109½; Paris, 5.17½.

MARIE & KANZ.

Since the sailing of the last packet, Messrs. Marie & Kan's have closed up the subscription to the First Mortgage Loan of the Racine and Mississippi Railway 8 per cent., convertible, \$10,000 a mile on 68 miles of the road opened and nearly approaching completion. The entire line from Racine, Wisconsin, on Lake Michigan to the Mississippi River at Savannah, is 136 miles, estimated to cost \$3,175,342. The capital subscriptions on the line amount to \$2,876,000, and the present loan being added, \$680,000, will afford about \$375,000 for contingencies upon this estimate. Since the late report of the Company, the new subscriptions to the work on the west end of the line have so far gone ahead of the previous calculations upon them, that the Directors are encouraged to believe that the present mortgage will be the only one required to consummate their undertaking.

They have now 47 miles in operation between Racine and Beloit; expect to open to Freeport, where connection is made with the Illinois Central by the 1st July, and to reach the Mississippi early in the Spring of 1857.

Extract from the Circular of Robt. Benson & Co., per Africa.

LONDON, Feb. 22d, 1856.

During the week nothing new has occurred either in connection with the negotiations for Peace, or to throw more light on the point in dispute between the governments of this country and America.

We mentioned in our last circular, that the particulars of a new Loan, and of the terms on which government proposed to fund a portion of the outstanding Exchequer Bills, were to be announced on the 18th, and we stated that it was supposed that the extent of the Loan would be £15,000,000. The amount, however, actually to be taken at present is much smaller, being only £5,000,000, and the operation is to be accompanied by the funding of £3,000,000 of Exchequer Bills. No sooner was this known than Consols which had fluctuated during the morning from 90 $\frac{1}{4}$ to 90 $\frac{3}{8}$, rose to 91 a 91 $\frac{1}{4}$ —the inference derived from the smallness of the Loan being that the most solid expectation of peace is entertained, and that Government have only sought to supply their immediate wants, assured that after peace is secured they will be able to obtain what they require farther, on better terms. The operation is not much liked by capitalists; and prior to the rate at which the Loan is taken becoming known, the market for Consols was flat, although it improved under steady and large purchases, which do not seem to be speculative, so that it closed last night at 91 a 91 $\frac{1}{8}$ for money, and 91 $\frac{3}{8}$ for the March account.

The bidding for the Loan took place this morning, when Messrs. Rothschild tendered for the whole at 89 $\frac{1}{8}$. This bid was not accepted, the Chancellor of the Exchequer stating that the lowest price which Government was prepared to take was 90. After consultation the offer was thus amended, and the Loan awarded to Messrs. Rothschild and their subscribers. It was first quoted 1 $\frac{1}{2}$ premium, and is now 1 $\frac{1}{8}$ a 1 $\frac{1}{4}$. The premium on the Funding operation is $\frac{1}{2}$ 1 $\frac{1}{4}$. Consols opened 91 for money, 91 $\frac{1}{4}$ a 91 $\frac{1}{2}$ for the account, and are now 90 $\frac{7}{8}$ a 91 $\frac{1}{8}$ for money, and 91 $\frac{1}{4}$ a 91 $\frac{3}{8}$ for account.

In American Securities a limited business has been done. U. S. Stock is quoted 104 a 106, and Coupon Bonds 105 a 106. Maryland Sterling 87 a 90. Pennsylvania Stock has been sold at 72 $\frac{1}{2}$ but is now quoted at 73 a 75; and the 5 per cent. bonds 80 a 82. Virginia 6 per cent. have changed hands at 87; and Tennessee 6 per cent. at 85. In Railroad stocks and bonds, we may quote Illinois Central 7 per cent. Construction Bonds firm at 79 a 80. Freeland's 84 a 85. Shares 3 and 2 discount. New York Central 6 per cent. 82. Erie Sinking Fund Bonds 82. Pennsylvania Railroad, 1st mortgage, 87 a 88, and 2d mortgage, Sterling, 90 a 92.

Cotton has not maintained the advance named last week. The sales are smaller and prices rather in favor of the buyer. Sales for the week reported to be 51,000 bales. In the Corn market there has been a small advance. To-day the market is firm but little doing. For Railroad iron higher prices are asked. ROBT. BENSON & CO.

Pennsylvania Coal Trade.

The Pittsburgh Gazette estimates the total shipments of bituminous coal from the mines in Western Pennsylvania during the last year, both east and west, at 1,423,698 tons. Estimated according to its value at the point of exportation, the coal sent to market, as above stated, was worth \$1,904,135; but when estimated by the probable amount obtained for it, its value may be set at \$3,270,852. The coal trade of Western Pennsylvania is steadily increasing. The increased shipments by river amount to 3,000,000 bushels, and there is a proportionate increase by canal and

railroad. The exports in 1854 were considerably less than one million bushels, the estimate for that year being 840,555 tons. A recent statement of the total value of anthracite coal mines in Pennsylvania during the last year puts it at about \$12,000,000; so that we may say that for the one item of coal, Pennsylvania has received in a single year about fifteen millions of dollars.

American Railroad Journal.

Saturday, March 15, 1856.

Pavements.

STREET AND RAILROAD.

It would be interesting to note the various expedients that have been resorted to at different times and in various places, for preserving the surface of highways from destruction, as well as insuring a road-bed that shall be pleasant for riding and economical for purposes of draught. Notwithstanding the immense amount of experience we have had to guide us, it is impossible as yet to point out in any street of any town the perfect pavement.

In Europe, they are even worse off than in this country, but more philosophical in submitting to the evil. It is true that in some of the cities on the continent the streets are paved with large flat slabs pleasant to ride over, but unless of great thickness, unsuitable for the purposes of heavy haulage; they are, therefore, never laid down in considerable commercial cities. Such a pavement cannot be crowned in the centre, so that there is little trouble from the falling of horses, while its perfectly even surface sheds the rain.

In some cities, as Edinburgh for instance, the streets are simply McAdamized.

In the United States we have resorted to every conceivable device to perfect this important feature of the public way.

Formerly our streets were paved with cobble stones, a sort that must be of different qualities in the different cities; some locations affording a better pebble than others. The worst possible specimens of this kind of work exist in New York city, a fact to be imputed to the common looseness with which the city contracts are made.

In Boston the cobble pavement has been superior. It is customary to cull the stones, laying the small pebbles in the middle of the street and the larger ones on the sides. Angular stones are not used, but care is taken that only those of a certain regularity, smooth and round, are admitted; they are set upright, with the small end down, upon a bed of sand or fine gravel and are grouted with sand, with which also they are covered to a depth of an inch or two for a few days in order to insure a perfect packing in the interstices.

Some of the finest pieces of this pavement are to be seen in the cities of the Ohio Valley. At Louisville and Cincinnati especially is this work well done.

The objections to the cobble pavement are, that in dry weather it is dusty, in wet weather muddy. Moreover, it is continually sinking in spots, making a rough surface under heavy loads. When omnibus lines run over it in nearly the same routes it is found that constant ruts are made.

If we could have the cobble pavement surface and freed from these objections, we should have all that is desirable, and it is astonishing that when Broadway was so expensively paved, the true re-

quirements in a street surface were not better understood.

As to smoothness for the pleasure of riding, the surface of fine cobbles well laid is as comfortable as the Russ pavement.

It affords the best foothold for horses and allows, indeed demands more crowning than any absolutely plain surface.

Is it not possible to have such a pavement with its merits and free from its defects? We think it is and that, at a less cost than the square block.

A bed of concrete should be prepared as a foundation for the stone, crowned in the centre of the street 10 inches for a width of 40 feet. On this the cobble pavement should be set, in accordance with the best rules for laying it in any bottom; it should then be filled with a thin running hydraulic grout to within an inch of the top of the stones.

Care should be taken that the foundation be wet when setting. Hydraulic lime should never be permitted to set dry.

With a pavement like this we should have a pleasantly running road, with a clean surface and an excellent footing for horses.

The desiderata in paving seem to have been appreciated in the designing of the newer forms of iron blocks. In that known as Terry's pavement, however, the processes depended on for furnishing foothold are angular and small. They are dangerous to the feet of horses.

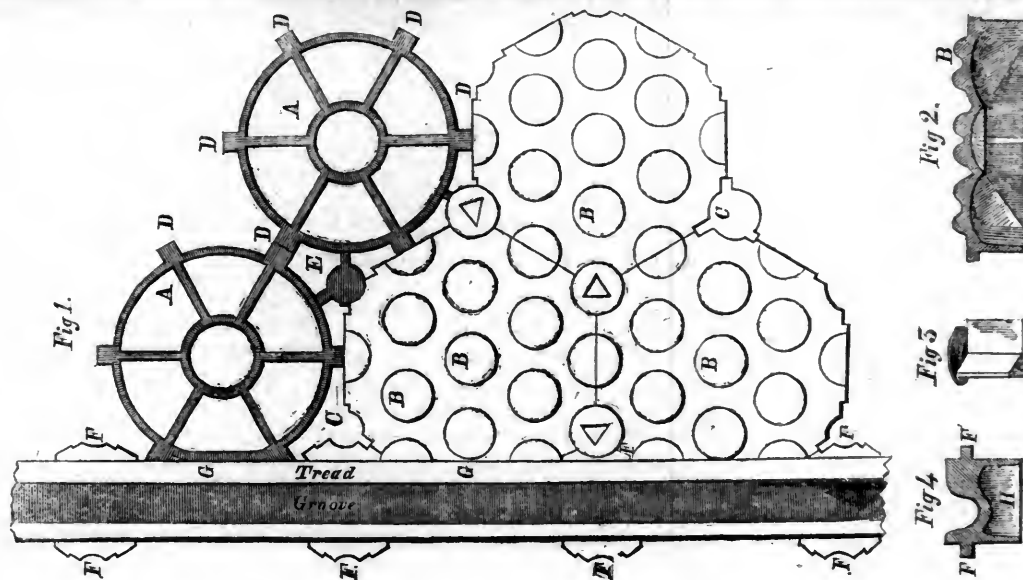
The form of block is cylindrical, and has dividing partitions, but it has no flat sides, and the blocks, if in contact at all, are so only at a single point near their top. The upper ends of the cylinders are not closed, and the surface of the pavement consists merely of the corrugated edges of the cylinders and partitions, presenting but a small portion of iron, with all the balance of the surface, comprising 0.9 of it, of earth or other soft filling. It may be called open honey-comb work.

The result is, that no matter what material the cells may be filled with, they become in a short time hollowed out, and are receptacles for mud and water, or dust in dry weather.

The water percolates through the cells, softens the foundation, the blocks settle, and the earth below is forced up.

All the bearing that the blocks have upon the earth below is from the edges of the cylinders and partitions, which, to bring the cost within reasonable limits, are very thin and sharp. More or less settling is inevitable, the amount depending upon the character of the material upon which the edges bear. The system of locking the blocks together is by means of three "lugs" cast upon the upper surface of each block at equal distances around its circumference. These "lugs" project over upon three of the blocks which surround it, the alternate blocks having similar lugs resting upon the first or centre block. Each one is therefore sustained by only three others. It is claimed for this pavement that in order to take up any one block for the purpose of repairs, it is only necessary to turn the three blocks which rest upon the one to be taken up, so as to relieve it from the overlapping lugs.

If the blocks could be turned, the object would be obtained. But it seems to us on an inspection of the pavement that as they are constructed it is



an impossibility, and we have been informed, though we have not witnessed the process, that where in practice it has been required to remove a block in the centre of the street, it has been found necessary to commence the removal at the curb-stone.

Any one block can only be removed in this way, or by moving a great number laterally, so as to obtain space enough around the block to be raised to relieve it from the lugs. It is evident that if there be space enough between the blocks to permit of this lateral movement, the pavement does not fulfil all the required conditions; for absolute contact is necessary between the blocks to make a perfect pavement, and to make available the advantages of arching the surface. Even if these blocks are at first laid in contact, they touch each other only at a single point near the surface, and the unavoidable motion wears these points off, so that even if the arch form is originally adopted, its advantages are in a short time entirely lost. The penetration of the water through the openings may be found a serious objection, as by it the foundation is softened and injured. An important condition to a good pavement is a thorough surface drainage, protecting the material below.

Independent of all these considerations, the form of surface presented is not that best calculated for the feet of horses. The corrugations in the upper edges of the cylinders and partitions leave square projections like spike heads, which strike the interior of the horse's hoof whenever the shoe is placed in the best position to give a foothold, and if the corrugations are made so shallow as to avoid this difficulty, they will soon wear smooth.

The Russ pavement is an arrangement of stone blocks about 12 inches cube. They are laid on a foundation of concrete close together. They have a grooved upper surface to prevent the slipping of horses. They are a failure. In one respect, a failure as the wooden pavement was. When wet, it is impossible for a horse to maintain his foothold. Such a positive calamity has this defect proved, that very great excitement in the city has been the result.

Looking merely to foothold for horses and ease of draft, there can be no question that, when in

perfect order, a pavement formed of small pebbles of from two to three inches in diameter is altogether superior to any plan yet adopted. The great difficulty is in keeping such a pavement in repair, when subjected to any traffic of consequence.

If such a pavement should be moulded in iron, a great object would be accomplished.

We have just examined a piece of pavement that seems to fill as near as may the demands for a correct pattern. The description will be best understood by a reference to the annexed drawing, on which for the purpose of illustration is introduced a portion of a city rail.

"Fig. 1 is a plan exhibiting several of the blocks in place, and also showing their combination with a rail.

"Fig. 2 is a vertical cross section of one of the cast-iron blocks.

"Fig. 3 is a perspective view of one of the keys used for locking the blocks, and blocks and rails together.

"Fig. 4 is a vertical cross section of the rail.

"The blocks are made of a cylindrical form, the upper end of which is closed, forming the surface. The interior is divided into cells by partitions radiating from near the centre to the soffit of the cylinder, as shown in fig. 1, letter A. The cylinders are about four inches in depth, and from twelve to fifteen inches in diameter, but their dimensions may be varied as may be deemed expedient. The upper surface projects slightly out from the circumference of the cylinder, and is covered with circular or irregularly formed bosses or studs, the tops of which are convex—see figs. 1 and 2, letter B. Each of these bosses covers one of the cells. All the blocks being precisely alike, every one is surrounded by six others, all being in contact. The projecting portions of the top are formed into six tangential sides, not forming an entire hexagon, but leaving interstices as shown in fig. 1, letter C. When the blocks are laid in place, these tangential sides are in contact. On the circumference of each cylinder are formed six vertical ribs, letter D, fig. 1, running down the whole depth of the block, which are also in contact.

"In the interstices, left as previously mentioned, a key is inserted, of the form shown in fig. 3.—The top of this key is formed with a hole for the reception of a wrench, and a turn of one sixth of a circle forces the keys into the position shown in fig. 1, letter E, thus locking the blocks so that any one is sustained by the six that surround it.

"The rails are formed of the section shown in fig. 4, and may be cast of any required length.—

On each side of the rail are formed lugs, F, or they may be formed with a continuous flange, figs. 1 and 4. The blocks laid next the rails are cast with a segment cut off to the line of two keys, as shown in fig. 1, letter C. The lugs on the side of the rails fit into the angular spaces between two blocks, and leave openings for the insertion of the key precisely like those between the blocks marked C. Thus the rails are confined to the blocks and the blocks to the rails in the same manner as the blocks are confined to each other.

"To strengthen the rail, the hollow space on the under side may be formed with cross-partitions at suitable intervals, letter H, fig. 4.

"The whole being thus confined and locked together, no timber substructure is needed; but the rail becomes a part of the pavement itself, and in case a rail is injured or broken, no spikes are to be drawn, but it may be taken out and a new one substituted by simply turning the keys which confine it. The ordinary street railway, in use in ordinary pavements, requires an expensive wooden substructure, which is constantly decaying and needing renewal, and there being no bond between the rail and the pavement, constant repairs are needed to keep both on the same level. Either the rail settles below the pavement or the pavement below the rail, offering serious obstruction to the passing of ordinary vehicles. The combination proposed avoids this difficulty, and presents a railway always upon the same level as the pavement.

"In this pavement large surfaces are brought in contact between any two blocks, and as each block has six flat sides, when once laid in place, the action of vehicles cannot move them. They are readily unlocked and removed by turning ten of the keys, thus releasing two blocks, after which they may be moved laterally."

Their stability, instead of depending upon the thin edges of the cylinders and partitions, depends upon the whole area of the block, and no matter what the material is in which they are laid, they cannot settle. The foundation is protected from the filtering of water through the blocks. The benefits derivable from an arched form, of solid iron, are made available. The surface presents a perfect foothold for horses, and of such form that it is impossible for a shoe to be placed upon it in such a way, as to bring the frog of the foot in contact with the bosses—while for the passing of vehicles it is substantially smooth. The material is concentrated in the top surface, presenting a large area for wear, and the bosses are so arranged over the cells, that whenever in process of time they

are entirely worn off—a surface equal to the Terry pavement is still left. It is free from dust and mud, and easily swept and cleaned. The form is one most cheaply moulded and cast, and the surface may be chilled in process of manufacture, increasing its durability. It may be combined with street railways in a simple and perfect manner, so that a pavement with a railway will cost but a fraction more than one without.

This pavement is the invention of Mr. A. P. Robinson, an accomplished Civil Engineer of this city.

Our limits will not permit us to more than mention the pavements used in connection with Railroads, which are for a purpose very different from those of the street. They are used to sub-lie foundations, and for the finishing of water ways for all shallow rapid streams, where the bottom is solid rock. When placed under the smaller class of culverts, they should be laid level across, extending beneath both walls. Round cobbles or boulders should never be used when they can be avoided; neither should square blocks or slabs. The object in such situations, and when under the abutments of bridges, being to secure equal settlement in the walls, it is necessary that small, wedge-like edges be presented to the ground, so that if there be inequalities in the bottom, they shall not be communicated to a large extent of surface. In addition to which, if the bottom be soft clay, it will be pressed between the different stones securing a uniform hard floor from the wall that may be said to float on the softer substratum.

In large openings where the pavement, instead of paving under the walls, abuts against them, it is customary to sink it in the middle to throw the channel away from the walls. The stones in the pavement of a water way should always lean up stream. This is not the custom with Engineers generally, but is the correct course. We know it by long experience. It would seem a trifling matter, but every Engineer knows something of the vexation of having his culverts washed out, as well as of seeing the stream take its course under the pavement instead of over it. If the stones lean up stream they soon become grouted, the running water forcing pebbles and sand into the crevices. When inclined the other way, it is true they generally become grouted in time—but it is also true, that frequently the water percolates through, and washes out the bottom.

The paving stones of a water way should be higher than their width or thickness, and should be laid with their longest diameter across the stream, and joints carefully broken, so as to be a dam to its progress; they will thus receive the earth washed down until a good, smooth bed is formed for the channel.

No part of bridges or a culvert masonry calls for more care than the pavement.

Backward Motion.

The Pennsylvania House of Representatives some days since passed a bill, repealing the act which exempted coal and lumber from the tonnage tax! The vote stood 68 to 23. So the wise men of that body prefer, in order to sustain the canal business, as they imagine, to levy such a tax upon railroad commerce that it must to a great degree leave the State, and go by those avenues both North and South, where it is unobstructed by public toll-gates. Pennsylvania is un-

der a deep obligation to her statesmen for their far seeing political wisdom, and generosity of sentiment!

Railroads in New York.

(Continued from Page 149)

HARLEM RIVER AND HIGH BRIDGE RAILROAD.

Capital authorized, \$150,000, of which \$15,000 have been subscribed, and \$1,500 paid in. Beyond making the surveys, nothing has been done. The length of the road will be about eight miles.

Clarence Livingston is the Company's Secretary.

BROOKLYN CITY RAILROAD.

Authorized capital, \$2,500,000, which has been reduced to \$1,000,000—all subscribed. The amount paid in is \$902,000. The shares have been reduced from \$25 to \$10 each. One-fourth the number of them was issued as Scrip stock. No funded nor floating debt. Cost of road and equipment, \$844,844. Estimated value, \$910,332. Length, 30 miles, of which $17\frac{1}{4}$ miles are laid, having a double track. Rail, 64 lbs. per yard. Number of houses and shops, 9; of horses and mules, 696; and of passenger cars, 116. Miles run, 1,691,462. Passengers carried, 6,324,559. Earnings, \$332,116. Working expenses not given. One dividend of $3\frac{1}{2}$ per cent. declared. The sum of \$199,170 was applied during the year to liquidating the floating debt. One fatal accident only, resulting from trespassing on the track.

Amos P. Stanton is President; John Schenck, Treasurer; Charles C. Bett, Secretary; Benjamin F. Crane, Engineer, and Montgomery Queen, Superintendent. Principal office at 12 Fulton street, Brooklyn, L. I.

LONG ISLAND RAILROAD.

The authorized capital of this Company is \$3,000,000, which has all been subscribed, and \$1,875,148 paid in. Shares, \$50 each. Funded debt, \$643,533; floating, \$25,416; making a total of \$668,949. The first of these consist of

No. 1.—State loan, \$100,000, at six per cent., issued, July, 1841; due August, 1856. Paid for railroad iron. Sinking fund, \$17,249.

No. 2.—\$25,035, at seven per cent., issued May 1st, 1843; matured, 1849 and '50. Secured by personal property and real estate. Mortgage executed for \$40,000.

No. 3.—\$300, at six per cent., issued December, 1838; due December, 1848. Mortgage executed for \$13,950.

No. 4.—\$500,000, at six per cent., issued 1st January, 1850; due 1st January, 1870. Of these \$122,900 were sold at 90 per cent., and the balance at par. Secured by personal property and real estate.

No. 5.—\$24,004, at six per cent.; not secured by mortgage; due from 1845 to 1858. Of these it is claimed that \$10,805 have been paid but were never crossed from the bond-book.

Cost of road, equipment, &c., \$2,555,986. Estimated value, \$1,717,947. Length of road, 95 miles; of double track and sidings, 2; and of branches, $2\frac{1}{2}$ miles. Rail, 50 and 56 lbs. per yard. Number of engine houses and shops, 14; of locomotives, 20; of passenger, baggage, mail and express cars, 35, and of freight cars, 190. In the length of the road is included that of the Brooklyn and Jamaica road, which is leased. Sum of ascents and descents, 1,332 feet, or $14\frac{1}{4}$ per mile. Maximum grade, 52 feet for three-fourths of a mile. Sum of straight lines, $89\frac{3}{4}$

miles. Degrees of curvature, 395. Minimum radius, 1,165 feet. On the Brooklyn and Jamaica road there is a grade of 97 feet per mile, for less than 200 yards.

Miles run by passenger trains, 142,210; and by freight, 82,053. Passengers carried, 374,881; tons of freight, 62,605. The earnings were—

Passengers.....	\$188,975
Freight.....	103,585
Other sources.....	9,233

Total.....	\$301,793
Trans. expenses.....	\$185,331
Interest.....	35,037
Rent of B. & J. Railroad.....	39,509
Carried to Surplus fund.....	15,724
	<hr/> 275,601

Balance..... \$26,192

The greater part of this was applied to the payment of funded and floating debts, and to the sinking fund. No dividends.

One employee and two "others" killed. No blame attached to the Company in any case.

W. E. Morris is President, and W. S. S. Russel, Secretary and Treasurer. Principal office at Brooklyn, N. Y.

LEBANON SPRINGS R. R.

Capital authorized, \$500,000, of which \$400,009 have been subscribed, and \$101,900 paid in. Shares \$100 each. Bonds have been issued to the amount of \$72,000, in payment of work done. Cost of road, &c., \$327,676. Length of road, $22\frac{1}{2}$ miles; of main line from Chatham Four Corners to Bennington, Vt., 52 miles.

Moses Y. Tilden is President; R. C. Root, Secretary and Treasurer; and Martin Green, Engineer. Principal office at 7 Nassau street, New York.

STATEN ISLAND R. R.

Authorized capital, \$300,000, of which \$62,550 have been subscribed, and \$5,221 paid in. There has been paid for engineering and agencies the sum of \$3,118. Length of road, $13\frac{1}{4}$ miles.

Joseph Seguire is President; Joseph Britton, Treasurer, and L. C. Clark, Secretary. Office at 82 Duane street, N. Y.

ATTICA & ALLEGHANY VALLEY R. R.

This company is no longer in existence. After grading some 25 miles of the line, they became insolvent, and a decree was obtained to sell the interest of the Company on the mortgage.

Amount expended, about \$350,000. Amount of mortgage, \$400,000.

BUFFALO & ALLEGHANY VALLEY R. R.

Capital authorized, \$300,000, of which \$135,000 have been subscribed, and \$16,000 paid in.—Amount expended on graduation and masonry \$16,300. Since the work was suspended, in January, 1854, nothing further has been done by the company. An arrangement, however, was made by which the Buffalo and Pittsburgh railroad company were to continue its prosecution. The length of line surveyed is about 30 miles.

Albert L. Baker is President; and A. Riley, Secretary and Treasurer. Office at Aurora, Erie county, N. Y.

SODUS POINT & SOUTHERN R. R.

Authorized capital, \$550,000, of which \$78,250 have been subscribed, and \$31,585 paid in. Floating debt, \$1,850. No funded debt. Amount expended, \$35,198. Estimated value, \$26,735.—Length of main line to be 35 miles. Nothing further has been done towards construction during

the past year. No part of the track is laid; about eight miles of the road bed are graded.

Albert Banta is President; Horace Blackman, Treasurer; and Stephen Culver, Secretary. Principal office at Newark, Wayne county, New York.

NEW YORK & WESTERN R. R.

This company was organized in June, 1853, with an authorized capital of \$12,000,000, of which \$2,790,000 were subscribed, and \$27,900 paid in.—Since organizing, nothing further has been done, it being discovered that the surveys previously made, by private parties, were altogether fallacious and deceptive.

OSWEGO & TROY R. R.

Capital stock, as by charter, \$2,000,000; amt subscribed, \$231,000; amount paid in, \$23,100. Value of shares, \$100 each. No funded nor floating debt. Expended for engineering and salaries, \$10,368. Estimated length of road, 160 miles.

Lucius B. Crocker is President; Delos De Wolf, Treasurer; L. Babcock, Secretary; and Wm. Parker, Engineer. Office at Oswego, N. Y.

SACKETT'S HARBOR & ELLISBURG R. R.

Authorized capital, \$175,000—all subscribed—of which \$167,485 have been paid in. Shares, \$50 each. Funded debt, \$250,000; floating debt \$56,810; making a total of \$306,810. The bonds consist of first and second mortgage, bearing seven per cent., the former issued in 1852, and the latter in 1854. Dates of payment not given. Cost of road and equipment, \$389,810. Length of road, 18 miles. Rail, 58 lbs. per yard. Sum of ascents and descents, 620 feet, or an average of 34 to the mile. Sum of straight lines, 13 miles. Degrees of curvature, 666. Minimum radius, 1,494 feet. The company own one locomotive and 34 cars of various kinds. Miles run by passenger trains 21,296; and by freight trains, 10,648. Passengers carried, 16,998; tons of freight, 160,707. The earnings were—

Passengers.....	\$4,278
Freight.....	5,120
Other sources.....	1,304

Total.....	\$10,702
Expenses of operating, &c.....	11,998

Deficit.....	\$1,296
No accidents reported.	

C. N. Bishop is President; D. B. Kellogg, Secretary and Treasurer; and J. Collamer, Superintendent.

LAKE ONTARIO, AUBURN & NEW YORK R. R.

This company suspended operations soon after last report. The road, then in process of construction, has since been sold on foreclosure of mortgage, to parties who are endeavoring to organize under the act of 1854.

WASHINGTON COUNTY CENTRAL R. R.

Three routes for this road have been surveyed—all contemplating a union with the Troy and Boston and Albany Northern roads. About \$80,000 in cash or "right of way," have been subscribed.

John Lee is President; John T. Masters, Vice President; and Le Roy Mowry, Secretary and Treasurer.

BUFFALO & NEW YORK CITY R. R.

Authorized capital, \$1,500,000, of which \$951,150 have been subscribed, and \$798,439 paid in. Funded debt, \$1,720,000; floating debt, \$867,849; making a total of \$2,587,849. Funded debt bears

seven per cent. interest. Cost of road and equipment, \$3,401,868. Length of line, 91 miles.—Weight of rail per yard, 63 lbs. Number of engine houses and shops, 4; of locomotives, 16; of passenger, baggage and mail cars, 26; and of freight cars, 138. Miles run by passenger trains, 237,328; and by freight, 75,894. Passengers carried, 138,589; tons of freight, 62,162. The earnings were—

Passengers.....	\$125,829
Freight.....	154,809
Other sources.....	7,754

Total.....	\$288,392
Trans. expenses.....	256,496

Balance.....	\$31,896
No returns made as to payment of interest, employees, accidents, &c.	

ALBANY NORTHERN R. R.

Authorized capital, \$600,000, of which \$445,000 have been subscribed, and \$439,004 paid in. Shares, \$100 each. Funded debt, \$1,578,098, bearing seven per cent. interest. Floating debt, \$50,000. Total debt, \$1,625,098. The bonds consist of the following issues:

No. 1—\$600,000; issued March, 1852, due March, 1867; secured by first mortgage.

No. 2—\$500,000; issued June, 1853, due June, 1863; secured by second mortgage.

No. 3—\$250,000; of which \$110,760 only were sold, and of these, \$65,700 have been redeemed by fourth class adjustment bonds. Date of issue, November, 1853. Bonds mature in 3, 5, and 8 years from date. Secured by third mortgage.

No. 4—\$500,000; to cover city loan of \$300,000, and adjustment bonds to amount of \$200,000. Of the latter only \$64,338 have been sold. Issued May, 1854. Date of maturity not given. Interest six per cent. for first five years, and seven per ct. afterwards. Secured by fourth mortgage.

Cost of construction, equipment, &c., \$1,840,695. Estimated value, \$1,545,000. Length, 32 miles, or including branch line, 32¾ miles. Rail used, 65 and 75 lbs. per yard. Number of engine houses and shops, 5; of locomotives, 7; of passenger and baggage cars, 19, and of freight cars, 101. The company lease 17¼ miles of the Troy and Rutland railroad.

Sum of ascents and descents, 699 feet, or 11 feet per mile. Maximum grade, 45 feet. Sum of straight lines, 21 miles nearly. Degrees of curvature, 1,428. Maximum radius, 600 feet. Miles run by passenger trains, 106,587; and by freight, 18,525. Passengers carried, 241,151; tons of freight, 45,289. The earnings were—

Passengers.....	\$68,194
Freight.....	44,243
Other sources.....	5,279

Total.....	\$117,716
Trans. expenses.....	107,812

Balance.....	\$9,904
The interest on funded and floating debts was \$34,457, showing a deficit of \$24,553.	

One employee and one passenger were killed. Company held free from blame.

Before the completion of this road, its affairs suffered severely by the financial crisis of 1853. In consequence, it passed out of the Company's control into the hands of trustees appointed for that purpose, who have furnished it with additional equipment, and operated it to the present time, in

connection with the Troy and Rutland, also in the hands of receivers. The earnings and expenses above given include those on the latter road.

Geo. H. Thatcher is President; Orland Meads, Treasurer and Secretary; Geo. H. Clarke, Superintendent, and Erastus Corning, John L. Schoolcraft, and Andrew White, Receivers. Office, 552 Broadway, Albany, N. Y.

TROY & RUTLAND R. R.

Authorized capital, \$325,000; subscribed \$265,000; paid in, \$249,939. Shares, \$100 each.—Funded and floating debt not given. Length 17¼ miles. Rail, 60 pounds per yard. Orland Meads is President; J. M. Lovett, Secretary and Treasurer; and James B. Jermain, Receiver. Few other particulars given.

Journal of Railroad Law.

IS A COMMON CARRIER LIABLE FOR THE LOSS OF GOODS BEYOND THE LIMITS OF ITS OWN LINE?

(Continued from page 154.)

In this country there has not been the same uniformity in the decisions as in England upon this point. The case of Weed vs. The Saratoga and Schenectady Railroad Company reported in our last, was decided in conformity to the English decisions. The fact of a contract by the defendants to carry beyond the terminus of their own road seems to have been assumed by the Court, at the trial, as the basis of the instructions to the Jury, that they were liable for the loss, and upon exceptions to the charge, the instructions were sustained. It does not appear to have been the intention of the Court to decide, that from the delivery of the baggage to be carried to a place beyond their line, they were conclusively presumed to have contracted to carry it the whole of the distance.

In St. John vs. Van Sartwood, 25 Wend. 660, the defendants were common carriers from New York to Albany, and they received a box from the plaintiffs in the former place marked for Little Falls, a place beyond Albany, for which they gave the following receipt:

"Received from St. John and Tousey, one box of merchandise, marked J. Pitrie, Little Falls, Herkimer Co."

The defendants delivered the box to the master of a canal boat at Albany, to be carried to Little Falls, receiving pay from the master for their charges for carriage from New York to Albany. The box was lost, and the plaintiffs brought an action, alleging a contract to carry to Little Falls. At the trial, the defendants proved that their delivery of the box to the master of a canal boat at Albany, was in accordance with the usage of tow boats on the Hudson, but they did not prove the usage to be known to the plaintiffs. The plaintiffs objected to the admission of evidence of the usage, unless knowledge of it was brought home to them. The Court charged the jury that there was no evidence of a contract to carry to Little Falls; that none could be implied from the receipt; and that the known usage of trade entered into and formed a part of the contract. Upon exceptions to this charge, the Supreme Court held it to be wrong, that a contract to carry to Little Falls might fairly be inferred from the receipt, though its meaning might perhaps be restricted by proof of the usage brought to the knowledge of the plaintiffs. The decision in effect was, that the evidence ought to have been left to the Jury with instructions to find whether there was in fact a

contract to carry to Little Falls. The case was carried to the Court of Errors, where the decision was reversed, the majority of that Court holding with the judge at the trial, that the receipt would not be construed as a contract to carry the whole distance. Whether the construction put upon the receipt by the Supreme Court or that of the Court of Errors was the true one, the decision leaves the question untouched whether a railway company which contracts to carry beyond its own line, is liable for a loss which occurs upon another road, but within the limits of its contract. See 6 Hill, 157. The courts of New York do not, however, regard this decision as restricting the common law liability of a carrier to the limits of his route as a carrier, when he has contracted to carry further. *Wilcox v. Parmelee*, 3 Sandford, 610.

Richmond, Fredericksburg and Potomac Railroad.

The Richmond, Fredericksburg and Potomac railroad company were incorporated in February, 1834, and authorized with a capital of \$700,000, which might be increased to \$1,000,000, to construct a railroad from the city of Richmond to Fredericksburg, to be extended thence to some point on the Potomac river. Shares, \$100 each. State subscribed two-fifths of the stock, or 2,800 shares. By a special act this was afterwards reduced to 2,752 shares, the excess over three-fifths (48 shares) having been taken by individuals.—Fares not to exceed 10 cents per mile per ton for heavy freight, and 7½ cents for passengers. Directory to consist of five persons, besides the President, two of these representing the State. The charter was made perpetual, and the capital stock and property exempted from taxation. By the 38th section, no line was to be constructed for 30 years, which should reduce their through passenger business between the cities of Washington and Richmond. Permission to borrow money on bond and mortgage was also subsequently granted.

The length of this road from Richmond to Aquia Creek, on the Potomac river, is about 75½ miles, (or, including a branch of 3½ miles, 79 in all,) forming part of the great sea coast line of travel, from the North-eastern States to Charleston, Savannah, and the South-west. On the south this line is prolonged by the Richmond and Petersburg, the Petersburg and Roanoke, and the Richmond and Danville roads, to the borders of North Carolina. At its northern terminus, it connects, by means of a line of steamboats, with the city of Washington; but a road is already in progress to connect with the Orange and Alexandria road, thus affording a through land route between the cities of Richmond and Alexandria. Twenty-seven miles north of Richmond it is crossed by the Virginia Central, which formerly had its eastern terminus at this point, but now extends into the city of Richmond.

The route is very direct, and on the whole favorable for construction, particularly from Richmond to Fredericksburg. The remainder is more difficult; but the highest summit crossed is not over 120 feet above tide-water; the grades are nowhere above 45 feet to the mile; and the shortest curves have a radius of 1,480 feet. The river crossings are the most formidable obstacles; the principal of these being the Chickahominy, South Anna, North Anna, Mattaponi, and Rappahannock—the last requiring a bridge of 600 feet long. The country along the line is among the most fertile, healthy, and populous districts in Virginia.

The company were organized in June, 1835, on

a subscription from individuals of \$305,200; and a Board of Directors chosen, of whom JOHN A. LANCASTER was elected President. The engineering and surveys were put under charge of MONSIEUR ROBINSON, who subsequently filled the office of President for many years. The original estimate of cost to Fredericksburg was \$763,182. This included but a moderate equipment and a superstructure consisting of an iron rail 2x½, laid upon white oak string-pieces resting upon cross-ties five feet apart. The first locomotives were received from England. In December following, 27 miles, between Richmond and North Anna river, were put under contract; and the remaining distance to Fredericksburg in the year following. In Feb'y, 1836, a section of 19½ miles, extending to the South Anna river, was opened for public use; and in May following, it was finished to the North Anna; in June, to Chesterfield, 28¾ miles; in August to Mattaponi, 36½ miles; in September, to Milford, 39½; and in October, to Downer's Bridge, 46½ miles. The line was completed to Fredericksburg, early in 1837. The gross receipts for the previous year were \$33,286, from which a dividend of 2½ per cent. was declared to the stockholders.

During the same year preparations were made for extending the road from Richmond to some point on the Potomac; and after making the necessary surveys, Aquia creek was selected as the Northern terminus. This was accordingly placed under contract in 1837; but a variety of circumstances concurred to prevent its speedy completion. The contractor failed, and the work had to be re-let. That part of the road already in operation required a much larger outlay on construction and equipment, than had been estimated; while the expense of keeping up repairs, owing to the lightness of the superstructure, was very heavy. In May, 1836, the stockholders authorized an increase of stock to the amount of \$300,000; but the State refused to take two-fifths of this as before. The whole was accordingly taken by the old stockholders; but little of the amount was paid in for many years afterwards; and then only on condition of six per cent. interest being paid thereon.

In these circumstances the Board concluded to make an issue of coupon bonds, in order to meet their immediate necessities. Mr. Robinson was accordingly sent to England to negotiate the sale of these, and succeeded in immediately disposing of £20,000 of them at favorable rates, and the remainder in the year following. The whole issue was for £67,500, bearing six per cent. interest, and maturing in 1860, principal and interest payable in London. With the proceeds additional equipment was obtained, and the work of construction proceeded with till its completion in December, 1842.

From their net earnings, the company were enabled, in 1837, to declare a dividend of four per cent., and one of six per cent. in the year following. The rapid depreciation of the track, however, and the application of net earnings to construction, prevented them from declaring any more cash dividends till 1845, when one of three per cent. was paid. Since that date the company have paid seven per cent. every year. In 1844, one of twenty per cent. on the old, and ten per cent. on the new stock, was declared, and made payable in six per

cent. bonds falling due in 1869. Principal and interest were made payable at Richmond. If we add to the above, \$30,000 of six per cent. bonds issued in 1840, and \$60,000 in 1841, for right of way and re-laying part of the line with a heavier track, and \$73,000 of scrip for dividends, issued in 1847 and due in 1856, we have the total bonded debt of the company. The issue of \$30,000 fell due in 1850, and was promptly paid. The other \$60,000 fall due this present year, and are payable at Philadelphia.

On the completion of the road through to the Potomac, an arrangement was made with a steamboat line for the conveyance of passengers and freight between that point and the city of Washington. In 1844, a partial consolidation with the Washington and Fredericksburg Steamboat Company, was effected, the stockholders in the R. R. Co. purchasing half of the steamboat company's stock, and agreeing to pay them one-fourth of the joint earnings. This allowance was subsequently raised to 30, and finally to 33½ per cent.

The company, on several occasions, received authority to increase their capital stock, but have not yet seen fit to do so.

In 1840, the bridge over the North Anna; and in 1847 that over the South Anna, were destroyed by fire. In both cases the thing was believed to be the work of an incendiary.

In 1850, the Company commenced to relay the road with a heavier rail, putting down a flat bar 24x7. This was completed two years afterwards. In 1853, the necessity of a still more substantial superstructure having been felt, they made a purchase of rails of the edge pattern, weighing 54 lbs. per yard. The work of re-laying with these has since steadily progressed, and may be expected to be completed at an early day.

With the Louisa (now the Virginia Central) Railroad Company, considerable difficulty has been experienced. On the opening of the first division of that road, in 1837, an arrangement was made by which it was to be operated by the R. F. & P. Co. At a subsequent date, this method was changed, the company deciding to run it on their own account. The charges for conveying passengers between the junction and Richmond still furnished matter for dispute, and on application to the Legislature, the Louisa Company were authorized to construct an independent line their own, which was opened in July, 1847. A long and expensive litigation as to the right of the latter to carry passengers on this part of their road, was decided in 1851, by a majority of the Supreme Court, in favor of the Virginia Central Company.

Annexed we give a statement of the Company's general account, on the 31st of March, 1855:

Cost of road and equipment.....	\$1,708,169
Surveys to Manassas.....	2,241
Bills and accounts receivable.....	154,471
Investments in other companies.....	73,797
Cash on hand.....	9,097
	\$1,947,776
Capital paid in by State.....	\$275,200
Do do by individuals.....	724,800
Sterling bonds, due 1860.....	324,005
Bonds due in 1856.....	60,000
Scrip dividends due in 1856 and 1869..	268,936
Bills and accounts payable.....	84,565
Profit and loss.....	210,269
	\$1,947,776

The following table shows the cost, gross and net earnings, and dividends of this company, from the opening of the first division to 1854. The report for last year has not yet been published.—The several years end on the 30th September.

Year.	Cost.	Gross Receipts.	Net Earn'gs.	Div'd.
1836....	\$795,253	\$43,655	\$18,458	2½
1837....	974,451	*85,249	*35,548	4
1838....	1,017,065	133,699	48,226	6½
1839....	1,055,186	*158,328	*31,013	none.
1840....	1,169,353	175,618	23,070	none.
1841....	1,259,984	185,867	59,743	none.
1842....	1,387,525	157,017	76,870	none.
1843....	1,421,600	161,606	99,285	none.
1844....	1,439,740	185,965	96,326	none.
1845....	1,454,371	188,925	98,856	3
1846....	1,458,219	200,689	108,776	7
1847....	1,474,004	212,048	122,208	7
1848....	1,478,916	178,412	81,890	7
1849....	1,483,199	217,100	100,330	7
1850....	1,509,959	268,669	164,041	7
1851....	1,531,238	243,732	123,584	7
1852....	1,531,238	237,891	93,991	7
1853....	1,531,238	249,691	116,795	7
1854....	1,690,618	246,641	116,685	7

* For eleven months only.

Railroads in Canada.

The total number of miles of railroad now open for traffic, in Canada, is 1,031, as follows: Grand Trunk, 404 miles; St. Lawrence and Champlain, 45; Montreal and N. Y., 28; Prescott & Ottawa 50; Coburg & Peterboro, 28; Ontario, Simcoe, and Huron, 95; Buff. Brant'd & God'ch, 80; Great Western and branches, 285; Erie and Ontario, 17. All these railways, except the St. Lawrence and Champlain, the New York and Montreal, and the Prescott and Ottawa, are on the five feet six inch, or "national or Canadian" gauge. The lines just mentioned are on the English narrow gauge. The amount of railway to be opened in 1856 is about 830 miles.

Extension of the Northern Central Railway.

The contractors for extending the line of this railway to Millersburg, on the one hand, and to tide-water at Canton, on the other, have already commenced their operations at various points. Six hundred men are now working on the extension of the road between Bridgeport and Dauphin, while at this end of the line Messrs. Burke and Lauman have one party of laborers employed in the neighborhood of Canton, and another about a mile north of the Bolton depot.

The entire line of route will be pushed forward energetically to its completion, as soon as the cessation of the right of way is satisfactorily arranged.

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by
THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
March 13th, 1856. 411

THE GREATEST INVENTION OF THE DAY.

BUSSER'S PATENT RAILROAD SIGNAL

for Draw-bridges, Curves, and Crossings, is now for SALE, and will be on exhibition for several days at the Merchants' Hotel, Courtlandt st., where the undersigned respectfully invites Railroad officers and travelers to call and see what may be done for their profit and safety. He also invites criticism from scientific Engineers and practical Machinists, as well as those who wish to embark in a profitable speculation. The Signal cannot be superseded by simplification or improvement. A. L. GERHART.

Lowell Machine Works.

WARREN ALDRICH (late ALDRICH, TYRE & Co.) manufacturer and furnish to order, at short notice,

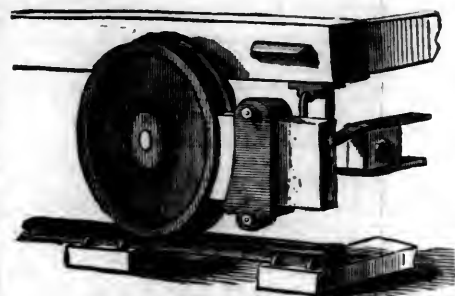
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of various description and with the latest improvements; as engine lathes, with swing 16, 20, 24, 28, 30, 36, 48 inches, up to 7½ feet, and bed made to turn any desirable length; planing machines, to plane 3½, 6, 8, 10, 12, 18, 20, 22 feet long, and 18, 24, 28, 36, 40, 48, 60 inches square; also hand lathes, compound planers, slotting and shaping machines, vertical drills, bolt cutters, and many other tools used in railroad repair and machine shops.

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411y

PAIGE'S ADJUSTABLE CAR BRAKE BLOCKS!



BY this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, ROSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

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New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

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will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a. m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

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BOOKLAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

1. tr. D. C. McCALLUM, General Sup't.

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SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a. m. 12 45, 3 and 11 p. m.

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From New York to Wilmington.....	\$15 50
do do Norfolk.....	6 50
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From New York to Cincinnati.....	\$13 50
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AND OTHERS INTERESTED.

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5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST; that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

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We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

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land, Me.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against THE
MAYSVILLE & LEXINGTON RAILROAD COMPANY
and others, defendants.—By virtue of the Judgment of the
Fayette Circuit Court, rendered in the above case, I will sell,
at public auction, on Wednesday, the 23rd day of April, 1856,
at the Public Square, in the City of Lexington, State of Ken-
tucky—

THE MAYSVILLE & LEXINGTON RAILROAD;

both that part of the road which is completed and the part
undisposed; embracing the road bed, and superstructure where
the same is laid down, the right of way, and all lots of land in
and adjacent to the road track, with all the buildings, stations,
car-houses, and improvements belonging to said railroad,
together with the franchises of the Maysville and Lexington
Railroad Company; all of which will be sold together, upon
credits of six, twelve, eighteen, and twenty-four months, in
equal instalments.

At the same time and place, I will also sell all the Lots of
Land belonging to said Company, and not adjacent to the rail-
road track—consisting of a lot of land in the City of Lexing-
ton, a tract of land in Fleming County, and town lots in Paris
and Millersburg, on credit of six and twelve months, in equal
instalments.

And at the same time and place, I will sell all the Locomo-
tives, Freight and Passenger Cars, Cross-Ties, &c.—consisting
in part of two locomotives and tenders of twenty-four tons
each, three passenger cars for sixty passengers each, one en-
tirely new and all in good order; seven box freight cars, eleven
platform cars, eleven tops for platform cars, five gravel cars,
and a top for another; fifteen pairs of car wheels, a hand car,
a lot of bridge and car irons; 9,500 cross-ties near Maysville,
1,390 of which are of locust and the remainder of oak; about
6,000 cross-ties along the line of the railroad between Lexing-
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and the tops for platform cars, are in Maysville, all the other
rolling stock is in Lexington, and the whole is of 4 feet 8½
inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the
purchase money, having the force of Judgments, with good
security, to be approved by me, of one of the following kinds,
to wit:—1. Personal security. 2. First Mortgage Bonds of
the Maysville and Lexington Railroad Company. 3. Mortgages
in real estate in counties near this railroad or the Covington
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Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of pur-
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LEXINGTON, Kentucky

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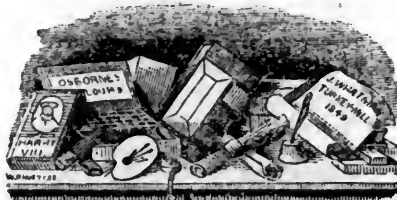
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Assistant Engineer, New York Navy Yard.

Mills, John B., Civil Engineer,

Sackett Harbor and Saratoga R. R., 24 William St., N. Y.

Septimus Norris,

Civil and Mechanical Engineer, Philadelphia.

Saml. & G. H. Nott,

Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,

Civil Engineer, Office 73 South 4th st., Philadelphia.

Prichard, M. B.,

East Tenn. and Georgia Railroad, Knoxville, Tenn.

W. Milnor Roberts,

Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,

Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

J. S. Sewall,

CIVIL ENGINEER.

ST. PAUL MINNESOTA.

Charles L. Schlatter,Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.**Straughan, J. R.,**

Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,Chief Engineer Bytown and Prescott Railway,
Prescott, Canada.**Steele, J. Dutton,**

Pottstown, Pa.

Charles B. Stuart,

Consulting Engineer, 23 William str., New York.

Edward W. Serrell,

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Trautwine, John C.,

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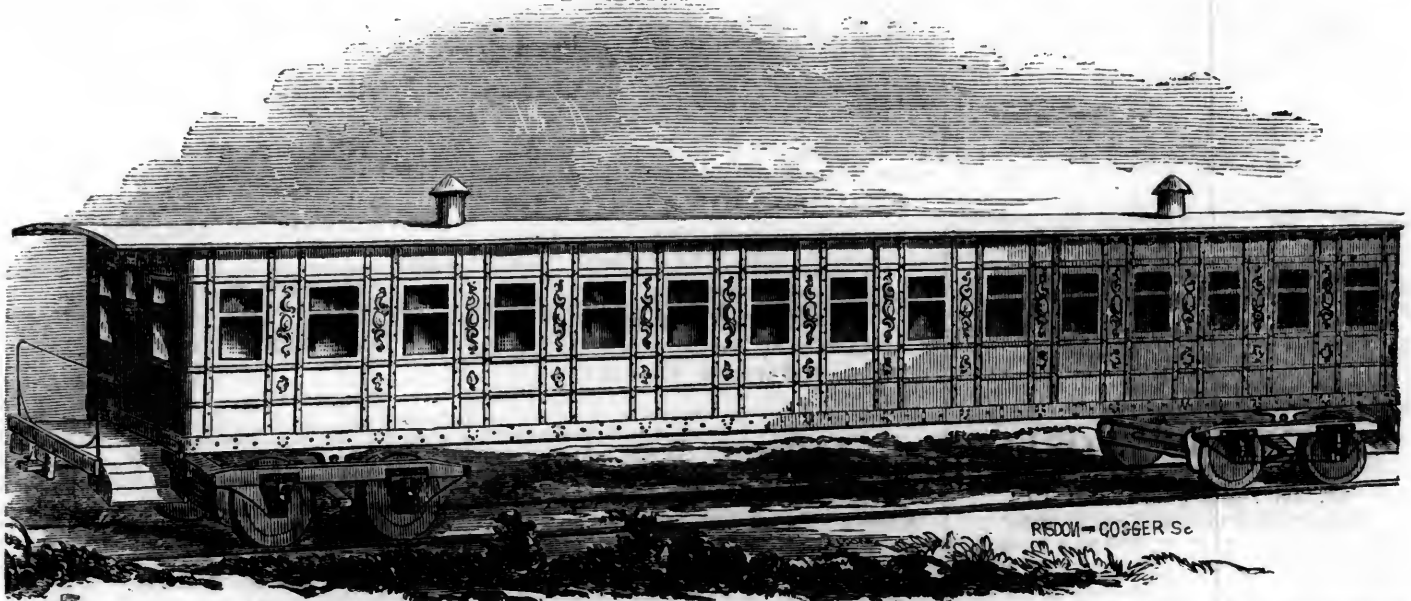
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AT A BARGAIN.****A**N excellent Transit made in DRESDEN and which cost
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alteration to adapt it to railroad purposes. Address Trans-
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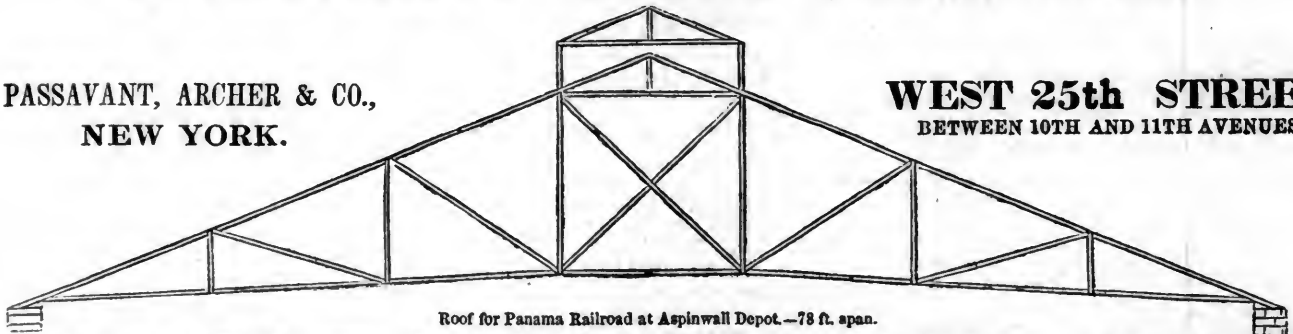
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PATENTED FEBRUARY 12TH, 1856.

THIS Oil Cup is self-feeding and provided with a transparent gauge tube—will feed as oil is wanted—is simple in construction—not easily put out of order—has no ground cocks—will last longer than any other cup in use. The best of references furnished as to its working.

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Weight 13½ tons.—4 ft. 8½ in. Gauge.—11½ in. Cylinder.—16 in. Stroke.—4 ft. Drivers.—New Tender on 6 wheels.—Engine in perfect repair.

The above will be found a very serviceable engine for graveling, switching, lumber and coal trains, and contractors' use, and can be had on excellent terms on application to

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6m27

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE
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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, March 22, 1856.

Railroad Management. ECONOMY IN OPERATING.

In writing on this subject last week, we were contented to call attention to a few of the "errors and fallacies" appearing in the Reform Reports. No attempt was made to conclude any elaborate analysis of the Reports, and even the mass of mistakes in them was allowed to pass unnoticed. Sufficient was written, however, to show beyond dispute, that great carelessness characterized their construction and a general indefiniteness the statement of those facts on which the future conduct of the companies should be predicated. We come now to the second part of our promise which was to notice the truly important and wise recommendations of the Reports.

The most valuable paper among those published touching railroad reform, is by Capt. Swift. We had occasion to notice it particularly, because of the evident ignorance of details exhibited by the writer. To suppose such ignorance in that quarter will in Massachusetts be called heresy; the more 's the pity. But we have shown the fact. Nevertheless, the suggestions contained in Capt. Swift's letter* will be found of great value as general propositions. And we shall therefore discuss them particularly.

The first cause assigned as having produced the present condition is: "Doing the work at less than

remunerating prices; more particularly in the freight department, and in the commutation system for passengers." The latter part of this proposition is discussed at some length, but without carefulness or justice, in the Report of the Investigating Committee of the Boston and Providence Railroad Company. Passing over the general looseness of the arguments we find the Committee recommending a total abolition of the commutation system as soon as it can be done without doing too great violence to the prejudices of their patrons. For the present they recommend an advance of 50 per cent. in the price of the commutation or season tickets. The system if not founded in error, has been attended with evil consequences. We are inclined to believe a season ticket arrangement entirely wrong. We do not see that it is a gain to the passenger, but it may be a source of loss to the stockholder, since it is the cause and cover of much deception in the passenger . . . the subordinates of the company. There is no sort of proof that the prices charged for this sort of work have been below the cost. These gentlemen know so little of their own business that we may be permitted to aid them in coming at an estimate of the expense of operating for this kind of traffic. Having a few figures based on the transactions of the Boston and Providence road, we shall limit our estimate to that company. Capt. Swift (page 16) has some argument on this instance. It is so unjust and totally erroneous that we might be excused for referring to it here. We have however given all the attention we can afford to the "errors and fallacies" of the statements and shall therefore only say that he bases his remark on the assumption that it costs the same to run the Dedham passenger trains that it does any other train on the Boston and Providence railroad, and that if the trains were double their present capacity it would cost no more to run them than it does now. However he declares that he uses "these figures merely for illustration!"

The Providence Railroad Investigating Committee informs us that there are from 700 to 800 commutation passengers carried over the road daily (page 7). We shall assume the number at 750. The greater portion of these live in Dedham. They go to Boston in the morning to attend the

daily calls of business and return to their homes at night. Besides the accommodations to these individuals and for this purpose, we suppose, a late forenoon and an early afternoon return train are demanded for their families who generally pay full fares. Add to this, the evening trains for theater or lecture, and we should suppose the public amply provided with the means of transit between Boston and Dedham. Three trains go and return in the morning and the same in the evening, making in all six round trips or twelve a day—120 miles besides the freight trains, which take a passenger car—and an accommodation train. This work can be done by one engine; it is indeed a common day's work. It should not run at a speed of more than 15 miles an hour. This will leave six hours in the middle of the day for repairs. The evening work renders necessary some extra wages for the men. We shall suppose the repairs to cost no more here than on the Reading railroad, and where we have no especial data shall take the estimate of similar duty on that road as guide. The items published in this connection last week, were for a trip of 93 miles; we shall call the 120 in the present instance one-third greater. The total rise on the road-way for which the estimate is made is 600 feet. We do not know the physical character of the Boston and Providence railroad between Boston and Dedham, but presume it is not such as to make the comparison of the two roads unfair. On the contrary, the forms thus prepared will be very just.

Wages of Engineer, 1 day (extra length)....	\$3.25
Do. Fireman do.	1.75
Do. Conductor, at \$600 per annum....	1.65
Do. Brakeman	1.25
Wood, 4.3 cords, at \$7.	30.10
Water used 6 M.galls. at 6c.	36
Oil for engine and tender 1.6 galls. at \$1.60.	2.56
Oil and grease for cars.....	54
Repairs of engine.....	11.64
Do. and refitting cars.....	11.68
Sundries for trains.....	5 12

\$69.90

The amount for depot hands, extra engines, &c., we do not reckon, as they are not due this branch of traffic which is in itself an extra item in the road operations. It must be borne in mind that we are estimating the special trains on account of commuters.

* Massachusetts Railroads, 1842—55.

By a paragraph on page 5 we find that each holder of season tickets paid 17-18th of a cent per mile traveled.

750 passengers going each way daily are 1,500 making one trip. Suppose one-half of this number go but an average of five miles, while the remaining one-half, who live in Dedham, go 10 miles. We shall have—

$$\begin{aligned} 750 \times 5 &= 3,750 \text{ miles, and} \\ 750 \times 10 &= 7,500 \text{ miles, or a total} \end{aligned}$$

of 11,250 miles for commutation passengers. Now we are told (page 4) that one-third of the travel between Dedham and Boston is transient; the same proportion we suppose to obtain for other points nearer Boston, so that an addition of one-third is to be added to the number of passengers carried one mile with season tickets making a total of 15,000 passengers carried one mile in those special trains, and for which duty the cost as per estimate is \$69.90 or 0.466 cent per passenger per mile. For 11,250 miles the company is receiving (page 5) 17-18th of a cent per mile, while for the remainder we are not so certainly informed, though, as the fare to Dedham is twenty-five cents (page 5), we judge it to be at least 2.5 cents per mile. We have therefore—

$$\begin{aligned} 11,250 \text{ miles at 17-18th cent per mile} &= \$106.25 \\ 3,750 \text{ do. } 2.5\text{c.} &\text{do. } = 93.75 \end{aligned}$$

$$\begin{aligned} \text{Gross earnings of trains} &\dots\dots\dots \$200.00 \\ \text{Less expenses of operating} &\dots\dots\dots 69.90 \end{aligned}$$

$$\text{Net earnings per diem} \dots\dots\dots \$130.10$$

—that is to say the commutation trains are paying the Boston and Providence Railroad Company a clear profit of nearly two hundred per cent. and they are seeking to rid themselves of the burden.

We are opposed to the system of season tickets, but we believe that in every case the price per mile then charged was sufficient to pay very handsomely, if the trains were properly managed. The passenger should purchase the ticket for each trip, but it should be at a commutation price. We shall not discuss the arguments brought forward to sustain this movement. They are obscure and unsatisfactory. They will enlist the favor of the stockholder for awhile, for they seem to promise him what he has long wanted to see, and they are moreover directed as a personal special plea for those unfortunate individuals. The officiating gentlemen have gone down on their knees to their customers and assured them of their conviction that among the constant passengers on the road there are few so deficient in self-respect, or a sense of justice * * * * that they would knowingly put their hands into the pocket of a fellow passenger, simply because he was a stockholder in the road, for the money to pay his fare." They are very pathetic over the widows and orphans and benevolent institutions. But we can assure these managers, that while they defend their mode of conducting business and without reforming that method, seek only to perform less work at an advanced price, they are but placing themselves in a position that will force them to act over again this scene. As to their roads, the depreciation of their rails and machinery has begun. "When iron begins to go, its destruction advances with accelerated speed." More pay does not in this case mean better work, but—the same blind manage-

ment continued—they will find a growing extravagance in expenditures. They will learn when it is too late, what they seem now destined never to learn, that there exists among them a *system of management* that is wrong.

We pass to the second difficulty noticed by Capt. Swift as a cause of depreciation; namely, "more mileage of trains than the business in the passenger department will justify." He thinks competition to be at the foundation of this error. We believe it is a charge founded in truth. This competition has sprung up in various ways. It exists even between those that are not rival routes, and took birth in the policy that invented the ridiculous season-ticket system. In one sense, all the roads out of Boston have constituted themselves competitors. *They have become rival routes to eligible house lots and cheap farms.* They have adopted every means in their power to secure the dense settlement of the country in which they lie. And the policy was wisdom itself, though now they repudiate the design. (Prov. R. R. Invest. Com. p. 4.)

There can be no doubt of their having been extravagant in the degree of accommodation they have afforded. But we fear that ere long the full amount will be demanded. Men do not recede in their wants; they are, on the contrary, continually more exacting of improvements.

Another sort of competition is direct as to route. Thus there are or have been, six distinct important lines between New York and Boston, namely:—1. via Fall River.

2. Providence and Stonington.
3. Worcester and Norwich.
4. New Haven.
5. Boston and New York Central.
6. Long Island R. R.

The first three are "boat lines" and are in the most positive competition both as to freight and passengers. They enjoy a share of management free of the follies of the Massachusetts system. And yet they do not extend to the public that accommodation they might. For through traffic they unitedly present the inconveniences of but a single line, leaving the termini at the same hours and arriving at nearly the same time.

The day lines perform in the same manner. Now who does not see that an immensely greater convenience would be afforded, should the companies, acting in harmony, operate these trains as if they were sent forward by the same road leaving their stations at different hours? The business interests of both cities would be benefitted by such a change. The companies would still be in competition, but the wire edge would be taken off their rivalry. The destruction to machinery consequent on undue speed would be avoided; connections would be made with through trains in both directions; whereas now travelers are dumped upon a crowded North river pier, forced to seek a hotel, or at the Eastern terminus are landed before light in a Boston depot. We specify this case simply for illustration.

While way traffic is receiving advantages from the multiplication of routes, the terminal business is only benefitted at the loss of the companies. Each road might run a less number of trains on the rival lines and the public would receive the same accommodation by the same number of opportunities as now, while the gross earnings to each

treasury would be the same and the expenditures of course less.

But we think Capt. Swift is wrong when he proposes "that no competition be entered into between any two roads for a business that does not in itself afford a reasonable profit;" this means simply a combination to force trade to pay; for without such a combination there must be a competition. Now the truth is, such combination is in violation of the duties owing the public by railroad companies, who have received valuable exclusive privileges from the people. If, owing to any peculiarities of location, construction, equipment, or management, one road can afford to transact a certain business at a cheaper rate than another running a parallel route at a distance, the public have a right to the advantage. They gave the privilege to build for the purpose of perfecting the means of transit. They cannot be called on to pay for the bad management of a company, whose agency they do not choose to employ. They are not responsible and should not be asked to suffer for the want of judgment in a company who have improperly constructed or equipped their road, or who unfortunately possess a disadvantageous location of line. The result of a policy of combination has led in Massachusetts to new rivalries and new combinations.

Capt. Swift names another cause of unnecessary expense in the excessive speed given to all trains. But we think he is behind the times somewhat.—There can be no doubt, that a slow speed will answer for season ticket or special passengers, going but a short distance out of town, and also for the freight; but the express and way trains on long roads have never been driven at a speed greater than was demanded by the requirements of the business. On the Massachusetts passenger roads, we do not believe it necessary to transport freight in daylight, and we know it is customary on some roads to run through freight at night when it can have a clear road without troubling the lighter trains. It should be a common practice, and the way freight could always be made up for night trains. On those roads doing the heaviest traffic, this would give relief to the day business, and afford facility for running a certain number of freight trains by daylight, at a low rate of speed, where such were absolutely demanded.

We should be glad to have some of the data on which the law is founded, that injury to the trains and track is in "duplicate ratio" of the velocity. We are aware that some Engineers so reckon it.—We think they are grossly wrong. There are cases undoubtedly in which it is true. The injury to all Railroad stock in the winter is much greater than in summer, and we have long sought to impress this fact on the minds of gentlemen connected with the management of roads in severe climates. The Providence Railroad Investigating Committee discuss the point very intelligently, and we hope to see its effects in their future operations.

The Massachusetts Railroad Companies will learn sooner or later, the true use and economy of the magnetic telegraph. No single track road can be worked economically without it; but with this cheap addition, has, we think, a greater business capacity than, in the ordinary chances of making time, is possessed by a double track road. We have not the data at hand on which this opinion is founded. We rest it on the experience of the

officers of the Erie Railroad Company, who are understood to have arrived at this conclusion.

"The very great increase in price of all materials required for use on the road, and in the repair shops;—the same of every description of mechanical labor, the very inferior quality of all iron rails, which have been manufactured in England for America for these five or six years past." These constitute a list of additional afflictions supposed to trouble Railroads. They are important, and are sufficient to justify a certain increase in the price of transportation. Just what that increase should be, it is in the power of the companies to determine.—We have not the means. We may, however, approximate the amount. By an examination of the Market Reports for the last five or six years, we observe an advance in the price of such materials as have been used in the repairs of machinery and the working of the roads, of fifty per cent. If we examine the accounts of any road, as the Providence for instance, we find the cost of repairs per mile run, not estimating depreciation, to be fifty per cent. greater than the same item six years ago. We suppose it nearly correct, therefore, to credit the advanced prices of materials and labor with this amount, which will be found to equal about three per cent. of the total working expenses. An increase, then, of three per cent. in fares may be reasonable as due this item.

But the increase of fares will not prevent depreciation—this can be accomplished only by keeping machinery in order, instead of repairing.

The managers of these companies have yet another important truth to learn. There can be no doubt that a greater price is paid for all the materials they use than would be paid for similar amounts by individuals buying for themselves. This does not impeach the honesty of the officers, but reflects on their shrewdness. It is an unfortunate fact that in some parts of the country the authority to buy is made a means of personal profit. It is to be feared that such practices obtain among men whose integrity in other transactions cannot be questioned. There is but one way to conduct the business. It is yet to be learned that the stockholders of any company are to be required to place unlimited confidence in the integrity or sagacity of an individual. In disposing of the funds of a company, the most public and open-handed dealing only, should, under any circumstances, be tolerated. Every article bought—if it be but a single pound of brass—should be purchased on contracts for which the bids have been received in response to advertisements that have been conspicuously paraded before the proper parties. It is to be regretted so little hope exists that such a course will be adopted by many companies in any part of the country, unless forced thereto by the stockholders. There is an interest opposed to such publicity—and an interest of the greatest power. Fuel contracts—metal contracts—oil and waste contracts are furnishing fortunes by commissions superadded to the first fees. They should be advertised certainly one year, and the entire direction of a road should see the bids inspected. But railroad managers, ever awake to saving their own muscles while subordinates are pocketing the profits, have not yet discovered the stupidity that governs their roads. They have farmed out the Express privilege to men who are coining money, that should be in the pockets of

stockholders, while to assist others in the same delightful process, they make private bargains for working material. They beg stockholders be patient and the public to aid them.

Mississippi Central Railroad.

The track has been completed to the temporary depot, about a mile and a quarter from the public square, and the passenger train came through to that point on the 21st ult. The first train of cotton, 360 bales, went off to-day. Quite a large amount has already accumulated there for shipment, and hundreds of bales are daily coming in. Freight is regularly coming through, and a warehouse is nearly completed for its reception. Altogether things exhibit quite a bustling and business appearance out there in the daily arrival and departure of cars and wagons. The company, we understand, are expecting twenty freight cars, platform and box style, which were shipped by flatboat from Cincinnati, last month.—*Holly Springs Times.*

Philadelphia, Wilmington and Baltimore Railroad.

From the annual report of this company, for 1855, we make the following extracts, showing their business for the past year, and their prospects for that just entered upon.

RECEIPTS AND EXPENDITURES FOR 1855.

Receipts of Philadelphia, Wilmington and Baltimore railroad company:

Passengers.....	\$692,790
Freight and express.....	191,613
Rents.....	14,144
Mails, &c.....	43,991
Total.....	\$942,449

Receipts, Newcastle company:

Passengers and table.....	\$64,730
Freight.....	2,205
Rents and miscellaneous.....	2,057
Total.....	68,994

Total receipts of both lines.....\$1,011,444

Expenses, P., W. & B. R. R., including maintenance of way, interest, rents, &c.....	\$571,325
Expenses, Newcastle line, including tax on capital and bonus to the State.....	97,271

Which deducted from revenue.... 668,597

Leaves.....	\$342,846
Less appropriated to renewal fund Phila., Wil. & Balt. railroad.....	\$50,000
Newcastle line.....	10,000
	60,000

\$282,846

Add balance of earnings expended on road from 1854, to August, 31, '55, and credited revenue, August, 1855.....	\$293,327
Surplus, Nov. 30, 1854.....	223,765

	\$799,940
Deduct stock dividend, Aug. 31, 1855....	600,000

And there is left a balance to credit of revenue, Nov. 30, 1855.....	\$199,940
--	-----------

The foregoing results show a gain of \$12,079 on the railroad line, and a loss of \$7,274 on the Newcastle line, in revenue, and an increase of \$7,641 on the railroad line, and an increase of \$7,890 on the Newcastle line, in expenses.

It will be seen that the gain on the railroad line has been in freight, while there has been a falling off in passenger receipts.

The foregoing net earnings of 1855, and surplus of last year have been expended to reduce the floating debt, and to pay for work on the Susquehanna bridge, Port Deposit Branch, and Principio Improvement, and for new work on the railroad,

and new cars and engines; and, in order that this amount, together with a portion of the earnings heretofore expended in the same way, might be represented in the capital stock of the company, a stock dividend of twelve per cent. was declared and paid on the first day of August last. The stock dividend amounted to six hundred thousand dollars.

The past year has not been productive of any material increase in revenue. Business travel generally has been small; and the high price of living and want of profitable employment have deterred many people from traveling for pleasure.—These two causes, together with the short session of Congress, have reduced the passenger business below that of the year before. As an illustration of the diminution of the pleasure travel, consequent upon the want of employment among mechanics and others, and the high price of living, it may be mentioned that the pleasure travel on the 4th of July week in 1855, fell short of that in 1854, more than ten thousand dollars. In a good season for business, the natural increase of population of the country would add to the passenger travel of the road at least six per cent. annually.

A considerable amount of work has been done the past year to the bridges and other structures, beyond ordinary repairs, and charged to expenses which properly might belong to renewals, or to construction. It will be good policy to close, as soon as possible, both these accounts, and charge all expenditures to the revenue, limiting them to the smallest sum requisite to keep the road and its appurtenances in good working order.

The floating debt incurred in rebuilding and improving the road, has been considerably reduced the past year, notwithstanding the heavy expenditures for new work, and will, before another year, it is hoped, be entirely paid off; when cash dividends can be resumed and continued, and the road kept in good order, if the business of the country is at all prosperous.

The necessity of withholding dividends for so long a period has been a matter of regret to the directors; but they could not look upon any other course as consistent with sound policy, so long as a large floating debt remained to be carried at a high rate of interest. It may not be understood by all of the stockholders that the road has been almost entirely rebuilt, and great additions made to its property, its depots, cars and engines, within the last five years; and that the expenditures incurred thereby have amounted to upwards of two millions of dollars. The company have met these expenditures by the assessments on new stock, by the sale of old materials, and some of the available property not required for the use of the road, by the net earnings of the road, and by incurring a floating debt. The available property now in the hands of the company, not sold, and not required for its use, at a low estimate amounts to more than enough to pay all the floating debt—but it cannot be disposed of at once, in such times as the present, at any price that would be consistent with sound policy to sell it for. Every possible effort is now making to sell all that is not required for the use of the road, even at a considerable sacrifice.

The most valuable piece of property of this kind is the Depot at the corner of Eleventh and Market streets, which has been readily rented for \$9,000 per annum. This property there is now a good prospect of selling. The other property for sale consists of stean boats, and vessels for the transportation of wood, real estate along the line of the road, stock in other companies, and improvement bonds not yet disposed of.

SUSQUEHANNA BRIDGE.

A large amount of work has been done on account of this structure. Nearly all of the stone has been got out for the abutments and piers, and some work done on the foundations. A temporary difficulty about the location of the bridge has been raised by another corporation, to remove which in its present shape would cost more than the exigency of the case justifies. It has therefore been deemed prudent to delay the work for the present.

Several causes have rendered a delay less objectionable at this time. First, the great stringency in the money market; second, the facility with which the new iron ferry-boat performs its work, being almost equal to a bridge; 3d, the experiments now being tried on suspension bridges and on iron structures promise to result in great improvements within a short time, so that, when the interests of the company require this important work to be finished, all the recent improvements can be availed of to render the structure one of the most perfect of its kind.

PRINCIPIO IMPROVEMENT.

The new arch on the solid land at this place has been completed, and the channel has been changed from the old bed to the new arch. The heavy embankment has also been pushed forward as rapidly as the work on this new arch and channel would allow. The whole of the remaining work is progressing as fast as is desirable, and will be finished probably within the current year.

PORT DEPOSIT BRANCH RAILROAD.

A large portion of the graduation and masonry of this branch has been completed; and at the rate it is now progressing, it will be ready for the rails by the 1st of April next. This branch will be an important acquisition to the main road, in the way of both freight and passengers.

DELAWARE RAILROAD.

Thirty-five miles of the rails of this road are now laid to Dover, the capital of the State, and trains will be run regularly thus far in a few days. The grading for the rest of the way to Seaford, on the Nanticoke river, is in a state of great forwardness. The rails for the whole line are made, and most of them delivered at Newcastle. This road will be seventy miles in length, and running, as it does, through the heart of Delaware, cannot fail to furnish our road a large amount of business when completed.

OTHER CONNECTIONS.

The branch of the Baltimore and Ohio road to Parkersburg, on the Ohio river, will be finished early in the ensuing summer, and will form a very valuable connection for South-western business.—The Central Ohio Railroad, connecting with the Baltimore and Ohio Railroad at Benwood, and forming a direct and valuable connection with Cincinnati and the whole West, is now in good order, having just completed the tunnel at Cambridge. The railroads at the South, connecting with our road, are constantly improving and extending their lines. Every improvement here will attract to the land route much travel, which now goes South by sea steamers; so that, as soon as the business of the country again revives and is prosperous, we shall have more channels from which we may reasonably expect an increase in revenue than ever before.

FINANCES.

By an examination of the Treasurer's statement for the last two years, it will be seen that there has been received during the last year, \$312,805 from assessments on new stock; and there has been expended on Susquehanna Bridge, Principio Improvement, Port Deposit Branch, and new works on the road, during the same time, \$527,404. Also, that the cash and cash items on hand were \$54,396 more, and the floating debt and amounts due sundry accounts, \$37,720 less than last year; from which it appears that the reduction of the liabilities of the company, and the excess of cash items on hand, were \$142,116, more favorable on the 30th of November, 1855, than on the 30th of November, 1854. To this is to be added \$32,393, of bills receivable on Newcastle and Frenctown account, for sale of steamboats, making in all \$174,500.

The amount still due from assessments on new stock, is \$116,833. As there will be but little new in the year 1856, as compared with '55, it is not that the liabilities of the company are diminished by the proceeds of new sales of available property of Directors.

President.

RAILROADS IN TENNESSEE.

Statement showing the number of miles of proposed railroads in Tennessee entitled to State aid; also the amount of aid to which each road is entitled; and also the number of miles of railroad completed in the State—prepared by R. G. PAYNE Esq., Commissioner of Railroads for the State.

WEST TENNESSEE.

RAILROADS IN TENNESSEE ENTITLED TO STATE AID, WHICH ARE BUILDING, OR WILL PROBABLY BE BUILT.	Whole length of road including Branches.	Length of road in Tennessee.	Whole length of finished road.	Length of finished road in Tennessee, including Branches.	Maximum grade of road, in feet per mile.	Whole amt of State aid granted by Tennessee.	Amount of State aid actually received.
Memphis & Charleston—Memph. to Stev'sont. Bridge aid granted.....	287	87	216	88	47	\$870,000	\$700,000
Mississ. and Tenn.—Memphis to Grenada. Bridge aid granted.....	96	9.8	15	9.8	..	100,000	60,000
Memphis and Ohio—Memphis to Paris. Bridge aid granted.....	130	130	40	40	40	1,300,000	400,000
Mobile and Ohio—Mobile to Cairo. Mississippi Central and Tennessee—Canton, Miss., to Jackson, Tenn. Bridge aid granted.....	527	118.5	160	..	..	100,000	60,000
North-western R. R., W. Tenn.—Nashville to Hickman. Bridge aid granted.....	171	77	..	..	68	770,000	..
						100,000	..
	470.3	431	137.8			\$5,103,000	\$1,318,000

MIDDLE TENNESSEE.

Nashville and Chattanooga—Nashville to Chattanooga, (in operation)*.....	151	151	151	106	\$1,500,000	\$1,500,000	
Tenn. & Alabama—Nashville to Hamburg.†	135	135	27	27	49	1,850,000	300,000
McMinnville and Manchester—Manchester to Tullahoma. (All graded.)†.....	34.5	34.5	..	..	..	845,000	300,000
Central Southern—Columbia to Decatur §.....	..	48.5	..	..	..	485,000	.....
Louisville & Nashville—Nashv. to Louisv. †.....	184	45.5	..	..	..	455,000	.....
Bridge aid granted .....	..	..	..	..	..	100,000	.....
Edgfield & Kent'ky—Nashv. to Hendes'n §.....	144	48	..	..	..	480,000	.....
South-western—McMinnville to Danville §.....	..	85	..	..	..	850,000	.....
Winchester & Alabama—Dachard's to Gunter'sville †.....	..	67	23	..	..	230,000	.....
Nashv. & North-west'n—In Middle Tenn.†.....	171	81	..	..	..	810,000	.....
		651.5	178	178		\$6,605,000	\$2,100,000

EAST TENNESSEE.

East Tennessee and Georgia.—Knoxville to Dalton, (incl. a fraction in Georgia)*.....	110	110	110	110	37	\$770,000	\$770,000
Bridge aid granted.....	..	..	..	..	..	100,000	100,000
East Tenn. & Virginia—Knoxville to Bristol. Knoxville and Charleston—Knoxville to State Line. Bridge aid granted.....	130	130	26	26	68	1,800,000	469,000
	55	55	..	..	..	300,000	300,000
	..	..	..	..	..	550,000	..
	..	..	..	..	..	300,000	..
Knoxville & Kent'ky—Knoxv. to Danville. Bridge aid granted.....	60	..	..	..	..	600,000	..
	..	..	..	..	..	100,000	..
Western and Charleston—Athens to Blue Ridge road. Cleveland and Chattanooga—Cleveland to Chattanooga. Cincinnati, Cumberland Gap and Charleston—Paint Rock and Cumberland Gap. Bridge aid granted.....	..	30	..	..	..	300,000	..
	..	30	..	..	..	800,000	..
	94	..	..	..	..	910,000	..
	..	..	..	..	..	200,000	..
	509	186	136			\$5,760,000	\$1,639,000

RECAPITULATION.

	Miles of Road in Tenn.	Miles Finished.	State Aid Granted.	State Aid Received.
West Tennessee.....	470.3	137.8	\$5,103,000	\$1,318,000
Middle Tennessee.....	651.5	178	6,605,000	2,100,000
East Tennessee.....	609	186	5,760,000	1,639,000
	1,630.8	451.8	\$17,468,000	\$5,057,000

NOTE.—Roads marked thus (*) are finished. Roads marked thus (†) are in an active state of construction, and progressing rapidly to completion. Roads marked thus (‡) have portions of their lines under contract, and some work going on. Roads marked thus (§) have organized with a determination to go on to completion, but have not let their work to contract.

NOTE.—In the estimate of finished roads, the Nashville and Chattanooga lateral to Shelbyville, of eight miles, was inadvertently omitted. This error corrected will make the Finished Roads in Tenn. 459.8 miles—the whole length of the Nashville and Chattanooga Road and Branch, being 159 miles. The State aid per mile granted to and received by this road, is \$9,433.

In addition to the roads marked as finished and in operation, many of the companies, particularly those marked with a (†) have large portions of their lines graded, and will lay the track upon them during the present year.—But I have no means of ascertaining the exact amount of graded road on each, as I have made a personal examination only of those lines making application for State Bonds.

Part of the Nashville and Chattanooga road, in Alabama, is placed as being in Tennessee.

Abstract of the Returns from the New York Railroads for the year 1855.

NAME OF RAILROAD.	LENGTH. Miles.	AUTHOR- IZED CAPITAL.	CAPITAL PAID IN.	FUNDED DEBT.	FLOAT- ING DEBT.	TOTAL DEBT.	COST.	GROSS RECEIPTS.	EXPENSES.	NET EARNINGS.	RATE OR DIVID- END.	INTER- EST PAID.
Albany Northern.....	32 3/4	\$600,000	\$439,064	\$1,576,098	\$50,000	\$1,625,098	\$1,810,696	\$117,716	\$107,812	\$9,901	None.	\$34,457
" and West Stockbridge.....	38	1,000,000	1,000,000	None.	320,835	320,835	1,930,966	828,318	219,901	103,327	6	33,327
" and Susquehanna.....	33	1,400,000	221,157	None.	9,000	9,000	222,016	828,318	219,901	103,327	None.	None.
Black River and Utica.....	33	1,500,000	613,330	182,000	156,859	317,859	974,823	725,262	112,402	+13,869	None.	9,640
Bloomingburg and Corning.....	14 1/2	250,000	260,000	229,000	8,007	223,007	496,038	40,223	Not known.	Not known.	None.	14,350
Brooklyn City.....	17 1/2	1,000,000	902,660	None.	None.	None.	814,344	332,116	Not given.	Not given.	3 1/2	None.
Buffalo and State Line.....	81	1,300,000	1,300,000	1,000,000	40,000	1,040,000	2,494,364	679,750	323,987	356,768	10	68,223
" Corning and New York.....	100	1,865,600	1,487,874	1,476,400	24,783	1,500,183	2,819,096	172,476	106,143	66,338	None.	61,379
" and New York City.....	91	1,500,000	784,439	1,720,000	867,849	2,587,849	3,401,868	288,392	536,403	31,896	None.	None.
Canadaigua and Elmira.....	46 1/2	1,600,000	434,114	800,000	122,393	922,393	1,276,796	174,089	104,538	69,506	None.	41,320
" and Niagara Falls.....	100 1/2	1,500,000	1,315,000	2,170,000	109,854	2,279,854	3,495,832	*58,766	*70,839	48,646	None.	None.
Cayuga and Susquehanna.....	34 1/2	1,500,000	637,000	630,000	6,089	636,089	450,000	135,433	86,754	None.	8	37,711
Chemung.....	17 1/2	380,000	762,500	70,000	None.	70,000	800,000	216,638	132,652	82,991	8	4,900
Elgin Avenue.....	5	200,000	133,132	211,000	39,866	250,866	310,902	89,432	38,902	530	None.	None.
Flushing.....	7 1/2	200,000	175,000	8,842,000	408,362	9,250,362	12,737,898	1,812,087	1,208,141	603,946	None.	16,689
Hudson River.....	144	4,000,000	3,738,466	None.	None.	None.	175,000	44,873	34,647	10,226	None.	611,814
" and Boston.....	17	175,000	175,000	None.	25,416	668,919	2,555,986	301,793	185,331	116,462	None.	35,037
Long Island.....	97 3/4	3,000,000	1,875,148	643,533	None.	14,462,742	28,623,913	6,063,651	3,401,455	3,162,126	8	951,110
New York Central.....	55 1/2	24,164,860	21,164,860	14,463,712	1,061,540	25,902,540	33,743,317	5,488,992	2,680,328	2,608,665	None.	1,793,993
" and Erie.....	46 1/2	10,500,000	5,717,100	8,074,301	995,468	4,069,766	8,768,203	1,086,577	891,461	224,126	None.	298,031
" and Harlem.....	12 1/2	2,000,000	1,633,022	4,173,000	230,374	4,406,874	5,470,714	620,163	381,390	135,751	None.	56,410
Niagara Falls and Lake Ontario.....	..	200,000	188,620	201,000	30,290	230,290	333,729	None.	None.	None.	None.	None.
Ogdensburg, Clayton, and Rome.....	36 1/2	300,000	397,238	196,500	67,537	76,237	438,822	None.	None.	None.	None.	3,637
Oswego and Syracuse.....	29 1/2	2,000,000	467,200	196,500	20,181	216,681	723,683	126,540	26,385	58,942	3 1/2	14,566
Potsdam and Watertown.....	25 1/2	600,000	554,270	140,000	None.	140,000	896,423	+241,149	128,300	112,750	None.	12,217
Rensselaer and Saratoga.....	25 1/2	800,000	554,270	150,000	26,118	176,118	693,961	42,048	19,236	22,792	None.	37,465
Rochester and Genesee.....	21	300,000	300,000	109,000	None.	109,000	480,020	71,909	49,820	22,089	5	7,805
Sackett Harbor and Saratoga.....	18	600,000	234,100	400,000	29,974	429,974	629,729	None.	None.	None.	None.	7,880
Sackett Harbor and Ellensburg.....	18	175,000	167,485	250,000	66,810	306,810	389,310	10,702	11,903	None.	None.	23,000
Second Avenue.....	9	800,000	357,000	261,000	109,141	370,141	425,320	174,883	66,623	112,253	8	17,500
Sixth Avenue.....	3 1/2	750,000	750,000	4,780	None.	4,780	786,658	212,436	163,225	47,221	3 1/2	14,763
Syracuse and Dinghampton.....	79 3/4	1,200,000	788,363	1,376,350	203,454	1,579,804	2,222,777	292,475	217,838	74,637	None.	605
Third Avenue.....	6 1/2	1,170,000	1,170,000	40,000	None.	40,000	1,170,000	81,659	62,008	29,651	7	6,885
Troy and Greenbush.....	2	275,000	275,000	None.	None.	None.	224,796	81,659	62,008	29,651	None.	42,420
" and Boston.....	27 1/2	1,000,000	437,830	707,000	17,344	724,344	731,432	156,363	101,179	55,184	None.	44,797
" and Bennington.....	5 1/2	80,000	74,100	160,500	13,015	173,515	1,106,822	None.	None.	None.	None.	10,730
" and Rutland.....	17 1/2	325,000	249,939	Not given.	255,979	Not given.	2,063,063	R.R. leased to Albany Northern Railroad.	231,900	172,474	None.	62,838
Watertown and Rome.....	96 1/2	1,500,000	1,370,378	545,000	None.	545,000	2,063,063	404,374	231,900	172,474	3 1/2	None.
Totals.....	2792 1/2	\$88,231,460	\$67,405,890	\$71,642,804	\$6,222,566	\$77,865,370	129,905,314	\$20,215,988	\$11,401,083	\$8,630,451	.....	443,457

* For three months.

† For nine months.

‡ Including the Saratoga and Schenectady R. R. which is leased.

§ Exclusive of repairs to track.

Note.—This table does not include 14 miles of the New York and New Haven, and 8 of the Williamsport and Elmira roads situated in the State of New York. On the other hand, nearly an equal length of the Erie road is within the limits of Pennsylvania.

Branches are included in this statement, but not double track nor sidings.

It will be seen that four roads in progress are also included in the table of cost, debts, &c. Roads whose construction is considered uncertain are necessarily omitted.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.]

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence....	140	1,538,100	2,973,700	6,019,929	470,647	90,797	6	68	South Western, Ga.....	92	1,097,496	465,500	1,624,920	253,306	141,168	8	----	
Androscoog & Kennebec....	55	642,343	1,473,080	2,245,020	190,605	12,807	none	18	Tennessee and Alabama....	30	244,458	-----	679,906	In progr.	-----	-----	-----	
Androscoog.....	20	91,192	232,193	343,317	29,396	12,807	none	20	Tennessee and Missis....	-----	170,931	-----	175,740	In progr.	-----	-----	-----	
Kennebec & Portland....	56	1,114,725	1,661,236	2,470,600	259,330	124,038	6	87 1/2	Memphis and Charleston..	288	2,108,177	958,275	3,563,862	176,484	102,016	-----	-----	
Portland, Saco, & Portland....	51	1,367,000	119,237	1,486,237	259,330	124,038	6	87 1/2	Mobile and Ohio.....	527	2,300,000	1,310,666	3,660,991	In progr.	-----	-----	-----	
Boston, Concord, & Montreal....	93	1,908,093	1,059,512	2,771,310	233,234	120,834	-----	-----	Miss. Central.....	188	642,534	-----	628,303	In progr.	-----	-----	-----	
Cheshire.....	35	2,085,925	809,313	3,179,687	350,221	143,665	2	-----	N.O., Opelousas & G.W....	350	1,309,428	476,143	1,825,812	In progr.	-----	-----	-----	
Concord.....	63	1,485,000	none	1,412,576	329,744	158,632	8	83 1/2	Victoria, Shreveport & Tex.	-----	111,760	none	107,895	In progr.	-----	-----	-----	
Northern, N. H.....	52	2,768,400	none	3,016,633	570,529	138,299	2 1/2	41 1/4	East Tennessee and Ga....	111	1,000,000	1,500,000	2,500,000	In progr.	-----	-----	-----	
Con't & Passumpsic Riv....	61	1,048,145	787,608	1,780,062	162,657	55,173	none	-----	East Tennessee and Va....	16	625,425	928,693	1,533,781	In progr.	-----	-----	-----	
Rutland & Burlington....	120	2,233,376	2,662,396	5,378,428	394,971	214,793	none	-----	Nash. and Chattanooga....	151	2,319,330	1,497,051	3,843,694	316,090	112,177	none	-----	
Vermont Central.....	27	1,830,000	325,635	2,158,595	439,754	140,377	6	-----	Covington & Lexington....	93	431,091	169,299	655,363	90,930	34,864	-----	-----	
Boston and Lowell....	83	4,076,974	150,000	4,179,535	854,426	339,060	6	92 1/2	Lexington & Big Sandy....	29	-----	-----	428,057	In progr.	-----	-----	-----	
Boston and Maine....	74	2,240,300	1,518,671	3,463,118	69,917	8,740	none	4 1/2	Lexington and Danville....	-----	540,117	61,626	670,463	In progr.	-----	-----	-----	
Boston and N.Y. Central....	55	3,160,000	399,132	3,877,154	558,671	219,689	65	-----	Louisville and Frankfort....	65	608,239	669,061	1,589,566	244,014	96,902	0	-----	
Boston and Providence....	48	4,500,000	655,428	4,865,419	1,008,004	404,461	6 1/2	89	Atlantic & Gt. Western....	254	866,939	77,294	613,231	In progr.	-----	-----	-----	
Boston and Worcester....	67	681,690	290,598	997,252	119,221	65,527	3	29 1/2	Bellevue and Ind.....	118	1,881,698	1,260,612	2,806,821	238,010	114,592	none	30	
Cape Cod.....	62	1,591,110	273,241	1,862,244	286,563	103,787	5 1/2	47 1/2	Cleveland and Erie.....	95	-----	-----	4,546,133	1,162,601	557,905	9	102	
Connecticut River.....	60	2,583,400	2,947,737	4,621,016	647,281	306,998	-----	43 1/2	Clev., Col., and Cin....	141	4,473,721	374,127	4,847,848	1,124,629	736,272	396,936	10	70 1/2
Eastern, Mass.....	67	3,540,000	153,700	3,765,998	681,163	225,071	8	70	Cleveland and Toledo....	87	-----	-----	2,676,426	2,689,301	628,533	In progr.	-----	-----
Fitchburg.....	14	600,000	16,000	654,603	191,871	55,877	8	82	Clev. and Mahoning....	103	-----	-----	2,686,770	2,516,162	4,818,153	450,215	255,868	62 1/2
Nashua and Lowell....	21	500,000	none	533,953	193,401	56,533	6 1/2	-----	Cin., Hamilton & Dayton....	80	2,100,000	1,464,364	2,961,978	483,620	-----	-----	60	
N. Bedford and Taunton....	57	3,015,100	292,650	3,862,940	653,499	295,738	6	83 1/2	Cin., Wm. & Zanesville....	131	1,120,450	1,131,265	2,326,459	In progr.	-----	-----	18	
Old Colony and Fall River....	77	2,232,541	1,033,670	3,209,727	268,726	87,313	none	9 1/2	Columbus and Xenia....	55	1,454,550	149,000	1,481,732	356,366	187,518	10	86 1/2	
Vermont and Mass.....	156	5,150,000	5,966,420	10,495,965	1,669,673	633,013	7	92	Dayton, Xen., & Belpre....	69	437,838	422,658	860,496	In progr.	-----	-----	-----	
Worcester and Nashua....	46	1,141,000	205,565	1,351,271	294,780	75,760	2	44	Dayton and Michigan....	140	1,076,692	393,011	1,185,826	In progr.	-----	-----	-----	
Providence and Worcester....	43	1,510,020	338,481	1,866,696	311,430	138,057	-----	72 1/2	Eaton and Hamilton....	42	448,411	835,994	1,346,973	113,859	63,256	24 1/2	-----	
Providence and N. Haven....	72	2,359,000	939,000	3,313,932	730,012	552,799	10	123	Little Miami.....	55	2,963,921	1,171,785	3,648,172	681,582	336,708	90	-----	
Providence and Fishkill....	123	1,845,610	2,090,124	4,060,860	268,685	119,611	none	-----	Mad River and L. Erie....	205	2,451,650	2,572,932	4,446,601	Recently opened.	-----	-----	17	
Housatonic.....	110	2,000,000	474,177	2,422,066	330,792	19,351	none	4	Central Ohio.....	138	1,520,927	3,485,076	4,283,443	111,626	662,117	9	66	
Naugatuck.....	62	1,031,800	573,995	1,577,167	238,266	341,667	30	-----	Ohio and Penn.....	187	2,451,700	3,219,000	5,670,700	111,626	662,117	9	66	
N.Y. and N. Haven....	50	2,992,450	2,264,656	4,906,784	985,025	217	none	30	Pittsburg, Mayfield & Cin....	50	-----	-----	3,432,882	In progr.	-----	-----	-----	
N.Y. and N. London....	62	738,258	735,165	1,450,318	103,988	217	none	-----	Sandusky, Munroe & Newk....	127	1,350,000	2,206,357	3,552,357	328,958	164,479	none	-----	
N.London, W. & Palmer....	66	509,200	1,073,673	1,594,383	124,044	66,331	none	33	Scioto & Hocking Valley....	135	403,975	50,050	888,858	In progr.	-----	-----	-----	
Norwich and Worcester....	66	1,122,300	873,489	2,597,113	304,236	88,458	2 1/2	33	Springf., Mt. Vernon & P....	113	1,000,000	950,000	-----	In progr.	-----	-----	-----	
Norwich and N. Haven....	32	480,005	1,625,098	1,840,605	117,716	9,904	-----	-----	Tol., Walsh & St. Louis....	242	2,500,000	4,530,000	-----	In progr.	-----	-----	-----	
Black River and Utica....	35	643,330	317,559	974,322	In progr.	-----	-----	-----	Cin., Log. and Chicago....	255	4,196,079	1,060,125	2,080,433	In progr.	-----	-----	8	
Buffalo, Conn. and N. Y....	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none	-----	Evansville & Crawfordsv....	109	706,945	1,177,596	1,844,641	127,400	64,652	7	59	
Buffalo and N. Y. City....	92	798,439	2,557,849	3,401,868	288,392	31,896	none	-----	Ind. and Cincinnati....	88	1,213,723	1,472,859	2,178,461	556,012	193,142	7	59	
Buffalo and St. Line....	49	1,300,000	1,040,000	2,494,364	679,760	355,763	10	-----	Indiana Central.....	66	611,400	1,281,179	1,907,911	850,176	134,375	47	-----	
Canandaigua and Elmira....	47	434,111	922,393	1,376,790	174,089	69,506	-----	-----	Ind., Clev. & Pittsburg....	98	834,157	1,011,971	1,671,544	-----	206,544	94,318	none	20
Canandaigua & Niagara Fd....	95	1,315,000	2,279,854	3,495,832	135,433	48,649	none	36	Jeffersonville.....	64	1,014,252	694,000	-----	206,544	94,318	none	20	
Canandaigua & Susquehanna....	35	687,000	506,689	1,187,562	135,433	48,649	none	36	Lafayette and Indianapolis....	64	-----	-----	2,237,331	-----	-----	-----	-----	
Cayuga & Susquehanna....	144	3,765,468	9,250,362	12,737,898	1,812,087	608,946	none	31 1/2	Madison and Indianapolis....	87	1,647,500	1,589,851	3,237,331	645,827	371,402	none	10	
Hudson River.....	155	8,175,148	6,989,949	15,555,956	301,793	116,462	none	31 1/2	New Albany and Selem....	288	2,555,121	5,281,948	6,648,189	150,000	90,000	none	15	
Long Island.....	534	24,154,560	14,462,742	28,622,918	6,563,581	3,162,126	8	92	Peru and Indianapolis....	73	-----	858,314	-----	150,000	90,000	none	15	
New York Central.....	464	10,024,958	25,126,669	33,439,431	6,488,993	2,627,118	none	56 1/2	Terre Haute and Ind....	73	974,800	604,355	1,502,166	287,512	189,702	10	95	
New York and Erie.....	135	5,717,100	4,069,769	8,755,293	1,655,677	234,126	none	20	Chicago and Rock Isl'd....	182	3,141,500	2,387,156	5,214,152	In progr.	-----	-----	-----	
New York and Harlem....	118	1,633,022	4,404,874	5,470,714	520,153	185,754	none	2 1/2	Chicago and St. Louis....	229	-----	-----	1,077,312	In progr.	-----	-----	-----	
Northern, N. Y.....	35	399,000	216,681	723,683	126,540	59,982	3 1/2	73 1/2	Chic., St. Paul & P'd du Lac..	178	2,300,000	1,325,000	3,625,000	-----	-----	-----	-----	
Oswego and Syracuse....	29	467,200	294,189	723,683	126,540	59,982	3 1/2	73 1/2	Galena and Chicago Ind....	208	4,334,800	1,189,304	6,866,268	1,506,710	942,231	17	111 1/2	
Pottsdam and Watertown....	25	610,000	140,000	896,423	241,149	82,600	7	-----	Illinois Central.....	907	1,419,440	18,014,256	17,698,099	1,532,118	-----	-----	97 1/2	
Pennsylvanian & Saratoga....	45	500,000	395,600	719,600	71,969	21,059	none	-----	Peoria and Oquawka....	73	569,859	81,426	1,388,342	In progr.	-----	-----	-----	
Saratoga and Whitehall....	20	763,369	1,578,804	2,272,777	159,484	22,503	none	-----	Ohio & Miss. (Wat. Div.)....	147	1,780,295	2,392,403	4,870,586	Recently opened.	-----	-----	-----	
Syracuse & Binghamton....	27	437,830	377,076	1,099,822	166,363	55,184	-----	-----	Terre Haute and Alton....	173	2,281,420	1,256,000	3,537,424	In progr.	-----	-----	-----	
Troy and Boston.....	97	1,370,373	700,979	2,068,063	404,374	172,474	3 1/2	73 1/2	Detroit and Milwaukee....	185	838,000	1,128,964	1,966,969	In progr.	-----	-----	-----	
Watertown and Rome....	50	1,000,000	1,177,376	2,177,376	124,301	44,825	none	-----	Mich. Central.....	282	6,021,916	6,132,023	10,300,147	2,215,283	879,656	93 1/2	-----	
Belvidere and Delaware....	94	1,500,000	4,763,184	6,263,184	69,673	61,700	none	122	Mich. South'n & N. Ind....	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	93 1/2	
Camden and Amboy.....	60	240,125	1,269,223	1,499,185	69,673	61,700	none	122	Green Bay, Mil. & Ch....	155	764,076	442,726	1,193,768	In progr.	-----	-----	-----	
New Jersey.....	31	3,253,925	798,696	4,306,338	824,032	404,447	10	-----	Milwaukee and Miss....	106	1,826,428	2,467,889	3,678,757	601,843	417,443	17	84	
New Jersey Central....	75	2,000,000	1,632,085	3,506,226	378,145	180,796	7	-----	Milwaukee & Water'n....	72	354,861	132,000	514,238	In progr.	-----	-----	-----	
Morris and Essex.....	62	1,155,715	351,500	1,549,022	233,596	99,377	6	-----	Milwaukee and Horicon....	92	-----	-----	31,000	In progr.	-----	-----	-----	
Alleghany Valley.....	44	1,637,867	342,664	1,985,317	Recently opened.	-----	-----	-----	Milwaukee & La Crosse....	61	1,351,832	532,131	1,883,963	In progr.	-----	-----	-----	
Cataw. Wil. & Eri....	63	1,700,000	1,940,000	3,640,000	219,253	52,												

The following quotations are ex-interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	----	85
Buffalo and State Line	500,000	Do, inconvertible	7	April, October.	"	1866	----	98
Bellefontaine and Indiana	600,000	Do, convertible	7	Jan'y, July	"	1866	----	92
Do, do.	200,000	Real estate, convertible	7	Jan'y, July	"	1855	----	92
Do, do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859	----	90
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divsrs	"	1861-64	----	77
Do,	800,000	2d do. inconvertible	7	March, Sept.	"	1865	----	75
Cincinnati, Hamilton, and Dayton ..	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	----	91
Do, do.	465,000	2d do. do.	7	May, Novemb.	"	1850	80	85
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862 ..	7	Jan'y, July	"	1868	----	77
Cincinnati, Wilmington, and Zanesville	1,300,000	Do, convertible	7	May, Novemb.	"	1862	----	87
Cleveland, Painesville, and Ashtabula	567,000	Do, inconvertible	7	Feb'y, August.	"	1861	90	95
Cleveland and Pittsburgh	800,000	Do, convertible	7	Feb'y, August.	"	1860	----	93
Do, do.	1,200,000	Do, on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do, inconvertible	7	Feb'y, August.	"	1863	86	89
Chicago and Mississippi	800,000	Do, conv. till 1857	7	April, October.	"	1862-72	----	86
Do, do.	1,200,000	Do, inconvertible	7	April, October.	"	1862-72	----	86
Covington and Lexington	400,000	Do, do.	6	April, October.	"	1862	73	76
Do, do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1853	----	66
Delaware, Lackawanna, and Western.	1,500,000	1st mortgage, do.	7	Jan'y, October.	"	1875	----	91
Port Wayne and Chicago	1,250,000	Do, conv. till 1868	7	Jan'y, July	"	1873	79	82
Galena and Chicago	2,000,000	Do, inconvertible	7	Feb'y, August.	"	1863	97	99
Do, do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	80	90
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	86	90
Green Bay, Milwaukee, and Chicago ..	300,000	Do, convertible	8	10 April, 10 Oc.	"	1863	93	96
Jeffersonville	400,000	Do, 2d sec. inconv.	7	April, October.	"	1873	----	75
Indiana Central	600,000	Do, convertible	7	May, Novemb.	"	1866	----	90
Indianapolis and Bellefontaine	450,000	Do, do.	7	Jan'y, July	"	1860-61	----	92
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do, conv. till 1857	7	March, Sept.	"	1866	----	92
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis ..	3,400,000	1st mortgage, conv. till 1859 ..	7	Feb'y, August.	"	1865	76	78
Little Miami	1,500,000	Do, inconv.	6	2 May, 2 Nov.	"	1853	79	82
Michigan Central	1,000,000	No mortgage, convertible	8	April, October.	Boat.	1860	99	100
Do, do.	600,000	Do, do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96	97
Do, do.	650,000	Do, 2d do.	8	April, October.	"	1863	94	95
Do, do.	1,250,000	Do, 3d do.	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do, 1st section	8	April, October.	"	1858-62	----	----
Do, do.	2,325,000	Do, oth. sec. con. till 1858	10	May, Novemb.	"	1864-75	----	----
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	92	95
Ohio and Indiana	1,000,000	Do, do.	7	Feb'y, August.	"	1867	----	90
Ohio and Pennsylvania	1,750,000	Do, do.	7	Jan'y, July	"	1865-66	94	97
Do, do.	2,000,000	Income, convertible	7	April, October.	"	1872	80	82
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860 ..	6	Jan'y, July	Phila.	1850	94	97
Scioto and Hocking Valley	300,000	Do, 1st sec. conv.	7	May, Novemb.	N.Y.	1861	83	84
Staubenville and Indiana	1,500,000	Do, convertible	7	Jan'y, July	"	1865	----	78
Terre Haute and Indianapolis	600,000	Do, do.	7	March, Sept.	"	1866	----	----
Terre Haute and Alton	1,000,000	Do, do.	7	Feb'y, August.	"	1862-77	76	80
Do, do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	76	78

The following quotations include the accrued interest.

NAMES OF COMPANIES.	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked
Baltimore and Ohio.....	2,500,000	Mortgage.....	6	April, October	Balt.	1885	84	81 1/2
Do. do.....	1,128,500	Do.....	6	Jan'y, July	Balt.	1875	86 1/2	88
Chicago and Rock Island.....	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	93	94
Erie Railroad.....	3,000,000	1st mortgage.....	7	May, Novemb.	"	1867	107 1/2	"
Do.....	4,000,000	2d mortgage, convertible	7	March, Sept...	"	1859	95 1/2	96
Do.....	6,000,000	3d mortgage.....	7	March, Sept...	"	1883	93 1/2	94
Do.....	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August...	"	1875	90 1/2	90 1/2
Do.....	4,351,000	Convertible, Inscription.....	7	Feb'y, August...	"	1871	83 1/2	83 1/2
Do.....	3,500,000	Convertible.....	7	Jan'y, July.....	"	1862	86 1/2	88
Hudson River.....	4,000,000	1st mortgage, Inscription.....	7	Feb'y, August...	"	1860-70	99 1/2	"
Do.....	2,000,000	2d do. do.....	7	16 June, 16 Dec	"	1860	87 1/2	89
Do.....	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	68	68 1/2
Illinois Central.....	17,000,000	Mortgage, inconvertible.....	7	April, October...	"	1875	90	90 1/2
Do. (Free Land).....	3,000,000	M'ge 345,000 acrs-priv 7 shares	7	March, Sept...	"	1860	90	90 1/2
Michigan Southern.....	1,800,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	92 1/2
New York and Harlem.....	1,800,000	Do. do.....	7	May, Novemb.	"	1861-72	84 1/2	85 1/2
New York and New Haven.....	750,000	No mortgage, do.....	7	June, Decemb.	"	1855-60	"	"
New Haven and Hartford.....	1,000,000	1st mortgage, do.....	6	Jan'y, July.....	"	1873	"	97 1/2
Northern Indiana.....	1,000,000	Do. do.....	7	Feb'y, August...	"	1861	91	92
Do. Gooschen Branch.....	1,500,000	Do. do.....	7	Feb'y, August...	"	1868	85 1/2	86 1/2
New York Central.....	8,287,000	No mortgage, do.....	6	May, Novemb.	"	1883	88 1/2	89 1/2
Do. do.....	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	102	102 1/2
Panama, 1st issue.....	900,000	Convertible till 1856	7	Jan'y, July.....	"	1866	105	106
Do. 2d do.....	1,478,000	Do. till 1858	7	Jan'y, July.....	"	1866	105	106
Reading, issued 1843.....	1,573,000	Mortgage, inconvertible	6	Jan'y, July.....	Phila.	1860	"	"
Do. do. 1844, '48, '49.....	1,300,000	Do. convertible	6	Jan'y, July.....	"	1860	92	94
Do. do. 1849.....	3,460,000	Do. inconvertible	6	April, October...	"	1870	85	88 1/2

CITY SECURITIES.		Int'l payable.	Off'd p. ct	Ask'd p. ct.	CITY SECURITIES.		Int'l payable.	Off'd p. ct	Ask'd p. ct.
New York, 7 per ct.-----1857	Feb'y, May,	100			Milwaukee, 7 per ct. coup.-----X	Divers	88	90	
Do. 5 do.-----1858-'60	August and	96	78		New Orleans, 6 per ct. R. R. X	Do.	75	78	
Do. 5 do.-----1870-'75	November	96	97		Philadelphia, 6 per ct.-----1876-'98	Jan'y, July	91	91	101
Albany, 6 per ct. coup.-----1871-'81	X Feb'y, August.	97	98		Pittsburgh, 6 per ct. coup.-----X	Divers	77	78	
Alleghany, 6 per ct. coup.-----X	Jan'y, July	96			Quincy, 8 per ct. coup.-----1868 X	Jan'y, July	87	91	
Baltimore, 6 per ct.-----1879-'90	Quarterly	96	98		Racine, 7 per ct. coup.-----1873 X	10. Feb'y, Aug.	83	85	
Boston, 5 per ct. coup.-----X	April October.	99	100		St. Louis, 6 per ct. coup.-----Long X	Divers	79	80	
Brooklyn, 6 per ct. coup.-----Long X	Jan'y, July	101			Do. do. Municipal-----X	Do.	79	80	101
Clev'Pd, 7 per ct. cp. W. W. 1879 X	Do. do.	100	102		Sacramento, 10 p. ct. cp. 1862-'74 X	Do.	81	82	
Cincinnati, 6 per ct. coup.-----X	Divers	80	90		S. F. & C. 7 p. cp. 1865, pay. N. Y. X	May, Novemb.	82	82	
Chicago, 6 per ct. coup.-----1873-'77	X Jan'y, July	89	90	90	Do. 10 p. ct. cp.-----1871 X	Do. do.	97	99	
Deitroit, 7 per ct. cp. W. W. 1873-'78	X Feb'y, August.	101	102		Do. 10 do. pay. N. Y.-----X	Jan'y, July	104		
Louisville, 6 per ct. cp.-----1880-'83	X Divers	78	80		Wheeling, 6 per ct. coup.-----X	Divers	67		
Memphis, 6 per ct. coup.-----1882 X	Jan'y, July	66	70		Zanesville, 7 do.-----X	April October	97		

By KIRK & CHEEVER.
For the week ending March 11th, 1856.
BONDS.

Per ct.

ROADS.		Revenue
Little Miami, 6 per ct. Mort.		\$0
Covington & Lexington, 2d Mort. 7 per ct.		55
Ohio & Mississippi, 2d Mort. 7 per ct.		44
Marietta & Cincinnati, 7 per cent. 1st Mort.		70
Indianap. & Cin., 2d Mort. 7 per ct.		80
Hillsboro' and Cin., 7 per ct. 1st Mort.		50
Cin., Ham. and Dayton, 2d Mort. 7 per ct.		90
Cin., Wil. & Zanes. 2d Mort. 7 per ct.		60
Covington & Lexington, 10 per ct. Income		61

STOCKS

Cin., Wilm. and Zanev., 18.—Cin., Mam. and Dayton, 65.—Col. & Xenia, 83½.—Cincinnati & Chic., 8.—Central Ohio, 12.—Covington and Lexington, 18.—Dayton and Western, 19.—Eaton and Hamilton, 25.—Fort Wayne and Southern, none. Indiana Central, 47.—Indianapolis and Cincinnati, 58.—Little Miami, 91.—Mad River and Lake Erie, 17.—Marietta and Cin., 17.—Ohio and Mississippi, 7½.—Hillsboro' and Cincinnati, 17.—Junction (Indiana), 10.—Peru and Indianapolis, 17.—Cin., Harr. and Indiana, (Straight Line), 10½.

By HEWSON & HOLMES

For the week ending March 12th, 1856.

BONDS.		
\$2,000 Cov'g. & Lex., 6 per ct. Income.....	40	(& inh.)
3,000 Cov'g & Lex., 7 per ct. 2nd Mortgage.....	65	"
1,000 Cov. and Lex., 10 per ct. Income.....	60	"
5,000 Ohio & Miss. 7 per ct. 1st Mort.....	65	"
2,000 Cin., Wilm. & Zanesv., 7 per ct. Income.....	45	"
6,000 Little Miami, 6 per ct., due in 1883.....	80	"
1,000 Cin., Ham & Dayton, due in 1880.....	85	"
1,500 Cin. Western, 8 per ct. Real Estate.....	90	"
8,000 M. River and W. Va. 10 per ct. Mortgage.....	40	"
700 Columbus & Xenia, 7 per ct. Divid.....	90	"
336 Little Miami, Divident Scrip. old.....	90	"
900 Ind. & Cin. 7 per cent. Divident.....	68	"

STOCKS

129 Shares Ohio & Mississippi		7 1/2
50	Columbus & Xenia	86 1/2
40	Little Miami	91 1/2
9	"	.92
30	Central Ohio	12 1/2
16	New Albany and Salem	10
14	Covington & Leighton	19
20	Chicago & Cincinnati	8
20	Indianapolis and Cincinnati	58
50	Marietta and Cincinnati	15
100	Eaton & Hamilton	24 1/2

Marie & Kanz' Money Circular for the European Steamer of the 19th Inst.

[TRANSLATED EXTRACT.]

New York, March 18th, 1855.

Since our advices of 10th inst., there has been an absence of speculative feeling, and the stock market, with few exceptions, has slightly receded. On the leading railway shares the depression has been more marked.

This decline is partly the result of apprehensions of an approaching specie drain, which is likely to be stimulated (such seems to be the impression) by the dearth of money in London, the facility for getting discount here, and the heavy imports of merchandise. It is, however, likely that the exports of domestic produce will be large enough to prevent the exports of gold from exceeding the California receipts. There has been a heavy fall during the week in the Nicaragua Transit Company—a purely fancy stock, not comprised in our quotation list, but which is the object of much attention with our domestic capitalists. This was caused by the decree annulling its charter, issued by Gen. Walker. The fall was from \$22 to \$13 per share.

City and County Bonds.—There has been a fair demand for City securities at firm prices. The leading purchases have been in St. Louis city bonds; some transactions have also taken place in Cincinnati, Milwaukee, Pittsburg and San Francisco 6 per cents. County bonds very dull.

MARIE & KANZ.

**Extract from the Circular of Robt. Benson
& Co., per Arabia.**

LONDON, Feb. 29, 1856.

The most important item in political news that has occurred during the week, is the report of a month's armistice having been agreed to at the first conference of the Plenipotentiaries. The public are entirely in the dark as to their further proceedings. The report above alluded to, and the more pacific and cheerful tenor of the advices received by the last American steamer, imparted a tone to our market in the early part of the week, which has not subsequently been quite maintained.

In our last circular we quoted consols at 90 $\frac{7}{8}$ a

91½ for money. They gradually advanced until they touched 92, on the 26th ult., since which there has been considerable fluctuation in prices. We now quote them at 91½ for money, and 91¼ for the account. The transactions of the week have been extensive. Money, although perhaps more readily obtainable on very short dates, is still in good demand, and commands high rates.

The news by the last steamer served to impart great firmness to our market for American securities. The chief transactions have, however, been in railroad bonds, and more particularly in the Construction bonds of the Illinois Central, of which there have been extensive purchases for transmission to Amsterdam. They have been sold at 84½. The Freeland bonds have not been much sought after—we quote them at 85½. A parcel of the shares of this have been sold at 2 discount.—Some transactions have taken place in Michigan Central 8 per cent. bonds of 1869, at 94½; and in New York Central 7 per cent. bonds at the same price. There are buyers of the 6 per cent. bonds at 82; and a sale of Ohio and Pennsylvania Income bonds at 77 is reported. We have very little enquiry for other railroad bonds; nor have there been any extensive transactions in State stocks, which, however, continue firm.

ROBT. BENSON & CO.

American Railroad Journal.

Saturday, March 22, 1856.

Erle Railroad—Susquehanna Repair Shop.

The repair shop at Susquehanna Station is one of the most important on the line of that great road, and is managed with the same careful system that characterises the general superintendence of the Company's affairs.

We ought to say shops in speaking of the establishment, for it is really a manufacturing village by itself, covering some six acres, and arranged as to the work done, in eighteen departments; the turn-table is at the center of the Roundhouse, in which there are facilities for stabling 30 locomotives with their tenders. The station is provided with 12 sets of siding track in addition to those running into the turn-table and engine-houses.—The premises are separated into the Boiler shop—Foundry—General repair and reconstruction shop—Blacksmith shop—Wheel shop—Rod shop—General turning and finishing shop—Coppersmith and tin shop—Grinding and shearing room—Wood shop—Paint shop—Pattern shop—Pattern room (containing 5,000 different patterns)—Foundry store room—General supply store—Draughtsman's room, and the general offices of those in charge of the shops.

When we have shown this perfect division of the labor we have said enough of the mode of doing work.

The system is stringent but not unnecessarily so. It is common in this country as well as on the "other side" to make a division of the accounts in repairing;—thus, if the Blacksmith draw iron from the General Supply store, the Blacksmith shop is debited and must account for its use. So, if the Paint shop draws oil, it is held responsible and an account is taken. As to new tools, every man is made answerable for those he uses. If he want a new file he must return the old one for which he receives credit. Every method to economise is employed. Even the chalk is broken into conveniently sized pieces, so that the men shall not be delayed in supplying themselves. Nevertheless most entire liberality governs the supply department. So that we have no "penny-wise

and pound foolish" policy exhibited. These shops are well supplied with duplicate parts of engines, fortunately, never more so than during the present winter, when immense demands have been made on the stock.

The regulations for the management of these shops are of the most stringent character. The system of discipline is perfect, while the Master Machinist in charge—Mr. James B. Gregg—has the proper characteristics necessary to a gentleman bearing his relation to the men, to which he adds the accomplishments of a superior mechanic. Mr. Gregg and Mr. Harvey Rice, Master Machinist of Piermont, are the designers of some of the best engines on the road.

NOTICE TO

Civil and Mechanical Engineers and Surveyors, Architects and Draughtsmen.

We are very successful in our attempt to arrange a Register of the names of these gentlemen. It is to be kept at this office for their own benefit. We invite them to send their address, at once. Their letters are carefully filed for reference, and they serve us an important purpose in answering questions.

Gentlemen will serve themselves and us also by a compliance with our request.

MECHANIC'S, MACHINIST'S AND ENGINEER'S PRACTICAL BOOK OF REFERENCE, and Engineer's Field Book. By Charles Haslett, C. E. Edited by Professor Charles W. Hackley, 1 vol. 12mo. Pp. 617. Price \$2.50.

Columbia College, N. Y. Stringer & Townsend. The first part of this work is just what it professes to be—a "practical book of reference." It is one of real value. In a volume of convenient size for the pocket, an immense amount of matter has been arranged that cannot be found in any cyclopedia. Matter of value to all practical men, because the result entirely of the practical man's experience.

The notes made from time to time by different Engineers and Mechanics have been collected, and in this volume are presented in a useful and cheap form—the receipts are of very considerable value. By one of them alone we have saved many times the price of this little book. It was given us some years ago by a New York Engineer. We copy it with trifling change for the benefit of draughtsmen. We have made many queries of it.

Copying (Tracing) Paper.

Canada Balsam—Spirits of Turpentine, equal parts—mix.

Spread on white tissue paper with a flat sponge stitched to a piece of pasteboard—it will dry immediately,—never retouch.

A little sugar-of-lead added is a good thing. This tracing paper will cost 14 cents a sheet, and for common purposes is sufficiently good.

There are thirty receipts for preparing paper for various purposes.

There is a mass of matter on subjects interesting to mechanics that will be found of value from the fact that they are in so convenient a form.

A part of the work is written by Mr. Haslett, a well known Civil Engineer. It is principally devoted to the operations of running in curves. The author has opened a new track for this practice, indicated in the preface. "Experience has shown that versed sines and external secants as frequent-

ly enter into calculations on curves as sines and tangents." Mr. Haslett has succeeded in arranging rules resulting from this simple fact. The work is not encumbered with geometrical demonstrations, being designed for use in the field. It will be found of great value in locating the side tracks, turnouts &c.

More than all, it is, we are glad to see, a truly American book—that is to say, instead of beginning with the assumption that in this country we are all wrong, and require to be forced into other channels, it begins by taking it for granted that to be of service to American Engineers, it must follow the custom of those men. We speak of this particularly, because we are occasionally visited by some new-comer in the shape of a gilt-edged pocket-book for the instruction of Engineers rather than their convenience. In these we have very wise dissertations on *Railways*—a word, by the way, understood in this country, to refer to the track up which a ship is drawn from the water for repairs—66 feet chains, laying out curves by ordinate and similar stuff. It is useless to publish books of this sort, unless they are of value to men as we find them. Such a book is not the present. Mr. Haslett does not enjoy the honor of being the "Author of a Dictionary," but is a man of practical common sense, and a first rate Engineer.

Several engineers testify to the value of the new rules, and we are glad of an opportunity for bearing similar testimony. We think this part of the book worth the price of the whole volume.

Sacramento Valley Railroad Opening.

We have an invitation to attend the ceremonies on this occasion, to come off on the 22nd of February, 1855!

We are not informed if they will await our arrival. But if they will learn from us, without our personal presence, they will avoid the mistakes that have ruined several of their brethren on the Atlantic shore.

Effects of Ice on Piling.

A most singular instance of this effect is exhibited on the long bridge of the New York and Boston Central Railroad near its intersection with the Old Colony Road at South Boston. As the tide has ebbed and flowed, the piles have become coated with ice until an immense body has formed around each, acting, as the tide came in, like a common life-preserver about the body. The effect has been, to draw the piles from their hold in the bottom, and the bridge has an undulating surface—the waves having risen in some cases to a height of nearly three feet. This might have been prevented by the use of screw piles—indeed, this is the only way to effectually prevent a recurrence of the accident.

We had occasion a short time since to observe an arrangement of foundation with this material, the only *Railroad* bridge in the country, if we mistake not, that has been constructed with the Screw Piles. It is on the line of the Norfolk and Petersburg Railroad, now in progress in Virginia. The bridge is to cross the south branch of the Elizabeth River—a stream emptying into Hampton Roads, 15 miles below Norfolk.

Six piers of six piles each are being laid down, and will be proof against the storms and floods that have been the cause of so much injury to the bridges on that river.

Commuters.

We shall be under very great obligations to the officers of the New York and Boston roads, if they will send us a statement of the number of commutation passengers passing over their roads. There will be little trouble in complying with our request and the result may be of service to them.

A statement may be made up in this way—

Number of passengers going each way.

The length of a single trip being for every passenger—

a miles = 100

b miles = 200

c miles = 300

Also number of transient passengers on same route, approximatively, expressed as the ratio of the total number.

Water Works.

We have received the last Report of the Cochituate Water Board, and extract such items as may be of interest to the curious, or value to the scientific. We learn that Boston has engaged the services of Mr. James Slade, as City Engineer.—The former efficient Engineer, Mr. E. S. Chesham, is designing and executing a system of Drainage for Chicago. We believe the City has made an excellent choice of a successor.

It will be remembered that some months since, the water of Lake Cochituate was rendered impure by the intrusion of foreign matters. We learn, however, that during the summer and fall, it has been of its original purity. This has been produced by improving circulation in the Lake.

"During the past summer and fall, the water in the Lake has been of its original purity, and no complaints have been made of bad water in the City, owing in a great measure to the unimpeded circulation of the water through all parts of the Lake and most of its tributaries, and to the care and attention which has been given to the removal of matters tending to impair its purity in the Lake and tributaries. The waters of Snake Brook, and of the meadow south of the Lake, were allowed to flow freely into it a few weeks last fall."

"There are still some leaks into the tunnels through seams in the rock, which are not objectionable, as the water is quite pure."

The causes that produce fractures in the walls certainly surprise us. We suppose the inference from the following statement is, that steep grades make a heavier thumping from the feet of horses, than levels. We supposed this effect would have been distributed by the back filling over the conduit, which is four feet deep.

"A new crack was discovered last spring, near a culvert in West Needham, one in Newton about 50 feet long, near station one; and also another near Dedman's Brook, of about 100 feet in length. All these have, no doubt, been caused by heavy loaded teams passing over the conduit at nearly right angles to its direction, and up very steep grades. It is advisable to change the grades and directions of these roads to prevent more extended damage in future. Other cracks, which have been mentioned in previous reports, remain stationary, with two or three, which have slightly increased. None of the cracks are sufficient to cause any apprehension of trouble. There are also a few more leaks into the conduit, which may be easily stopped at the spring cleansing."

Concerning cements, the following must be received as an interesting fact.

"Those portions of the aqueduct which have been repaired with English cement, remain perfectly tight. By comparing these portions with others which have been repaired with American

cement, the superiority of the English is so very apparent, that it would be advisable to use it in all the repairs to be made hereafter."

The annexed tabular statement sufficiently illustrates the fact, that if the Maine Liquor Law has been impotent, the people have not repudiated the use of Cochituate water.

CONSUMPTION OF WATER.

Number of Wine Gallons Used in Six Years.

1849.	1850.	1851.	1852.	1853.	1854.	1855.
3,680,000	5,837,900	6,883,800	8,125,800	8,542,300	9,902,000	10,346,300

This amount is distributed among 19,998 water-takers. The revenue from the Aqueduct amounts to about \$210,000, for water used the last year.

Railroad Accidents.

The following table shows a list of the accidents which happened on the New York railroads for the year ending Sept. 30th, 1855.

CAUSES.	KILLED.			INJURED.			TOTAL.	
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Killed.	Injured.
Jumping off or on trains in motion.....	6	3	3	10	1	—	12	11
Fell, or thrown from the cars.	2	13	—	3	8	1	15	12
Collision of trains, or trains thrown off track, explosions, &c..	2	5	—	50	9	1	7	60
Stand'g on platform.....	—	—	—	1	—	—	—	1
Trespassing on track—walking or lying..	—	3	55	—	—	14	58	14
At road crossings.....	—	—	10	—	1	8	10	9
At work or standing by trains.....	—	8	—	—	7	—	8	7
Caving in of gravel pit.....	—	2	—	—	2	—	2	2
Struck by bridge.....	—	5	—	—	—	—	5	—
Looking out of windows....	1	—	—	—	—	—	1	—
Fall'g or jumping from engine.....	—	—	1	—	1	—	1	1
Falling down embankment.....	—	—	1	—	—	—	1	—
Unknown cause.....	—	—	—	—	1	—	—	1
Drowned.....	—	1	—	—	—	—	1	—
Suicide (probably).....	—	—	1	—	—	—	1	—
Murdered and plac'd on tr'k 2 "others."	—	—	—	—	—	—	—	—
Totals..	11	40	71	64	30	24	122	118

SUMMARY.

Killed.	
Passengers	11
Employees	40
Others.....	71
Total.....	122
Injured.	
Passengers	64
Employees	30
Others	24—118
Total killed and wounded.....	240

Of that vast number who have travelled by rail as passengers, during the year, we see that only

eleven persons lost their lives, while sixty-four were injured more or less dangerously. Of the killed, it will be observed that six persons owed their death to getting off or on the cars while in motion; two were thrown off while passing between the cars, and one (a lady) had her head crushed while looking out of a car window. In all these cases we may fairly presume that death was the result of carelessness on the part of the sufferers, brought on by trespassing the company's regulations, as well as the dictates of ordinary prudence. In two cases only was death the result of causes over which passengers could have no control. One of these arose from the explosion of a locomotive boiler; and one from a train being thrown off the track by the falling of a tree across the line. The list of wounded, however, is pretty large. Of these fifty cases were the result of such causes as collisions, detrackments—to coin a word—and the like. Ten were injured in the act of jumping off or on cars while in motion. Three fell between the cars, and one was thrown from the platform.

The list of accidents among employees is much larger in the number killed, but smaller in the injured. Thirteen of the former fell, or were thrown from cars; five were killed in collisions, &c.; eight while at work or standing by trains; and five by striking against bridges.

Of the "others," it will be seen that of seventy-one killed, sixty-five were cases of parties crossing the track, or trespassing on it, while the train was passing. Nearly half the fatal accidents arose from these causes alone. In several cases, the parties were found lying on the road, showing unmistakable symptoms of having been intoxicated at the time. In others, individuals who had stepped off one track on the approach of a train were struck on the other by a train passing in the opposite direction. Of the injured, twenty-four in number, fourteen suffered from this cause.

In all the Railroads in the State, (leaving out city lines, and estimating for the Harlem from its receipts,) 9,001,513 passengers were carried a distance of 426,669,975 miles. If we add to these figures the passengers in city cars, we have the total number of passengers carried as 34,743,411; and estimating for the latter an average distance of one mile travelled by each, we have a total movement of 451,743,413 miles in one year.—Taking the number of travellers, and the distance accomplished, it will appear that one passenger out of every 3,158,492 lost his life; or leaving out those who suffered from their own rashness or carelessness, the figure will then stand at one to 17,371,705!—a result which shows that the railroad car in this State is about the *safest* place in which a person can well stow himself away for the time being! One passenger was injured out of every 542,865 carried.

One employee was killed for every 868,665; and one injured for every 1,158,113 passengers carried. In both cases, the relative proportion might be vastly decreased, but for the want of sufficient vigilance and caution on the part of these men.

Of outsiders, one was killed for every 489,844; and one injured for every 1,147,642 passengers carried. The disproportion between the aggregate of killed and wounded will readily strike the reader. One of the fatal cases was a suicide.

Taking the whole number of accidents, we find

that one person for every 284,782 passengers carried, lost his life, while for every 294,438, one was injured. A large proportion of both took place in the cities of New York, Brooklyn, Jersey City, Albany and Buffalo. In these places many of the victims were children.

Of course we have no data wherewith to compare accidents on railroads with those on stage coaches in the olden time; but doubtless, when we take into account the vast numbers who are now enabled to travel in comparison with the few who could afford it twenty or thirty years ago, the gain will be vastly in favor of the present, in the proportion of accidents alone. This says nothing of the superior healthiness, comfort, convenience, cheapness and speed of the railroad car, compared with the lumbering stage of antiquity.

If we compare the year ending 30th September, 1855, with the previous twelve months, we find that on 20 roads reported in 1854, the number of passengers carried was 5,172,154, who travelled in all 390,677,283 miles. The total killed and injured was 203, of whom 130 were killed. These numbers were sub-divided among passengers, employees and others, as follows:—

	Pass'grs.	Employees.	Others.	Total.
Killed.....	11	56	67	130
Injured.....	8	41	23	73
Total.....	19	97	90	203

It will be seen that last year, with a much larger number of roads reported from, as well as passengers carried and distance travelled, the fatal accidents were fewer; but the injuries rather more numerous. The increase in the latter was owing to a collision between the New Haven and Harlem trains that occurred in November, 1854, by which 30 passengers and one employee were injured. It is gratifying to find that so far as this department of management is concerned, our roads show satisfactory improvement. Much less recklessness is now visible among railroad employees than was half-a-dozen years ago; while the means for preserving the lives of those intrusted to their care are gradually becoming more and more efficient.

But while outsiders are permitted by law to make railroads a common highway, and are at liberty to walk on them just where and when they feel inclined, it is utterly useless to think that the state of things will become much changed for the better. Think of it that in one year no less than fifty-five persons were thus slaughtered in a single State! Legislatures are nearly always devising more stringent laws for the protection of the public against railroad companies. Why do they not at once make trespassing on railroads a penal offence? This is a most important point to have settled; and the sooner it is done the better. The feelings of Railroad officers, the interest of companies, and the lives of hundreds of victims all join in an urgent appeal to do away with permission to trespass on railroads. How soon will the people of New York, "represented in the Senate and General Assembly," thus accomplish this desirable consummation?

Virginia Railroads.

We learn that the Senate has passed a bill increasing the capital stock of the Virginia and Tennessee railroad, and authorising the Board of Public Works to subscribe for \$500,000 of its preferred stock, also, bills appropriating \$500,000 to

the Covington and Ohio railroad, and subscribing \$500,000 in seven per cent. preferred stock of the Manassas Gap road. The bills in aid of the Virginia Central, the Orange and Alexandria, and the Richmond and York river roads were lost for want of a constitutional majority.

Philadelphia and Baltimore Central Railroad Company.

We publish this week portions of the last annual Report of the officers of this company, to the stockholders, and call the attention of our readers to it, as illustrating the deserved success which has attended the management of its affairs by the adoption of the principle of self-reliance. This road originated mainly from the desire of a large number of the citizens of Pennsylvania and Maryland, to have a more convenient outlet to the cities of Philadelphia and Baltimore. Instead of applying to those cities for aid, and endeavoring to enlist their wealthy citizens in behalf of the enterprise, the friends of the road labored diligently until they procured from residents along the route of the proposed improvement, exclusively, an amount of stock adequate to grade and bridge it.

From among these friends of the road, a Board of Directors was selected, all of whom have local interests to be promoted by a judicious, economical expenditure of the stock subscription, and the results as contained in the Report of the Secretary, convey an instructive lesson. With the grading of 30 miles of the road completed in a single season, it appears that the total amount paid for land damages has been \$3,615, for salaries and office expenses, \$3,487, for engineering, \$5,604, and for discounts, \$109,—these amounts severally being about one-fifth the average cost of these items on railroads generally, when built through a country of corresponding character.

It is stated that no efforts have been made to procure stock subscriptions in either of the cities at the termini.

No greater error is committed in railroad building than in seeking to place its management in the hands of residents of cities, instead of entrusting it to those who are to be directly and immediately benefitted by an economical administration of its concerns, and whose opportunities are constant for learning its progress step by step. We consider the management of the Philadelphia and Baltimore Railroad Company one of the best illustrations of the policy we have at various times advocated in the columns of our Journal.

"The President and Directors of the Philadelphia and Baltimore Central railroad hereby submit to the stockholders their annual report upon the present condition and prospects of the company, together with a brief history of the enterprise from its commencement.

In the early part of the year 1852, certain citizens of Maryland and Pennsylvania, feeling the necessity of a more direct communication with the cities of Baltimore and Philadelphia, resolved to attempt the construction of a railroad between the two cities, through a most fertile and highly cultivated district, which had long suffered for want of a more ready access to the leading markets of the country.

Although its great value, and its manifold advantages as a through line, connecting the two cities were apparent to all, yet the early friends of the project engaged in the enterprise mainly because they felt that the country to be traversed by the proposed road, not only demanded such a public improvement, but that it would also afford an amount of local business, sufficient to sustain

the road independently of any through traffic or travel.

According to the estimates of the Engineer, the cost for the grading, bridging, and masonry of the Pennsylvania division of the road, 36 miles in length, would amount to about two hundred thousand dollars. To raise this sum and to secure the right of way, numerous meetings were held along the line in Pennsylvania, and finally a subscription was obtained sufficiently large to enable the Directors to put the grading of the road under immediate contract. A large number of the landholders, conscious of the immense advantages that such a public improvement would afford them and the whole community, freely granted the right of way through their lands, without any charge whatever; while with others satisfactory arrangements were made on reasonable terms; a few persons, however, set up claims for high damages; but intelligent juries, subsequently appointed by the Court, have, in some instances, awarded less than had been previously offered by the company.—The common sense of the people sees the injustice of awarding heavy damages to landholders, when their landed property, as often occurs, is doubled in value by the construction of a railroad through it.

At a public letting of the work, a proposition made by the well known contractors, Stone, Quigley & Eddy, was accepted, in which they agreed to do all the grading, bridging and masonry, of the thirty-six miles in Pennsylvania, for the sum of one hundred and ninety-five thousand dollars;—one hundred and fifty thousand dollars to be paid in cash, and forty-five thousand in the capital stock of the company at par value. The first ground was broken near Concord, Delaware Co., on the 3d of January, 1855, and since that time the work has been vigorously prosecuted, thirty miles having already been graded, and the most important bridges are nearly completed.

In August last, a proposition was made by responsible parties, who had a deep interest in the early completion of the road, to finish it and to lease it for a term of years. After the merits of this proposition had been fully discussed at two large meetings of the stockholders, the Directors were authorized by a unanimous vote to enter into a contract for the completion and leasing of the road, upon the following terms and conditions:—By a contract, executed the 11th day of October, 1855, the contractors agree to furnish the necessary quantity of iron rails, chairs, spikes, switches, and all other iron materials which may be required for the laying down and putting in perfect running order thirty-six miles of single track, and one mile of side track; the said materials to be of the best quality now in use for such purposes in the United States; the rails not to weigh less than fifty-four pounds per lineal yard.

They agree to lay the track on the said thirty-seven miles, and to ballast the same with broken stone or gravel of suitable quality, nine feet in width, and sixteen inches in depth or thickness.—They also agree to furnish all the materials, and perform all the labor necessary for the construction and completion of all the turn-tables, engine houses, water stations, and arrangements for furnishing a full supply of water, passenger and freight depots, that may be necessary for the proper working, operating, and running of the cars, and doing all the business that may be required to be done on the said division of thirty-seven miles. The passenger depots to be not less than twelve in number, to be built of brick, and covered with slate. The ballasting, laying the track, cross-ties, &c., are to be done and performed in every respect, as may be directed by the Engineer of the company. The railroad company contracts to finish the grading, to furnish the cross-ties, to complete the fencing not erected by the landholders, and to pay four hundred and twenty-five thousand dollars in the first mortgage bonds of the company taken at their par value. The railroad company also leases the Pennsylvania division of the road for a term of ten years, beginning six months after the completion of the grading and fencing, and the delivery

of the cross-ties. The Lessees agree to fully equip the road, and to keep it in complete repair, to pay the semi-annual interest upon the above-mentioned bonds, if held by other parties, and upon the stock, to pay a semi-annual dividend of 3 per cent., or 6 per cent., annually, clear of all liabilities, and at the expiration of the lease to surrender up the road in thorough running order in all respects.

It is further agreed by and between the said parties, that in the event of the failure of the Lessees to pay the interest upon the bonds, or the dividends to the stockholders, for a period of sixty days after the same shall become due, then it shall be lawful for the railroad company to declare the contract null and void, and to take possession of all the locomotives, cars, and rolling machinery belonging to the Lessees, in use upon the road.

Upon similar terms the Lessees agree to finish and lease the Maryland division of the road, or any eight consecutive miles thereof, as soon as the grading shall be completed, the cross-ties delivered, and the fencing done as in the previous contract.

By this arrangement the Directors hope, at an early period to push the road through to Baltimore, and already they have placed under contract the portion of the line between the Pennsylvania boundary and the Susquehanna river, the grading of which can be done sometime during the coming summer.

It is the intention of the Lessees to commence laying the track on the eastern portion of the road as soon as the West Chester and Philadelphia railroad is completed to the intersection at Grubb's Bridge.

When intelligent business men thus agree to lease a road merely for its local business, guaranteeing all the interest and dividends upon its bonds and stock, the public may easily judge of its value when completed through to Baltimore.

By a glance at the map it will be seen that this road passes through a country having comparatively no outlets by canals, rivers, or railroads.

The district of country drained by the road, amounting to about one thousand square miles, is densely populated, and for agricultural and manufacturing purposes will compare favorably with any region of equal extent in the United States.

Along and near the line, as located, there are inexhaustible quarries of lime, marble, chrome, and slate, which will add greatly to the local freight business. In the burning of lime, large quantities of coal must be used, which will have to be transported over the road.

Although in this report the road is considered mainly in its local capacity, yet when completed, forming a new connexion between two important Atlantic cities, and constituting a part of the chain between New York, the commercial metropolis of the United States, and Washington, the capital of the country, it must, in many points of view, favorably commend itself to the traveling public. It passes through a country characterized by its fine scenery, unsurpassed for its healthfulness, affording beautiful locations for country residences, and possessing an intelligent enterprising population. Crossing the rivers at points above tide-water, the Philadelphia and Baltimore Central R. R. will not have a single pile or draw-bridge on the whole line, and it will cross the Susquehanna above Port Deposit, by a permanent bridge, of easy construction, upon solid rock foundation. It will be seen, therefore, that no natural causes exist to render this road insecure or dangerous, and no obstacles to detain the regular passage of mail trains at all seasons of the year.

The entire cost of the road, eighty-five miles in length, including the bridge over the Susquehanna, according to the most careful estimates, cannot exceed two millions of dollars, or less than twenty-four thousand dollars per mile. Experience clearly shows that railroads constructed at no greater cost than this can generally pay fair dividends upon the money invested; but too often in the history of railroad enterprises, we find expended in these improvements an amount far exceeding

what would be absolutely necessary to construct them under proper management. In many instances the expenditures are too lavish at the outset, causing a general suspension of the work, which destroys public confidence; then first, second, and third mortgage bonds are sold at such ruinous prices, that if a merchant were to sell his securities at similar rates his business reputation would be almost valueless.

If the people of a rural district, instead of waiting supinely for aid from distant capitalists, will use their utmost energies to build a railroad by their own exertions, they can generally be successful; and they will be much more likely to construct and manage it with prudence and economy.

It is the landed interest that usually receives the greatest benefit from railroads, it should therefore contribute largely to aid in their construction. The present increased value of land beyond former prices, caused by the prospect of this railroad, would, if fairly estimated, more than pay the entire cost of its construction and equipment.

Besides this advance in the value of property along the line, new activity is given to all kinds of business, indicating already the beneficial influences of railroads in developing the enterprise of the people, and stimulating among them higher intellectual culture.

In order to complete the grading and fencing of the Pennsylvania division, and to furnish the cross-ties, the additional sum of sixty-five thousand dollars will be required. This sum, it is believed, can be raised without much difficulty, as a large number of persons along the line, including many men of wealth, have done as yet but little to aid in constructing a work so important to the interests of the whole community that will enjoy its advantages.

Several thousands of cross-ties have already been contracted for, and a portion of the fencing, for which payment is to be made in the stock of the company.

A slight effort on the part of the landholders, on or near the line, to furnish the balance of the cross-ties, and to erect the fences, taking pay therefor in the stock of the company, would enable the Directors to give notice to the Lessees of the completion of the road ready for ballasting and the iron, and then by the terms of the contract, the stockholders, at an early day, would secure the dividend of six per cent. upon the stock held by them.

The Directors hope that the original subscribers to the stock will pay the remaining instalments on or before the first of April next, so as to complete the grading without delay.

As by the contract with the Lessees, the first mortgage bonds of the company are to be paid only as the road is completed, those bonds will possess a value which will entitle them to rank among first class railroad securities.

It may be remarked further, that having seen so many evil results flowing from dissensions among railroad stockholders and managers, the Directors of the Philadelphia and Baltimore Central Railroad Company, from the commencement, have labored to manage its affairs in a spirit of harmony, often sacrificing personal interests in order to secure that unity of action which is an essential element necessary to attain complete success.

In conclusion, the Directors feel confident that this enterprise, which, in the beginning, was looked upon by many as impracticable, will prove entirely successful; that the road will be completed at a reasonably early period; and that when finished it will be a permanent public benefit, the advantages of which will, hereafter, be more highly appreciated, as well by those who have vainly attempted to throw obstacles in its course, as by those who have generously aided in its construction."

According to the Secretary's report, the receipts of the company, for the year ending January 14, 1856, have been—

Stock subscriptions—in cash and notes at par.....	\$104,661
Notes of individual Directors, loaned for Company's use.....	16,189
Total	\$120,850

The disbursements have been—

Construction acc't.....	\$96,474
Salaries to officers and agents.....	3,488
Land damages.....	3,615
Engineering acc't.....	5,604
Interest acc't.....	109
Notes loaned to Company, due and paid.....	11,189

Total

There are outstanding, and not yet due, Company's notes given for work done and land damages,

Amounting to.....	\$8,719
Notes of individual Directors, loaned, unpaid.....	9,415

Total

The officers of the company for the ensuing year are—

Franklin Taylor, President; E. V. Dickey, Secretary; Samuel J. Dickey, Treasurer; and T. E. Sickles, Chief Engineer.

Directors—Isaac Watkin, Lewis Gause, John Richards, John M. Kelton, Job H. Jackson, Mark A. Hodgson, Samuel Dickey, James R. Ramsay, Joseph Roman, George P. Cook, Cheyney Hoskins, and Gerard Gover.

(For the American Railroad Journal.)

Vicksburg, Miss., Feb'y 19th, 1856.

DEAR SIR,—I have read in the 2nd February No. of your valuable JOURNAL a short article on the Pacific Railroad, in which it is stated—"1st, that no railroad will be built to the Pacific for less than \$100,000 per mile; and 2nd, that before any is built, you expect to see the General Government contributing a considerable portion of the capital stock."

These are the only points in the article to which I would make objection.

There is a route for the Pacific Railroad on which it will not cost \$50,000 per mile, and where the General Government will be required to do comparatively but little, viewing the vast national importance and value of the enterprise.

Under the Louisiana charter of the Vicksburg, Shreveport, and Texas R. B. Co., we are constructing a road along the line of latitude 32° 30', 190 miles in length, across the State, from the Mississippi river to the State of Texas. The State will take up this line, and continue the road across that State, a distance of nearly 800 miles, with great vigor and earnestness, just so sure as it is understood that the General Government will extend it to the Pacific ocean, a distance of seven hundred and five miles.

We have a correct idea of what the 190 miles across Louisiana will cost; because we have contracted for its construction at item prices, have measured the work to be done, and can judge of what is to be executed, by what has been already finished.

For instance, we know the number of cubic yards on each mile, and the price per cubic yard, and also the number and price of cross-ties, and of track-laying and we have purchased a part of our iron.

There is no uncertainty in our knowledge of its cost, except the fluctuation which may take place in the price of iron for the residue of the work.

Under our control our road will cost about \$22,000 per mile, or a little over \$4,000,000 in all.

The common-sense people of the country and experienced engineers, are of opinion, that our road will cost as much, if not more per mile, than 500 miles of the Texas road, leaving the remaining 300 miles to cost double, or \$44,000 per mile.

There is now before the public sufficient information to satisfy any observant reader that the above is a fair estimate. The character of the country, the timber, water, &c., are well understood for that distance (690 miles), and pretty well understood for the 300 miles nearest the western boundary of Texas.

If the cost for 690 miles be \$22,000 per mile, it amounts to \$15,180,000. Three hundred miles at \$44,000 will amount to \$13,200,000. The whole road across Louisiana and Texas, 990 miles, will therefore cost \$28,380,000, and no more.

Thus far, it is not expected that the General Government will contribute one cent. Texas does not ask for aid, and the application of our road for a grant of land, was given the go-by in Congress, in 1854, though it passed the Senate with great unanimity.

I am aware that the road through New Mexico and Sonora (Territories of the U. S.) will cost more than through Louisiana and Texas. But will it cost more than the last 300 miles in Texas? From the best information we have, I think it will not. But suppose it may cost \$60,000 per mile, for the 705 miles, between Texas and San Diego, it will amount to but \$42,300,000 a very high estimate, which added to \$28,380,000, gives us a total cost of \$70,680,000.

Your estimate of \$100,000 per mile makes it \$160,500,000.

Judging from the reports of the War Department, and of previous explorations, and from what we have seen and known along the line of 32° 30', my estimate of \$70,680,000 is beyond what I believe it will cost. It is also over the estimate of the Department; and yet it is \$98,820,000 under your calculations.

Col. Davis, in his elaborate and able report, supposes that the cost from Fulton, on Red river, to the Pacific ocean, a distance of 1,618 miles, may reach \$68,970,000. From the caution observed by the Secretary of War, the reader of his report will have reason to feel confidence in his estimates. But he commences at Fulton on Red river (which is perhaps 80 or 100 miles north of Shreveport). To complete that line of communication, it will be necessary to continue the work eastward to the Mississippi, or to rely upon the very uncertain navigation of Red river. To extend the line to the Mississippi, would increase the distance at least 175 miles, and make the whole distance from the Mississippi to the Pacific, 1,793 miles.

Now, we commence on the west bank of the great Father of Waters, at Vicksburg, and running west, cross Red river, south of Fulton, as before stated, and continuing west, reach the Pacific ocean in 1,695 miles, nearly 100 miles less than even the Fulton route. This is accounted for, because ours is a direct line from East to West; whereas the other has to make a considerable southing to get to El Paso, the only place at which the Rio Grande is contemplated to be passed.

I divide the distance as follows, viz: From Vicksburg to Texas line, surveyed, 190 miles;

across Texas, 800. This is estimated and over the true distance. From western line of Texas to El Paso, 150 miles. From El Paso to mouth of Gila, 355 miles; from Gila to San Diego, 200 miles, making a total of 1,695 miles.

The propriety of commencing the Pacific Railroad on the Mississippi is most obvious, as the navigation of the Red River is too precarious to rely on, and the selection of Vicksburg as the beginning point is judicious; because, from that place to the City of New Orleans, there is always a sufficient depth of water for the largest class of steamers, and from that place likewise, there are Railroads in operation and in contemplation running eastward on the direct route to the Atlantic States.

Fulton, on Red River, is above the Raft. Shreveport is below. The latter can be reached by steam navigation, when the former cannot.—Vicksburg, Shreveport and San Diego are situated on the line of N. latitude 32.30°; and the Gila river runs its whole length nearly on the same parallel. None doubt the propriety of commencing on the Mississippi, and if we do, Vicksburg is the nearest point on that great river to both the Pacific and Atlantic Oceans, being 1,695 miles from the Pacific, and less than 800 from the Atlantic at Charleston or Savannah. Only a little over 200 miles are wanting to connect Vicksburg with the Atlantic by railway, and that distance is under charters for construction, except the 50 miles between Selma and Montgomery, Ala.

But of the \$70,680,000 required to build the Pacific Railroad, what portion is expected from the General Government? That portion which may be necessary to construct a road from the western boundary of Texas through the territory of the General Government, about 505 miles. One hundred and ninety will be made by Louisiana, eight hundred by Texas, and, if necessary, two hundred by California.

The refusal of Congress to make the central section may retard the progress of the Louisiana and Texas sections. But let Congress act wisely and promptly in the premises, and the other sections will be speedily completed.

We do not consider our road dependent upon the action of Congress with reference to the Pacific road; because North Louisiana and Eastern Texas will furnish business to justify its construction, and make our investment a good one. But will the Texas road enjoy the same advantage? That road may languish for years, because the local business may not justify its construction. But if it were made a link in the Pacific chain, none can doubt that it would become one of the great thoroughfares of the United States, and its immediate completion could be confidentially relied upon.

I am one of those men who believe that the Pacific road should be made, if it cost the General Government \$162,500,000—the full amount of \$100,000 per mile.

In time, our Pacific States and those intermediate will be as important to us as a nation, (if I may use the term) as any number of States occupying the same extent of country on or contiguous to our Atlantic seaboard. And I think every man who desires the perpetuity of our Union should advocate the immediate construction of a Railroad connection between the Atlantic and Pacific

regions, as a government measure, necessary to our continued existence as a Union.

The accomplishment of so great an end should not be left to chance or individual energy and enterprise.

I am happy to see, that you say, "we must have the road at any reasonable cost." I would amend that sentence only by striking out the word reasonable. For though I hope I am a reasonable man, I am perfectly satisfied that the road can be made for much less than \$100,000,000—and that sum to be paid by Louisiana, Texas, California and the General Government, is not too much to accomplish so important an object.

Your friend, N. D. COLEMAN.

Railroad Earnings.

NEW YORK & NEW HAVEN RAILROAD.

The receipts of the New York and New Haven Railroad for February were as follows:

Passengers, &c.....	\$61,518 97
Freight.....	20,000 00
Total.....	\$81,518 97
Less paid Harlem Railroad Company..	3,690 29
	\$77,828 68
February, 1855.....	53,850 92
Excess over same month in 1855.....	\$23,977 76

PENNSYLVANIA CENTRAL RAILROAD.

The receipts for February on this road amounted to..... \$293,442 16
Same month last year..... 191,014 22

Increase.....	\$107,427 94
Re'pts from Jan. 1, 1856, to March '56	\$596,551 49
Same period last year.....	489,794 88

Increase.....	\$106,760 11
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MICHIGAN CENTRAL RAILROAD.

The earnings of the Michigan Central Railroad for February, 1856, were:

	Pass'grs.	Freight.	Miscel's.	Total.
1856.	\$55,168 76	\$52,642 37	\$6,724 75	\$114,553 88
1855.	45,050 95	41,590 12	6,625 36	93,266 43

Inc.. \$10,116 81	\$11,052 25	\$99 39	\$21,269 45
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OHIO AND PENNSYLVANIA RAILROAD.

The receipts of the Ohio and Pennsylvania Railroad for the month of February were as follows:

From passengers.....	\$85 067 04
From freight.....	34,355 06
Total.....	\$69,922 09
Receipts for February, 1855.....	64,331 09

Increase..... \$5,591 00
Comparative receipts for January and February 1855 and 1856:

	1855.	1856.	
January....	\$77,373	\$66,181	Dec... \$11,171
February....	64,331	69,922	Inc... 5,591

READING RAILROAD.

The following shows the business of this road for February:

	1856.	1855.
Received from coal....	\$140,425 09	\$139,180 08
Rec'd from merch'dse..	26,666 65	20,772 23
Rec'd from travel, &c..	17,127 84	17,745 42
Total.....	\$190,259 58	\$177,697 70
Transportation, renewal fund, roadway dumpage, and all charges..	124,792 24	106,307 04
Net profit for the month.	\$65,427 34	\$71,380 66
Net profit for previous two months.....	81,970 93	222,333 83
Total net profits for three months.....	\$147,398 27	\$293,729 49

CLEVELAND AND TOLEDO RAILROAD.

The receipts of this road for February, were \$68,188, against \$51,357 for the corresponding month last year. Increase, \$11,781, or nearly 23 per cent.

MILWAUKEE AND MISSISSIPPI RAILROAD.

The earnings of this road for February, were \$28,646, against \$26,808 for the same month in 1855.

Notice to Contractors.



OFFICE OF RACINE AND MISSISSIPPI R. R. CO.
Racine, Wis., March 15th, 1856.

PROPOSALS will be received at this office until the 10th day of April next, at 12 o'clock m., for the Grading, Masonry and Bridging of the second division of the Racine and Mississippi Railroad, being from Beloit to Savanna on the Mississippi river, a distance of about sixty-eight miles. The whole work to be completed during the present year and in time for laying the track previous to January 15th, 1857. This work lies wholly through the northern counties of Illinois west of Rock river. The country is densely populated and unsurpassed in point of health and abundance of supplies.

Proposals will also be received at same time for the construction of the Bridge across Rock River at Rockton. Plans, profiles, and specifications, together with all necessary information can be obtained on application at this office on and after the 26th instant.

HENRY S. DURAND, President.

For general information parties can refer to the Company's Agents in New York, Messrs. CLARK & JESUP, No. 70 Beaver st.

Notice to Contractors.

OFFICE OF THE DEMOINE NAVIGATION AND R. R. CO.
Ottumwa, March 4th, 1856.

SEALED PROPOSALS will be received at this office until 12 o'clock m., of Monday the 28th day of April next, for the construction of twenty Locks and Dams for the improvement of the Des Moines river between the town of Alpine (12 miles below Ottumwa) and Fort Des Moines, a distance of about 126 miles, and also the Lock and Dam at St. Francisville, 12 miles from the Mississippi river.

The chamber of the Locks is to be 200 feet long between the quoins, and 44 feet wide. They will generally be built on rock foundations. The face of the masonry will be of hammered stone, leveled up to regular courses, and laid in hydraulic cement. The backing and interior stone will be quarried in rectangular blocks, with beds parallel to each other, and joints at right angles thereto, and will be laid in quick lime mortar, except at the head of the Lock, where it will be laid in cement.

The coping will be of cut stone doweled and clamped.

The Gates will be in a separate contract.

The Dams will generally be about 600 feet long and 13 feet high, (resting on rock) made of timber and stone, with Bulkheads (with stone abutments) on each side of the river for the hydraulic canals.

The plans and specifications for the work will be ready for examination on the 15th of April, at which time copies of the specifications and blank forms for proposals, and information in regard to the locations of the Locks and Dams, will be furnished to the contractors at the several Engineers' Offices on the line, and at the Company's Office, No. 15 WILLIAM STREET, NEW YORK.

The contracts will contain a clause requiring the personal attention of one of the partners of each contracting firm, at each Lock and Dam; that no transfer of contract shall be made, and that no subcontract except for the delivering of materials, will be allowed.

Monthly payments will be made in cash as the work progresses, reserving 15 per cent. in lieu of other security; and the whole work will be required to be completed by the 1st of January, 1858.

Contractors who are not known to the Directors, or to the Engineers, will be required to furnish satisfactory testimonials of their skill, experience, and responsibility.

The Company reserves the right to award the contracts on such proposals as may be deemed best for the interest of the State and of the Company.

WM. C. JOHNSON, President.
EDWARD H. TRACY, Chief Eng'r.
WM. J. McALPINE, Consulting Eng'r.

3:12

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by
THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
March 13th, 1856. 4:11

Lowell Machine Works.

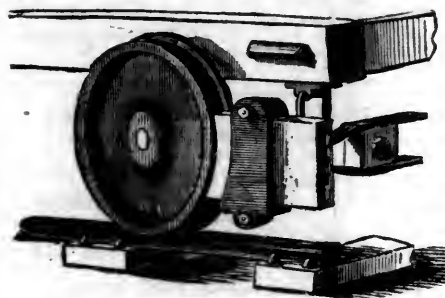
WARREN ALDRICH (late ALDRICH, TYNE & Co.) manufacturer and furnish to order, at short notice,

Machinists' Tools

of various description and with the latest improvements; as engine lathes, with swing 16, 20, 24, 28, 30, 36, 48 inches, up to 7½ feet, and bed made to turn any desirable length; planing machines, to plane 3½, 6, 8, 10, 12, 18, 20, 22 feet long, and 18, 24, 28, 36, 40, 48, 60 inches square; also hand lathes, compound planers, slotting and shaping machines, vertical drills, bolt cutters, and many other tools used in railroad repair and machine shops.

Lowell, Mass., Jan'y 1, 1856.

41:17

PAIGE'S
ADJUSTABLE CAR BRAKE BLOCKS!

By this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE
COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent,
DINSMORE'S RAILWAY GUIDE OFFICE, 9 Spruce st., N. Y.

Lord & Wright,
Counsellors at Law, Cincinnati, Ohio. 181

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

1st. D. C. McCALLUM, General Supt.

Philadelphia, Wilmington &
Baltimore Railroad.UNITED STATES MAIL ROUTE TO THE
SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	1 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$13 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00
An extra charge will be made for meals and state rooms on board the boat.	
GEORGE A. PARKER, Supt.	

NEW YORK
IRON PAVEMENT
AND
STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT.

- 1st. The cheapest pavement ever used, because most enduring at least cost of repair.
- 2d. The safest pavement for either man or beast to travel on.
- 3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.
- 4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.
- 5th. The easiest and least tiresome pavement to ride upon, because most even of surface.
- 6th. The least noisy pavement to use or reside near.
- 7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to bleed utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company.

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
HON. J. V. C. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. F. FRENCH, Associate Judge, Superior Court, Exeter, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against THE
MAYSVILLE & LEXINGTON RAILROAD COMPANY
and others, defendants.—By virtue of the Judgment of the
Fayette Circuit Court, rendered in the above case, I will sell,
at public auction, on Wednesday, the 23rd day of April, 1856,
at the Public Square, in the City of Lexington, State of Ken-
tucky—

THE MAYSVILLE & LEXINGTON RAILROAD;
both that part of the road which is completed and the part
unfinished; embracing the road bed, and superstructure where
the same is laid down, the right of way, and all lots of land in
and adjacent to the road track, with all the buildings, stations,
car-houses, and improvements belonging to said railroad,
together with the franchises of the Maysville and Lexington
Railroad Company; all of which will be sold together, upon
credits of six, twelve, eighteen, and twenty-four months, in
equal instalments.

At the same time and place, I will also sell all the Lots of
Land belonging to said Company, and not adjacent to the rail-
road track—consisting of a lot of land in the City of Lexing-
ton, a tract of land in Fleming County, and town lots in Paris
and Millersburg, on credit of six and twelve months, in equal
instalments.

And at the same time and place, I will sell all the Locomo-
tives, Freight and Passenger Cars, Cross-Ties, &c.—consisting
in part of two locomotives and tenders of twenty-four tons
each, three passenger cars for sixty passengers each, one en-
tirely new and all in good order; seven box freight cars, eleven
platform cars, eleven tops for platform cars, five gravel cars,
and a top for another; fifteen pairs of car wheels, a hand car,
a lot of bridge and car iron; 9,500 cross-ties near Maysville,
1,350 of which are of locust and the remainder of oak; about
6,000 cross-ties along the line of the railroad between Lexing-
ton and Millersburg. The new passenger car, two freight cars,
and the tops for platform cars, are in Mayville, all the other
rolling stock is in Lexington, and the whole is of 4 feet 8½
inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the
purchase money, having the force of Judgments, with good
security, to be approved by me, of one of the following kinds,
to wit:—1. Personal security. 2. First Mortgage Bonds of
the Mayville and Lexington Railroad Company. 3. Mortgage
in real estate in counties near this railroad or the Covington
Railroad. 4. State and United States Bonds. 5. A First
Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of pur-
chasing, by the undersigned, who will be found in Lexington,
Ky., or by A. M. JANUARY, at Mayville. Letters of enquiry,
addressed to me, will be attended to. EBEN MILTON,
Receiver and Commiss'r.
LEXINGTON, Kentucky

2m8

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK. (ONE DOOR SOUTH OF BEAVER STREET.)

RAILROAD AGENTS AND COMMISSION MERCHANTS, PURCHASE AND SELL ON COMMISSION FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most
favorable terms for the delivery of Rails either on
board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of
the best builders, they furnish the best at the lowest rates for
cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best
Forges, and one of the first Wheel Makers, and can supply
orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorised to sell wrought
and cast iron chairs and spikes from the best known makers at
the lowest rates.

All orders will be promptly filled and at the lowest market
prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested
to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

FINANCIAL.

Rollins & Haviland, STOCK BROKERS,

38 Exchange Place New York.

JOHN T. ROLLINS.

WALTER HAVILAND.

ELLERY & GIBBONS,

No. 10 WALL ST.,

BANKERS, DEALERS IN DOMESTIC AND FOREIGN
EXCHANGE, &c., are prepared to negotiate Stocks,
Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't Oc'n Bk, CORNELIUS W. LAWRENCE,
N. Y. Esq., N. Y.
SILAS K. EVERETT, of Everett & Co., Bank'r, Philad.
& Brown, N. Y. SAMUEL WILLETS, Pres't of
Wells, Fargo & Co. 18tf Am. Exchange Bank, N. Y.

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of
STOCKS, BONDS, &c., strictly on commission. Orders
respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.

A. W. GREENLEAF, late of No. 2 Wall st.

REFERENCES: American Exchange Bank, Bank of the Re-
public, Metropolitan Bank, Merchants' Bank. 1y18

Wm. S. Rowland & Co., RAILROAD IRON

AND

Commission Merchants,

NEGOTIATORS OF CREDIT FOR RAILROAD
COMPANIES,
No. 6 WALL STREET, NEW YORK.

London Agency for Sale of Bonds, &c.

MESSRS. LANCE & CO. are making more generally known
in England, the great advantages of American Securities
for investment.

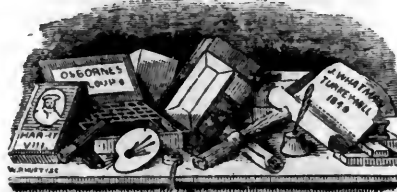
During the present year Messrs. Lance & Co. have disposed
of a large amount of American and Canadian Railway Bonds,
and are fast extending their connection, they will be happy to
correspond with parties having good Amer. Securities for sale.

Messrs. LANCE & CO. have had experience in the purchase
and shipment of iron, and offer their co-operation to those about
to negotiate for the disposal of bonds and the purchase of rails.
F.A.—Presidents of railway companies are requested to favor
Messrs. L. & Co. with Exhibits or Reports of their companies as
published. 10 Regent st., WATERLOO PLACE.
LONDON, Oct. 1855. 6m46

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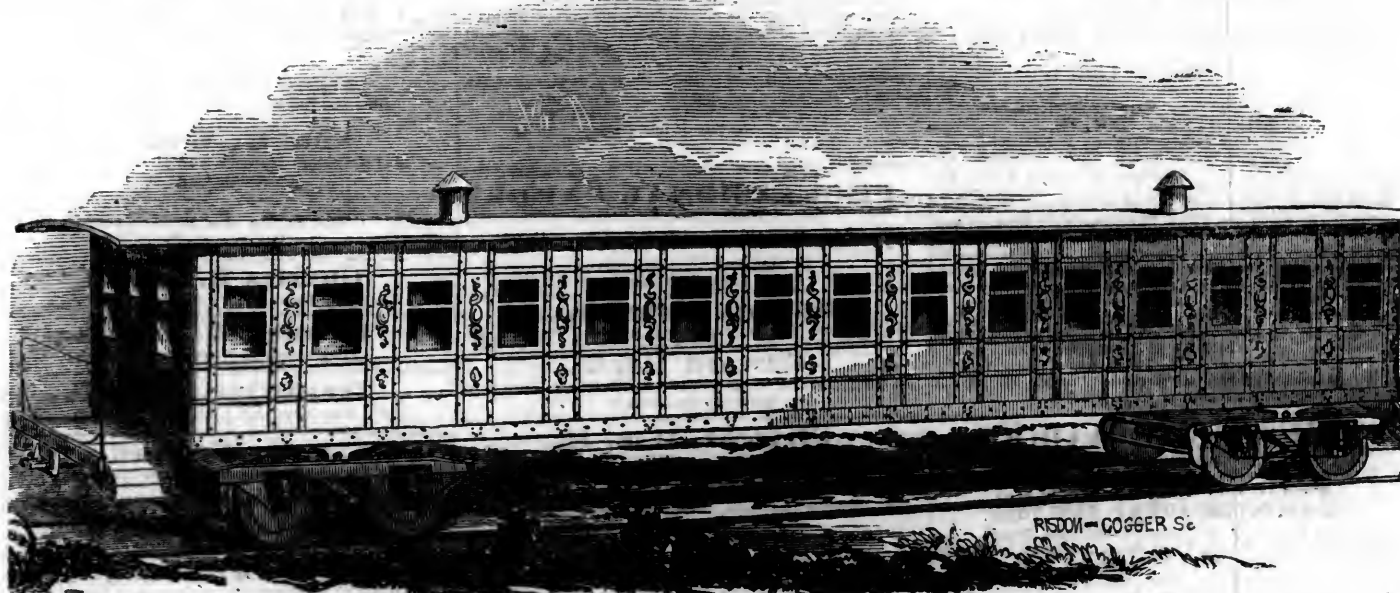
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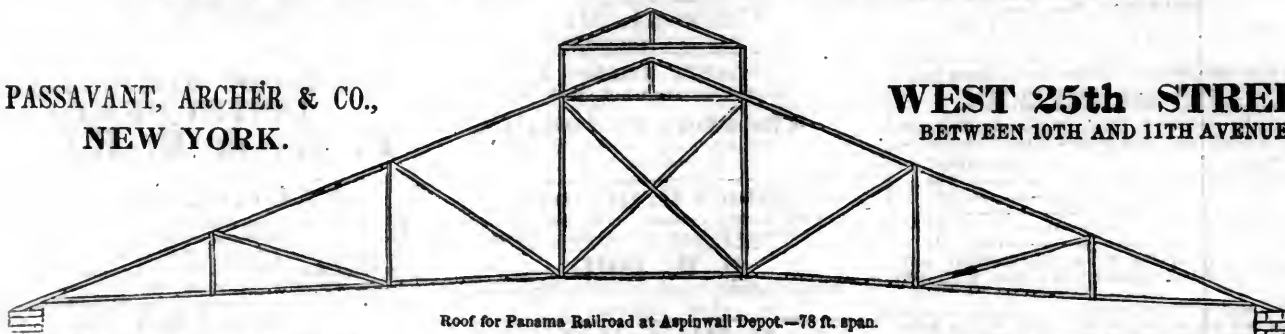
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SATURDAY, MARCH 29, 1856.

[WHOLE No. 1,041, VOL. XXIX.]

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, March 29, 1856.

Railroad Management. ECONOMY IN OPERATING.

In the former articles on this subject, we have merely reviewed the obscurely written Reports of gentlemen who were appointed or inspired to say something for the victims of Railroad speculations and mismanagement.

This week we call attention to another view of the case. To keep in mind our position, let us recapitulate a little. The sum of all the substance contained in the Reform Reports, may be thoroughly presented in a few words.

1. Massachusetts Railroad Securities have alarmingly depreciated in value.

2. This depreciation has been progressing for several years.

3. Evidences of depreciation are to be found in the low prices of Stock and Bonds in the market, and a failure of regular dividends.

4. Causes of the low prices of Stock and Bonds are, the public exposition of their affairs to which companies were forced by Legislative enactment in 1846, and the failure of regular dividends.

5. Causes of depreciation in the real value of the property are stated to be: the having afforded extraordinary accommodations to the public without remunerating prices, though where the losses may have been made—or on what branch of

traffic, or in what manner—whether on “a ton of freight or a passenger,” the managers and investigators do not pretend to any definite knowledge. They do not know what any branch of their business is costing or earning, nor have they ever known. And the basis for their best guesses have been “kindly” furnished by a Civil Engineer of Boston, who, in his scientific pursuits, had occasion to compile certain tabular statements that might have been on the desk of every Railroad manager in Massachusetts, before their reports entered the State’s printing office. And in addition to this cause, the advanced price of labor and materials used in operating the roads, with the want [see Joel W. White’s letter,] of men possessing “moral honesty, energy of character, and common sense.”

6. Remedy to be applied to restore Railroad property to its par value, is an indiscriminate advance in all rates, whether the present are just or not; because while they have no means of knowing what they ought to charge, they know that dividends are wanted; to which increased tax, is to be added a reduction in the amount of accommodation now extended to the public; this reduction, also, to be made on the strength of random guesses.

The entire body of words to be found in all the Reports and letters laid before the stockholders, may be compressed without effort into these six propositions, which have the merit of being candid statements instead of defensive pleas. They are the reflections made by every intelligent stockholder, when he read those very unsatisfactory productions. They are a concise and faithful summary. What practical lessons do they teach? It is impossible to expect a healthy condition if we do not first comprehend the disorder. In the present case there is an illustration of the old mode of treating diseases when enormous doses of calomel were administered, in the first instance, with equal confidence to cure all kinds of attacks. So here, without investigating the causes of the difficulty, the managers of Railroads have determined to *cram* their patients. We cannot resist the progressive tendencies of the day, and in the exercise of our hydropathic prejudices, seek to throw cold water on a proceeding so insane, as well as inefficient. In pursuance of our first intentions,

therefore, we call attention to some of the causes of, and remedies for, the existing state of affairs.

While it is on all hands agreed, that mismanagement has characterized the operations of Railroads, it is not yet seen that the parties to blame have offered to resign their present positions in favor of those who would be competent to conduct those works to a successful issue. On the contrary, the very men who have had charge of the roads, and in the exercise of that charge, have brought the companies to the verge of ruin by their want of skill and judgment, by their entire ignorance of their own business, and of all the data which should guide them in the management of that business, are the individuals, who, at this crisis, set themselves up as oracles of wisdom, in matters where they have made gigantic failures. Under some circumstances it would be prudent to listen to such teaching. Men, by the study of their own mistakes, sometimes do learn important lessons.—But the first lesson they learn, must be the correct appreciation of those mistakes.

Objections may be reasonably made to the instruction imparted by the present teachers, because they defend the policy pursued for a quarter of a century, with only disastrous results, striving to persuade us, that in the times, not in the system, lies the trouble; condescending to furnish no proof for even a single point of their assertions.

There can be no doubt that we are to find one great cause of the failure of Massachusetts Railroads, in the character and habitual pursuits of the managers. Merchants are by no means, necessarily the best men to give in charge of the working operations of a Railroad. On the contrary, they may be very dangerous men to trust with such duties. Nothing can be more reasonably expected than that a speculating trader, whatever his character for integrity, will instinctively study the chances for a bargain. This is not a practice, that we have ever heard condemned; yet there are circumstances in which it may produce bad results. While the road is new, there is every temptation to make it pay all that it will. It is a poor plea to set up, [Boston and Providence R. R. Inv. Com., p. 20,] that men supposed an iron rail or a Locomotive would never wear out, but had the permanence of real estate. What individual is willing to acknowledge that he ever utter-

ed such a sentiment—even conceived such a thought? No man will volunteer a confession that he has ever been so stupid. No! The truth is, "a bird in the hand is worth two in the bush" policy has been pursued. Mr. President Speculator has a large interest in his road—he has a keen eye on the treasury from a first-rate standpoint. He draws year after year his certain dividends—he makes no appropriation to a contingent fund but seizes the proceeds, and when he finds a positive crisis near at hand—when he can no longer stave off the renewals of track and machinery, he pockets another dividend, sells his stock to the "widows and orphans," who are dazzled by the first class profits, but to whom they are ever historical. In all this, the officer has been guilty of no lack of integrity. He has acted as not one merchant out of one hundred could avoid acting. It has been "a fair business transaction." But it has ruined the roads.

Mr. White says:

"The management of railroads heretofore has been deemed a matter of science, while experience has taught that what was chiefly needed was moral honesty, energy of character, and common sense. These will put railroads upon the platform with other branches of business that are successfully managed."

Does not Mr. White know that one cause of their failure is this very attempt to put them on the "same platform with other branches of business," by placing at the head of their management those who have been successfully engaged in mercantile pursuits? It is because more attention has been given the paper stock than the rolling stock—because a class of Superintendents, than whom there are none more efficient in the country, have had their hands fettered by gentlemen, who could profitably dispose of a cargo of tea or the year's product of a cotton factory, and who were therefore supposed to possess the qualities needed to guide a Railroad company to success. What mercantile firm would think of sending out the senior partner of the house to India, to take charge of a three decker on the voyage? Such positions are not the places for men reared in the counting-house. A certain power of analysis and judgment are undoubtedly necessary to ensure success in trade. And a power of analysis and judgment but of another kind and degree are needed to manage a Railroad. The merchant has occasion for the gamster's genius—since he must speculate on chances; he has only the markets to analyse; and with all his wit may lose. The Railroad manager reasons on *certain* premises—he has a vast army of *facts* to pass in review—the deductions must be mathematically accurate—his genius must be that of the mechanic and analyst. Such language as that used by Mr. White has a fine sound. Common sense! There's a granite ring in the words, but it's granite in the rough. There's a roundness and a substance in such phrases that make them pleasant to the ear. But they are the weight and character of the boulders scattered all over the country. Unfinished, without the rule of the designer and the drill of the mechanic, they are worthless, so far as any active purpose of structure is necessary.

This folly has been gnawing at the life of the Railroads, and now, seeing the approach of investigation, and fearing its own destruction, rears its

head and exhales the same vapor that has already charmed its victims. "Moral honesty, energy of character, and common sense!" With few exceptions, the Massachusetts railroads have been pre-eminently cursed with all these fine qualities. "Moral honesty," that would not withhold dividend money from its lawful owners for the sake of contingencies in the future. "Moral honesty" that feared to step out of the way to introduce important and necessary improvements, since that would be experimenting with the funds. "Moral honesty," so straightforward, it could never learn from its neighbors. "Energy of character" too. "Energy of character" that pushed every strip of iron and every piston-rod to its fullest capacity to kill out rivals and gratify its own covetous lust. "Energy of character" that built branches for the sake of working them. "Energy of character" that has driven the companies to bankruptcy. And to assist all and direct all, "Common sense," "that began by seducing fifty thousand men to settle in the suburbs of Boston with their families, knowing in its far-sightedness, that one day they would become game for poor 'widows and orphans.'" "Common sense" that knew how to get the dividends when the roads must pay them, and to withdraw investments in favor of the "widows and orphans" when the investments are worthless. "Common sense" that places a merchant, because successful in counting-house speculations, on an open sea under a firmament he has never seen, with a sextant that he knows not how to use.

Certainly, the Massachusetts Railroads want something better than "Moral honesty—energy of character, and common sense." Some of the companies have shown their appreciation of this truth. It was shown long ago when Capt. Swift was made the President of the Western Road. More recently it has been exhibited in the proceedings of the Boston and Lowell Corporation, who have placed a practical Engineer in the President's chair, and a practical mechanic in the Superintendent's office. This is as it should be. The President and Superintendent of a road should be men of clear heads, who can wade unembarrassed through the sea of facts that are continually rolling in on them, and from which important deductions are to be continually drawn that will modify their management. Such qualifications are rarely found among merchants. The Engineer or mechanic, trained by severe duty to constant analyses, has received the education demanded for the occasion. It has been customary to place the profession in the position of Superintendents. That office needs more assistance than can be gained from consultations with superannuated merchants. The President should be in every way capable of advising and aiding the Superintendent. We do not mean that every President should have been an Engineer. Probably no company ever had a more efficient officer in that capacity than the Hon. Nathan Hale, formerly of the Boston and Worcester Railroad; a man accustomed to march among intricacies and difficulties with an unembarrassed clearness of perception; possessing a mathematical mind of great scope and comprehensiveness, and a power of generalization that peculiarly fitted him for such a post. Such instances are rare—we do not know another like it. Mr. White has made an astonishing discovery indeed when he has learned

that the management of railroads is not a science. It is indeed a science, but has not been scientifically handled.

If the managers of our roads had been scientific men instead of men possessing only "moral honesty, energy of character, and common sense" the roads would now have been in a healthy condition physically and financially.

We set it down, therefore, as the first and fundamental mistake in the management of railroads, that proper qualifications have not been sought in selecting managers. That because a man has been a successful merchant, the mistake had been made of supposing he would be successful as a mechanic and analyst. Whereas the fact of his success in mercantile pursuits was evidence that in such pursuits lay his peculiar forte and that in a position demanding very different characteristics he would exhibit his weakness. The discussion of this blunder suggests the remedy, which is to appoint men possessed of minds with a power of analysis and the constructive talent of the mechanic.

The second mistake in this management has been the negligence practiced in keeping account of the business of the companies. A consequence of this neglect has been, that no officer has known what any branch of traffic on the road was costing or earning, so that tariffs have been regulated rather by convention than by any accurate knowledge of what was just. And when a greater income is needed, an indiscriminate advance takes place in all rates forcing some trade to pay an unjust freight and some passengers a higher fare than can properly be demanded. No company appears to know what it is costing to carry a ton of the various kinds of freight nor the expense of transporting passengers. Yet some of these roads have been in operation more than twenty years. The depreciation of rails and machinery has not been noted as it ought and but just now it is claimed, they have learned that such a thing as depreciation can occur;—a fact that might have been known to any intelligent boy, who had looked into his grandmother's coffee mill. This inexcusable ignorance, it is pretended, accounts for neglecting the contingent fund, which is to provide against the ordinary wear and tear of material as well as the damage of accidents. It has produced the destruction of the Massachusetts railroads; and they, being now in a generally dilapidated condition—the companies are receding towards the practice of those ages of which their roads are only worthy. They find stage coach prices to be reasonable because, as "time is money," there is still a saving in traveling by railroad. Wonderful logic—intensity of "common sense."

The third cause of the unprofitableness of railroads in Massachusetts and one like the last, proceeding from the original blunder of selecting the wrong men as managers, may be found in the excessive prices paid for the means of operating the roads. It is natural enough, for men who declare that "the cost of carrying passengers and of carrying freight is not separated on this or any other road" (B. & P. R. R. Inv. Com. p. 10,)—should be generally ignorant of what is going on away from home. Such men must expect to pay enormously for whatever they use; they need not be surprised that men who live by them, grow fat while they are skinned. It is a natural consequence of their old foggyism. In the simple mat-

ter of loading and unloading freight, they tell us the average cost (Mass. R. R. 1842—1855, p. 12,) is 15 cents per ton—smaller quantities 20 cents per ton. This figure will abundantly surprise railroad managers in this part of the country. We have taken the trouble to make some inquiries in reliable quarters. We find but one expression of opinion; an opinion that reflects on the enterprize if not on the integrity of those men who allow their companies to be fleeced to such an extent. Labor is no dearer in Massachusetts than in this State. We doubt much if it command as high pay. Yet the Erie Railroad Company are able to unload and reship freight in either direction, at Dunkirk for 7 cents per ton. Says Capt. Swift page 12, "The Taunton Branch Railroad pay the Boston and Providence Railroad 15 cents for loading and the same for unloading per ton, and this after much experience by the Taunton Branch in that onerous part of railroad work."

And what does this prove? It is designed to show in connection with other facts, that the companies need an advance in freights. Does the Providence company know whether they are making or losing by the operation? Of course not. "Owing to a peculiar method of keeping accounts" they are unable to determine the point. Nor does it matter to the Taunton Company; they make the customer pay, if it cost more or less.

So also of the fuel burned on those roads. What rich jobs are the fuel contracts! Nor are the officers of the companies impoverished by those same contracts. We cannot tell where the fault lies, but it is certain that the railroads of Massachusetts are suffering under a monstrous extortion for this item. The fuel bill of the Boston and Providence Railroad Company is so extraordinary as to demand especial investigation. Last year, it amounted to 34.8 cents per mile run, while on the Worcester road, sufficiently extravagant to excite attention, the bill was but 28 cents per mile and was higher than on any other road we examined (see JOURNAL of March 8th,) save the Providence.

We have already shown, that the fuel bill on those roads might be reduced to 16.5 cents per mile run. Nor would this demand a new equipment. A change in the fire-boxes costing between five hundred and a thousand dollars an engine, amounting in all to less than fourteen thousand dollars on the Providence road, would be sufficient. Some of those roads have been dabbling in new patterns that have as yet amounted to little, if we are to judge from any action taken by the companies. Yet even this sort of enterprize has been neglected by that wofully mismanaged affair, the Providence road. It has been waiting for its neighbors; the venerable ladies, who have held it tied up in their aprons, have in their highly respectable conservatism been very prudent and have taken good care that Patent Inventions did not pocket their funds. The old course of private bargaining and quiet bids has been followed and the result just what might have been expected. The company have now entered a new enterprize worthy the genius that conceived the South Sea bubble. They have bought more than 1,700 acres of land in Virginia at a cost of 13,500 dollars, and have put thereon an agent with a pleasant salary, have built a saw-mill and railroad, have purchased scows for shipping the wood and have opened a store to supply the "many hands apparently em-

ployed there." We venture to propose that when a small tract is cleared, they raise cotton for packing and waste as well as freight. And if there be no profanity in the proposition, we further suggest that, if they have a shrewd foreman, who has good judgment in selecting the army of laborers employed, they might without difficulty obtain a fair crop of wool from the "place where the wool ought to grow." But the matter is too serious to be treated with levity. We are the more convinced of the credulity of the honest dames who manage the affairs of the road. If those managers would supply their road with the proper improvements for the consumption of fuel, they would save on a year's work equal to the last—nearly \$60,000 being about two per cent. on the capital stock of the road.

But even the Virginia scheme might have been turned to good account. The company, after purchasing that land, should have advertised for bids, and by exciting private enterprise, secure the fuel at the least possible expense. This policy, however, is constantly pursued by the Massachusetts companies. Men are accumulating fortunes as supply agents, that should be in the treasury of those roads, while the "widows and orphans" are treated to the Reports of Investigating Committees, in place of fair dividends. This state of things will exist so long as the system is supported in which it has its life.

Milwaukee and Horicon Railroad.

We have received a copy of the second report of this corporation. For the first fifty-one miles, it uses, under lease, the route of the La Crosse and Milwaukee line, constituting the first division.—At Horicon it diverges, and pursues by a very direct route to the North-west, its course to Stephens' Point, its present proposed terminus. During the year, the Directors have pushed forward the work as fast as circumstances would permit. It is now open to Waupun, 15 miles from Horicon, and 68 miles from Milwaukee. When it is remembered that the La Crosse and Milwaukee road was not opened to Horicon until January of the present year, the progress made since that date in track-laying will appear the more satisfactory. The report states that though for nearly all the time the mercury was below zero, these fifteen miles were laid in the course of forty days!

Early last season application was made to the city of Milwaukee for a loan of its bonds; as owing to the financial condition of the company, their bonds could not be sold, except at ruinous sacrifices. In accordance with this request, an ordinance was passed, and approved by a popular vote, loaning the company \$166,000, which was accordingly done. In July, the town of Ceresco voted \$50,000 in bonds, which they executed and delivered to the company. A first mortgage has also been made on the 42 miles between Horicon and Berlin, for \$10,000 per mile, running twenty years, but none of these have as yet been negotiated.

The entire disbursements on the second division, on account of engineering, construction, interest, Salaries, &c., have been..... \$262,375
And for rolling stock and machinery.... 91,734

Total \$354,109

Some additional rolling stock will be needed, as the road progresses.

Since opening to Waupun, the business offering

comes fully up to the most sanguine expectations, and no doubt is entertained about the road becoming one of the best paying lines in the State.

Important connections are already in progress, which will bring this road a valuable business.—Among these may be mentioned the Winnebago road, which will extend from Oshkosh to Ripon, and there connect with the Milwaukee and Horicon line. A large lumber business will be drawn from this feeder, which it is expected will be completed in three years. At Burnet, five miles from Horicon, the road also connects with the Chicago, St. Paul, and Fond du Lac line. It is in contemplation to change the gauge of this road, so as to correspond with the other roads of the State. Such an arrangement would enable freight to be carried between Milwaukee and Fond du Lac without breaking bulk. The Winnebago road, it is also thought, will be extended to the Copper Mines.—From Berlin to Lake Superior, another company are to construct a railroad, which will be another valuable feeder when completed.

In securing all these connections, the report states, not one dollar of the Company's funds has been or is to be applied to their construction, thus conferring all the advantages of tributary lines, without any risks or embarrassments.

It is expected that, during the present fiscal year, the road will be completed to Berlin, 42 miles; and next year, to Stevens' Point, 60 miles farther.

The distance from this point to New York, by Milwaukee, will be 1080 miles, or 129 miles less than by way of any route that may be constructed by way of Chicago.

After setting aside sufficient to finish the road to Waupun, the Company have on hand the following resources for completing the second division:

1st mortgage bonds.....	\$420,000
Bonds of town of Berlin.....	100,000
" " Ceresco.....	50,000
" " Waupun (voted).....	50,000
Amount to be paid on cash stock.....	126,000
Amount of stock to be paid on contract.....	36,850
Bonds to be voted by towns and counties under act of 1854.....	220,000
Unperfected real estate mortgages.....	108,000

\$1,116,850

Amount expended..... 854,109

Total resources and expenditures..... \$1,469,459

The amount of stock represented is 5,542 shares consisting of—

Cash installment and full paid stock, including farm mortgage.....	\$333,100
Stock held by City of Milwaukee.....	166,000
Stock to contractors.....	55,000

Total \$554,200

Of the expenditures, about \$60,000 have been made on that part of the road between Waupun and Berlin. This makes the cost of that section opened about \$20,000 per mile.

The Chief Engineer's report states that by the middle of next month the ballasting will be completed. The rail is 60 lbs. per yard, and is estimated to have 25 per cent. greater strength than the ordinary pattern. In the chairs, cross-ties, frogs, &c., everything is of the best description—superior to those in use on most roads. The design has been to build the road first-class in every respect. The equipment is not exceeded in quality by any road in the West.

The rolling stock consists of 3 first-class locomotives; 3 passenger, 2 baggage, 40 house freight, 40 platform, and 3 other cars. At different points, about 30 acres of ground have been secured for depot purposes. The 27 miles between Waupun and Berlin, are now ready for the contractors, and will be built as cheaply as any part of the line.

John B. Smith is President; Jesper Vliet, Chief Engineer and Superintendent; and D. H. Richards Treasurer. The last annual meeting was held at Waupun, on the 5th inst.

Mississippi Central Railroad.

The constantly increasing business upon this road, now opened 24 miles from Grand Junction, its northern terminus, to a point about two miles from Holly Springs, proves it a vastly more important tributary to the Memphis and Charleston Railroad, than its most sanguine friends could have anticipated. One merchandise and two passenger trains now run daily in connection with those of the Charleston Road. The freight is immense, and the passenger cars generally crowded. The track, as its foundation becomes solid and compact, which always requires time and careful attention upon a new road, must prove its adaptation to heavy as well as fast trains. The steepest grade, as determined by the Road, at the closing of the contract for construction, is 42½ feet to a mile, which is less than that of most roads throughout the country. The curvature is light, and will compare favorably with any road, except, perhaps, two or three, in the United States.

The road will be opened to Oxford, 55 miles from the junction, and also from Canton northward, some 30 miles, by the 4th of July next; and the grading, trestles and bridges upon all portions of the road are progressing rapidly. So we are assured on the best authority.—*Memphis Eagle*

Railroads in New Jersey.

The annual statement of the railroad companies in this State gives the following, as to their general condition and business for 1855.

CAMDEN & AMBOY R. R.

The paid-in capital of this corporation is \$1,500,000; and that of the Delaware and Raritan Canal Company also \$1,500,000; making a total of \$3,000,000. The funded debt consists of—

Sterling Loan, at 6 per cent.	£800,000
" 5 " "	210,000
" 6 " "	225,000
" 5 " "	185,000
Total	£1,420,000
Equal to, at \$4.80	\$6,816,000
Loan at 6 per cent.	367,000
" " "	800,000
" " "	1,700,000
" " "	292,000
" " "	1,175,000

Total Funded Debt.....\$11,150,000

The last but one of these items is part of an issue of \$2,500,000 authorized by the stockholders, but only in part negotiated. The £185,000 was issued for stock in the Philadelphia and Trenton road. This has since been converted into dollar bonds at 4.80. The last of the loans was issued for subscription to the Belvidere, Delaware, Freehold and Jamesburg, and Flemington railroads.

The floating debt is \$257,200. Debts due the companies, from advances made to other corporations, &c., \$189,476. Cost of road and equipment, \$4,877,981; of Del. and Raritan Canal and appurtenances, \$3,758,542, making a total of \$8,636,523. The earnings for 1855 were—

C. & A. R. R. & Trans. Co.	\$1,501,787
D. & R. Canal Co.	515,940
Total	\$2,017,127
Working expenses—	
Railroad	\$870,558
Canal	184,628
	1,055,186

Net gains	\$961,941
From which were paid dividends of 12 per cent. in cash amounting to	360,000
	\$601,941
Interest on sterling loan	\$390,000
" on other loans	260,040
	650,040

Deficit.....\$48,099

We are not informed whether or how this has been met, or what revenues the companies derived from their investments in other roads. On a comparison with 1854, it will be seen that the gross earnings have decreased; but the working expenses in a still greater degree, leaving the net revenue considerably in advance of that year.

During the year four persons were killed and five wounded, besides the 24 killed and 38 wounded from the Burlington catastrophe in August. Total killed and wounded, 71.

Robert L. Stevens, President.

FREEHOLD & JAMESBURG R. R.

Length, 11½ miles. Capital subscribed, \$137,900, of which \$130,336 have been paid in. Funded debt, \$70,000, bearing six per cent. interest. The sum of \$18,446 has been applied to construction from earnings. Total cost of road and equipment, \$218,782. The earnings for 1855 were—

Passengers	\$13,188
Freight	20,422
Total	\$33,610
Working expenses	\$19,505
Interest	3,181
	22,686

Balance10,924
Passengers carried, 50,998; tons of freight, 27,553; mileage of trains, 26,495. No dividends. No fatal accidents; three persons injured.

W. D. Davis of Freehold, President.

NEW JERSEY R. R. & TRANS. CO.

Capital stock, \$3,482,850. Funded debt, including \$485,000, the cost of property and privileges of the Jersey Associates, \$690,000. Profit and loss, being surplus earnings applied to construction, \$127,949, besides \$37,894 paid for relaying road with new rails. Cost of road, \$3,114,928; of locomotives and fixtures, \$106,247; and of cars, \$136,830. Other property owned by the Company valued at \$952,066. Cash and cash items on hand, at 1st of January \$195,496. The earnings were—

Passengers	\$635,922
Freight	78,884
Mails, &c.	146,708
	\$861,514
Working expenses	360,767

Profits	\$500,747
From which were paid—	
Interest on bonds	\$40,580
Transit duties	16,037
Tax on capital stock	17,414
Dividends, 10 per cent.	348,235
Profit and loss	78,481
	500,749

Passengers carried in 1855, 2,164,471, besides commuters and free passengers. Tons of freight hauled, 64,049. Mileage made by trains, 382,563.

No passengers or others were killed while in the cars. Killed by jumping from trains in motion, 1; by trespassing on track, 2; by coupling trains, 1. Total, 4. Three persons were injured.

John S. Darcy of Newark, President.

PATERSON & HUDSON RIVER R. R.

Capital stock, \$630,000. Cost of road and equipment, \$630,000. No funded debt. Rented to New York and Erie Railroad Company for \$50,400, or eight per cent. on cost. One dividend of 2½ per cent. was paid, amounting to \$15,750. No other particulars given.

John Colt, of Paterson, President.

NEW JERSEY CENTRAL R. R.

Capital stock, \$2,000,000; first mortgage bonds, \$1,500,000; second mortgage bonds, \$534,975; other indebtedness, \$231,201; making a total of \$4,266,176.

Cost of road, at 1st of April last	\$2,698,436
Expenditures since	309,992
Land and work at Elizabethport	112,219
Station houses and shops	108,768
Engines and cars	314,784
Ferry interest and boats	189,950
Miscellaneous property on hand	193,123
Cash and cash items	389,904

Total.....\$4,266,176

The receipts for 1855 were—

Passengers	\$185,048
Freight	199,324
Mails, express, &c.	9,356

Total	\$393,728
Working expenses, including taxes	222,125

Net earnings.....\$171,603

No dividends were declared during the year; the net earnings having been expended on construction.

Number of passengers carried, 307,925; tons of freight, 88,157. Mileage of passenger trains, 144,597; by freight do., 213,881; by construction and others, 32,971. No passengers were killed, but a number were wounded from a car being thrown off the track, in consequence of a rail being broken. One killed and one injured from trespassing on track. One employee killed and one injured from falling off trains.

John T. Johnson, President.

MORRIS & ESSEX R. R.

Capital paid in, \$1,157,805; funded debt, \$328,000; floating debt, \$47,000; contingent fund, \$173,904; making a total of \$1,706,745. Cost of road and equipment, \$1,636,550. Paid as subscription to stock of Newark and Bloomfield Railroad, \$20,500. Cash and bills receivable, \$49,695. The earnings for 1855 were—

Passengers	\$135,127
Freight	84,951
Mails, &c.	5,814

Total	\$225,893
Operating expenses	\$123,419
Interest on debt	25,277
	148,696

Balance.....\$77,196
From this were paid two semi-annual cash dividends of three per cent. each, amounting to \$73,580.

Wm. Wright of Newark, President.

MILLSTONE & NEW BRUNSWICK R. R.

Length of road completed, 6½ miles. Capital paid in, \$100,914. Floating debt, \$10,086. Cost of road and equipment, \$111,000. The receipts for 1855 were—

Passengers \$3,762
Freight 6,056

Total \$9,818
Working expenses 5,661

Net profits \$4,157
Passengers carried, 17,328; tons of freight, 8,076. No accidents.

Isaac R. Cornell of New Brunswick, President.

WARREN R. R.

This road was expected to be opened within three months from date of report. Amount expended about \$1,000,000. At the Delaware river, it connects with the Delaware, Lackawanna, and Western road; and at New Hampton with the New Jersey Central. Length, when completed, about 18 miles. The Van Ness tunnel, now under construction, will be nearly 3,000 feet in length. At the previous session of the Legislature, the company were authorized to construct a temporary track over the mountain. This work is now completed, with an average grade of only 50 feet to the mile. The President in his report makes the following happy hit at the Legislature.

"I found it much easier to construct this temporary track, five miles long, over this barren and uninhabited mountain, than to obtain the necessary legislation for it. I was nearly three months in obtaining this reasonable legislation, and I constructed the road in about two months. I think the Legislature ought not only to have given me this authority, the first week after application, but ought to have furnished or loaned the money into the bargain, without security. The road is the most costly one for the distance ever undertaken in New Jersey. It is located on a grade going east of 21 feet to the mile. This grade made it necessary to construct a tunnel at Van Ness Gap, near the Delaware, of 1,000 feet long, a cut through every hill, a fill in every hollow, a bridge across every stream. The water courses and hills in Warren run north and south, while the road runs east and west."

We will warrant the man who talks thus to make an efficient President!

J. I. Blair of Belvidere, President.

CAMDEN & ATLANTIC R. R.

Capital paid in, \$369,320. Funded debt, \$867,600. Floating debt, \$654,531. Cost of road and equipment, \$1,729,642. The business for 1855 was—

Passengers \$86,741
Freight 35,178
Other sources 498

Total \$122,417
Working expenses 72,336

Net profits \$50,080
Interest charge 63,129

Deficit \$13,049

Two fatal accidents—one an employee, and one a lady while attempting to cross the track.

Geo. W. Richards of Camden, President.

FLEMINGTON R. R. & TRANS. CO.

Capital stock, \$150,000. Funded debt, \$72,800. Other indebtedness, \$56,420. Total, \$279,220.

The road has been worked, during the past year, by the Belvidere Delaware R. R. Co. The earnings were—

Passengers \$4,846
Freight 3,894
Mail, &c. 92

Total \$8,832

Expenses for working about \$8,000. No dividends. One fatal accident reported.

C. Bartles of Flemington, President.

PATERSON & RAMAPO R. R.

Capital paid in, \$248,225. Funded debt, \$100,000. Other debts, about \$1,200. Cost of road and equipment, \$350,000. Income—rent from New York and Erie Railroad Co., \$26,500. Dividends paid, six per cent., amounting to \$14,880. Expended for contingencies, as taxes, &c., \$2,783, besides \$7,000 for interest. No other particulars reported.

Gouverneur Morris, President.

SUSSEX R. R.

Capital paid in, \$150,000. Funded debt, \$150,000. Floating debt, \$52,464. Cost of road and equipment, including interest, \$352,464. Income for 1855, \$27,969. Expenditure, \$29,891, besides \$10,005 for interest on bonds and floating debt.—No dividends. No accidents.

Thomas Hewitt of Trenton, President.

BURLINGTON & MT. HOLLY R. R.

Capital paid in, \$70,000. Net earnings applied to construction, \$9,551. Funded debt, \$20,000. Due to Camden and Amboy Railroad Co. for rails, about \$15,000. Cost of road and equipment, exclusive of the above \$15,000, \$99,551. The receipts for last year were—

Passengers \$15,914
Freight 6,639
Mails, &c. 436

Total \$22,989

Working expenses \$12,153

Interest 1,200

Dividends (five per cent.) 3,500

Balance \$6,136

Chas. Bispam of Burlington, President.

BELVIDERE DELAWARE R. R.

Capital paid in, \$1,000,000. Funded debt—1st mortgage, \$1,000,000; 2d mortgage sold, \$305,000, total—\$1,305,000. Floating debt, \$314,000, of which \$164,000 are due the Camden and Amboy company. Cost of road and equipment, \$2,619,000.

The road has been in operation between Trenton and Phillipsburg during the whole year. That part between Phillipsburg and Belvidere was opened in November last. The receipts for last year were—

Passengers \$79,836
Freight 66,640
Mails, &c. 14,879

Total \$161,355

Receipts from Flemington R. R. 8,832

Total \$170,187

Expenditures for both roads 102,653

Net profits \$67,534

The expenditures include an increase of wood and materials worth about \$9,500; also \$5,460 applied to construction. No dividends. Interest charges not stated. No accidents.

Chas. Sitgreaves of Easton, President.

MORRIS CANAL & BANKING CO.

Capital paid in, \$1,789,000. Debts, (funded and others,) \$465,439. Cost of canal and appurtenances, \$2,320,198. Repairs in 1855, \$52,877. Navigation, lock, and plane tending, \$26,902. Superintendence and management, \$17,081. Income for last year, \$278,638. Dividends paid in cash, \$76,400.

Ephraim Marsh of Jersey City, President.

Abstract of the Returns from the New Jersey R. R. and Canal Companies for 1855.

NAME OF COMPANY.	L/gh in Miles.	Capital paid in.	Funded Debts.	Other Debts.	Cost.	Earnings.	Expenses.	Net Earnings.	Rate of Dividends.
Camden and Amboy R. R.	94	\$1,600,000	\$11,150,000	\$257,200	\$4,877,981	\$1,501,787	\$870,558	\$631,229	12
Delaware and Raritan Canal.	*	1,600,000	690,000	None.	44,479,918	616,940	184,628	331,311	12
New Jersey R. R. and Trans.	30	3,482,550	1,534,975	231,208	44,266,166	861,614	360,767	500,847	10
New Jersey Central R. R.	63	2,000,000	1,634,975	47,000	1,638,550	338,728	222,125	117,603	None.
Morris and Essex R. R.	63	1,157,805	828,000	None.	630,000	225,893	148,696	77,197	6
Paterson and Hudson River R. R.	13½	630,000	100,000	1,200	830,000	33,610	19,504	14,106	2½
Paterson and Ramapo R. R.	16½	248,225	70,000	None.	218,782	33,610	19,504	14,106	None.
Freehold and Jamesburg R. R.	11½	180,325	None.	10,086	111,000	9,818	5,661	4,157	None.
Millstone and New Brunswick R. R.	61½	100,914	None.	None.	1,000,000	122,415	72,336	50,079	None.
Warren R. R.	60	869,320	867,600	654,530	1,729,642	8,832	29,891	None.	None.
Camden and Atlantic R. R.	12	150,000	72,800	56,420	279,220	27,969	12,153	15,816	None.
Flemington R. R. and Trans.	12	150,000	150,000	15,000	352,464	27,969	12,153	15,816	None.
Sussex R. R.	6	70,000	20,000	15,000	114,551	161,355	78,893	82,462	5
Burlington and Mount Holly R. R.	6	1,000,000	1,305,000	314,000	2,619,000	96,862	96,862	181,776	None.
Belvidere Delaware R. R.	64	1,789,000	465,439	None.	2,320,198	278,638	None.	None.	None.
Morris Canal and Banking.	*	1,789,000	465,439	None.	2,320,198	278,638	None.	None.	None.
Totals.	442	\$14,278,450	\$16,753,814	\$1,639,108	\$24,080,482	\$4,164,488	\$2,110,874	\$2,132,403	

* Length of D. & R. Canal, 43 miles; of Morris Canal, 102 miles.

† Including \$1,117,563 assets then on hand, besides road and equipment.

‡ Including \$721,977 assets then on hand, besides road and equipment.

§ Dividends of six per cent. paid on preferred stock.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	63	South Western, Ga.	92	1,097,496	465,500	1,624,920	283,306	141,168	8	---	
Androscoog & Kennebec.	55	942,343	1,475,080	2,245,020	190,605	12,807	none	18	Tennessee and Alabama.	30	246,486	---	679,906	In progr.	---	---	---	
Androscoog.	20	91,192	232,193	843,317	29,506	---	none	20	Tennessee and Miss.	170,881	---	---	175,740	In progr.	---	---	---	
Kennebec & Portland.	60	1,114,725	1,661,236	2,470,600	239,330	124,038	none	14	Memphis and Charleston.	288	2,103,177	958,275	3,663,302	176,484	102,016	---	---	
Portl., Saco, & Portland.	61	1,367,000	119,237	1,486,317	233,224	120,824	87½	---	Mobile and Ohio.	527	2,300,000	1,310,666	3,666,991	In progr.	---	---	---	
Boston, Concord, & Montreal.	93	1,808,093	1,059,512	2,771,310	380,221	143,665	2	---	Miss. Central.	188	642,534	---	628,308	In progr.	---	---	---	
Quechere.	53	2,085,925	899,313	3,174,687	329,744	158,632	84	---	N.O., Opelousas & G.W.	350	1,309,428	476,143	1,825,612	In progr.	---	---	---	
Concord.	35	1,485,000	---	1,412,676	870,529	138,299	2½	41½	Vicksburg, Shreveport & Tex.	---	111,750	---	107,896	In progr.	---	---	---	
Northern, N. H.	82	2,768,400	---	3,016,693	102,647	55,173	none	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,600,000	In progr.	---	---	---	
Conn't & Passumpsic R.V.	61	1,048,145	787,608	1,780,062	804,971	---	none	---	East Tennessee and Va.	16	625,425	538,593	1,033,781	In progr.	---	---	---	
Rutland & Burlington.	120	2,238,376	2,662,396	4,378,428	290,119	214,793	none	---	Nash. and Chattanooga.	161	2,319,330	1,497,081	3,843,694	318,090	112,177	none	---	
Vermont Central.	117	5,000,000	5,550,236	8,465,366	439,764	140,377	6	07	Covington & Lexington.	93	---	159,290	635,303	90,930	24,964	---	20	
Boston and Lowell.	37	1,830,000	325,638	2,158,565	459,764	140,377	6	32½	Lexington and Frankfort.	29	431,091	---	428,057	In progr.	---	---	---	
Boston and Maine.	58	4,078,974	150,000	4,468,18	60,917	8,740	none	4½	Lexington and Big Sandy.	---	---	---	570,463	In progr.	---	---	---	
Boston and N. Y. Central.	74	2,410,800	1,618,671	3,468,18	558,371	219,659	none	65	Louisville and Frankfort.	66	698,236	669,061	1,559,566	244,014	96,902	6	---	
Boston and Providence.	65	3,160,000	359,132	3,677,154	1,008,004	404,461	6½	58	Atlantic & Gt. Western.	264	866,989	77,294	613,231	113,859	---	---	---	
Boston and Worcester.	68	4,500,000	668,425	4,868,425	119,221	65,527	8	29½	Bellefontaine and Ind.	118	1,881,598	1,200,612	2,806,821	238,010	114,592	none	30	
Cape Cod.	47	691,090	290,593	967,252	286,563	103,757	5½	47½	Cleveland and Erie.	95	---	---	4,546,133	1,162,601	567,905	9	102½	
Connecticut River.	62	1,691,110	273,241	1,802,216	119,221	65,527	8	70	Clev. Col. and Cincin.	141	4,473,721	374,127	4,546,133	1,162,601	567,905	9	102½	
Eastern, Mass.	60	2,685,400	2,947,737	4,621,016	647,281	305,998	---	82	Clev. Zanesv. and Cincin.	87	---	---	---	---	---	---	---	
Fitchburg.	67	3,640,000	153,700	3,793,998	681,183	226,071	---	70	Cleveland and Toledo.	200	2,675,425	2,689,301	5,124,629	786,272	396,986	10	79½	
Nashua and Lowell.	14	600,000	---	654,603	191,871	55,777	8	83½	Clev. and Mahoning.	103	---	---	---	---	---	---	---	
N. Bedford and Taunton.	17	3,015,100	292,150	3,307,250	653,499	295,738	6	83½	Clev. and Pittsburgh.	133	2,686,770	2,516,162	4,818,153	450,216	255,868	64½	---	
Old Colony and Fall River.	57	2,225,541	1,033,670	3,269,217	268,726	87,313	none	9	Cin. Hamilton & Dayton.	60	2,100,000	1,464,364	2,961,978	483,620	---	---	60	---
Vermont and Mass.	77	5,160,000	5,906,420	10,495,005	1,869,673	633,013	---	72½	Cin. Wilm. & Zanesv.	131	1,120,450	1,311,265	2,326,469	In progr.	---	---	18	---
Western, Mass.	165	1,141,000	506,565	1,511,271	294,780	75,760	2	44	Columbus and Xenia.	55	1,484,550	149,000	1,461,733	356,365	187,618	10	85	---
Worcester and Nashua.	46	1,510,020	938,461	1,806,966	311,430	138,057	---	123	Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	In progr.	---	---	---	---
Providence and Worcester.	72	2,350,000	939,000	3,313,932	730,012	352,799	10	---	Dayton and Michigan.	140	1,076,692	893,011	1,185,826	In progr.	---	---	25	---
Hartford and N. Haven.	120	1,845,616	2,090,324	4,060,869	288,685	119,611	none	---	Easton and Hamilton.	42	448,411	835,994	1,346,573	113,859	63,256	---	20	---
Hartf. Prov. and Fishkill.	110	2,000,000	474,177	2,424,096	830,792	18,351	none	---	Little Miami.	65	2,963,921	1,171,785	3,648,172	681,562	336,708	---	90	---
Housatonic.	62	1,031,800	1,031,800	1,031,800	1,031,800	1,031,800	---	30	Mad River and L. Erie.	205	2,451,560	2,672,932	4,446,661	---	---	---	18	---
Nantuxet.	62	2,992,150	2,264,656	4,906,784	936,025	341,667	none	---	Central Ohio.	138	1,620,927	3,485,076	4,283,443	Recently opened.	---	---	12	---
N. York and N. Haven.	60	78,258	738,166	1,450,818	108,996	217	none	83	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	66	---
N. Haven and N. London.	66	609,200	1,073,631	1,694,353	124,044	66,331	none	---	Pittsburg, Mansf. & Newk.	127	1,350,000	2,206,367	3,662,357	328,058	164,479	none	---	---
N. London & W. Palmer.	66	2,122,360	773,459	2,907,13	304,236	88,458	2½	---	Scioto & Hocking Valley.	155	403,975	69,050	888,858	In progr.	---	---	---	---
Norwich and Worcester.	32	439,005	1,625,098	1,840,606	117,716	0,904	---	---	Springf. Mt. Vernon & P.	113	1,000,000	600,000	---	In progr.	---	---	---	---
Albany Northern.	35	643,330	317,859	974,323	In progr.	---	---	---	Tol. Washash & St. Louis.	242	2,500,000	4,580,000	---	In progr.	---	---	---	---
Black River and Utica.	100	1,487,877	1,401,183	2,819,066	172,476	66,333	none	---	Cin. Log. and Chicago.	255	4,196,697	1,006,123	2,080,433	In progr.	---	---	8	---
Buffalo, Conn. and N. Y.	100	708,439	2,577,849	3,401,868	288,292	31,896	none	---	Evansville & Crawfordsv.	109	708,945	1,177,596	1,844,541	127,400	64,652	---	---	---
Buffalo and N. Y. City.	67	1,300,000	1,040,000	2,494,304	679,750	355,763	10	---	Ind. and Cincinnati.	88	1,213,723	1,442,859	2,178,401	506,012	193,142	7	58	---
Buffalo and St. Line.	49	454,111	1,222,303	1,775,796	174,080	90,506	---	---	Indiana Central.	66	611,400	1,261,179	1,907,911	350,176	134,878	---	45	---
Canadaigua and Elmira.	98	1,315,000	2,279,854	3,405,832	---	---	---	---	Ind., Clev. & Pittsburg.	83	884,167	1,101,971	1,671,544	---	---	---	20	---
Canadaigua & Niagara F.R.	35	615,000	698,689	1,187,562	135,433	48,649	none	---	Jeffersonville.	65	1,014,252	694,000	---	206,544	94,318	none	---	---
Gayles & Susquehanna.	144	8,738,466	9,250,362	12,737,898	1,812,087	608,946	35	---	Lafayette and Indianapolis.	64	---	---	---	---	---	---	---	---
Hudson River.	95	1,576,143	688,949	2,555,980	301,793	116,462	none	---	Madison and Indianapolis.	87	1,447,500	1,589,881	3,237,381	---	---	---	---	---
Long Island.	534	24,154,880	14,462,742	38,253,913	6,663,581	3,627,118	8	92½	New Albany and Salem.	288	2,535,121	5,281,948	6,643,189	645,827	371,402	none	10	---
New York Central.	404	10,024,968	25,126,669	33,439,481	4,485,998	2,627,118	none	66½	Peru and Indianapolis.	73	---	688,314	---	150,000	90,000	none	17	---
New York and Erie.	131	5,717,100	4,069,798	9,786,203	1,335,577	234,126	none	20	Terre Haute and Ind.	73	974,800	604,365	1,502,166	287,512	189,702	10	96	---
New York and Harlem.	115	1,633,022	4,069,874	5,702,714	520,153	135,764	none	---	Chicago and Rock Isd.	152	3,141,500	2,387,155	5,214,162	In progr.	---	---	---	---
Northern, N. Y.	35	899,000	216,681	723,683	126,540	50,982	3½	---	Chicago and St. Louis.	220	---	---	---	1,077,312	---	---	---	---
Oswego and Syracuse.	29	467,200	204,189	749,638	In progr.	---	---	---	Chic., St. Paul & Fld du Lac.	178	2,800,000	1,325,000	3,625,000	---	---	---	---	---
Pottawamie and Watertown.	25	610,000	140,000	896,423	241,149	82,600	7	---	Galena and Chicago.	208	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	114½	---
Rensselaer & Saratoga.	45	600,000	398,600	---	71,909	21,098	none	---	Illinois Central.	707	1,419,440	18,001,426	17,098,099	1,532,118	---	---	98	---
Saratoga and Whitehall.	80	768,389	1,578,804	2,272,777	150,484	22,503	none	---	Peoria and Oklawaha.	93	569,859	818,454	1,888,342	In progr.	---	---	---	---
Syracuse & Binghamton.	27	487,830	737,073	1,109,822	156,363	55,184	---	---	Ohio & Miss. (Wst. Div.).	147	1,780,296	3,292,403	4,070,558	Recently opened.	---	---	---	---
Troy and Boston.	97	1,370,378	700,979	2,068,063	404,374	172,474	8½	---	Terre Haute and Alton.	178	2,241,420	1,256,000	3,637,424	In progr.	---	---	---	---
Watertown and Rome.	50	1,000,000	1,177,376	4,763,184	1,682,466	552,456	12	---	Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.	---	---	---	---
Belvidere and Delaware.	61	1,500,000	1,269,223	1,409,186	69,673	61,760	none	---	Mich. Central.	282	6,021,916	6,142,023	10,300,147	2,215,258	879,656	---	93½	---
Camden and Amboy.	81	240,125	1,092,223	1,409,186	69,673	61,760	none	---	Mich. South & N. Ind.	476	6,928,900	6,319,222	11,645,208	2,410,000	876,000	10	96	---
Camden and Atlantic.	31	823,253	798,596	4,306,338	824,032	440,447	10	121½	Green Bay, Mil. & Ch.	155	764,077	2,427,880	1,193,766	In progr.	---	---	---	---
New Jersey Central.	76	2,000,000	1,032,085	3,506,226	180,796	7	---	---	Milwaukee and Miss.	106	1,826,428	4,672,626	3,578,767	691,843	417,443	17	86½	---
New Jersey Central.	62	1,157,715	351,600	1,549,022	232,696	99,377	6	---	Milwaukee & Western.	72	354,861	132,000	614,238	In progr.	---	---	---	---
Morris and Essex.	44	1,367,867	342,564	1,958,37	Recently opened.	---	---	---	Milwaukee and Horizon.	92	---	---	---	---	---	---	---	---
Albany Valley.	63	1,709,000	1,940,000	3,640,000	219,253	52,450	---	---	Milwaukee & La Crosse.	61	1,351,832	532,131	1,883,963	In progr.	---	---	---	---
Cataw. W. & E.	68	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Racine and Miss.	47	921,906	380,715	1,289,321	In progr.	---	---	---	---
Cumberland Valley.	109	2,865,175	1,865,897	4,140,363	In progr.	---	---	---	Hannibal & St. Joseph.	137	292,351	680,0						

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	85	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	98	98
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	92 1/2	92 1/2
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	92 1/2	92 1/2
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	90	90
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	77
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	75	75
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	85
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	77 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87 1/2	87 1/2
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	92 1/2	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	86 1/2	89
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	85	85
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	85	85
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	66
Delaware, Lackawanna, and Western	1,750,000	1st mortgage, do.	7	April, October	"	1875	90	90 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	82 1/2	82 1/2
Galeana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	97	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	89 1/2	90
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	92	92
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	80	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76 1/2	78
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	79 1/2	82
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N. Y.	1862	96	97
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	94 1/2	95 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90 1/2	91 1/2
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	92 1/2	95
Do. do.	3,225,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	92 1/2	95
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	92 1/2	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	94	97 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	82 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	94 1/2	97 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N. Y.	1875	83	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	83 1/2	85 1/2
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	78	78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	76	80
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	76	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	76	78

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84 1/2	85
Do. do.	1,128,000	Do. do.	6	Jan'y, July	Balt.	1875	86 1/2	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N. Y.	1870	93 1/2	94 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107 1/2	110
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95 1/2	96
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	93 1/2	94
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	91
Do. do.	4,351,000	Convertible, Insurance	7	Feb'y, August	"	1871	83 1/2	83 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	86 1/2	87 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	97 1/2	98
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	87	88
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	69 1/2	70
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	91	91 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 abars	7	March, Sept.	"	1860	91	92
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	95
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	86 1/2	85 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	97 1/2	97 1/2
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91	92
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1868	83 1/2	84 1/2
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1863	89 1/2	90
New York Central	8,287,000	No mortgage, do.	7	15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	Jan'y, July	"	1866	105	106
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	105	106
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	105	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88	88 1/2
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	88	86 1/2

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. 1867	Feb'y,	100	97	Milwaukee, 7 per ct. coup.	X	Divers	88
Do. 5 do. 1858-60	May,	97	97	New Orleans, 6 per ct. cp. R.R.	X	Do.	75
Do. 5 do. 1870-75	August, and	96	97	N. Orleans, 6 per ct. cp. municip.	X	Jan'y, July	83
Do. 5 do. 1890	November.	99	99	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	91 1/2
Albany, 6 per ct. coup. 1871-81	Feb'y, August.	98	98	Pittsburgh, 6 per ct. coup.	X	Divers	77 1/2
Alleghany, 6 per ct. coup.	Jan'y, July	98	98	Quincy, 8 per ct. coup.	1868	X	73
Baltimore, 6 per ct. 1879-90	Quarterly	99 1/2	100	Racine, 7 per ct. coup.	1873	X	83 1/2
Boston, 5 per ct. coup.	April October	100	101	Rochester, 6 per cent. coup.	X	Divers	79
Brooklyn, 6 per ct. coup. Long	Jan'y, July	100 1/2	101 1/2	St. Louis, 6 per ct. coup. Long	X	Do.	79 1/2
Clev'rd, 7 per ct. cp. W. W. 1879	Do. do.	100 1/2	101 1/2	Do. do. Municipal.	X	Do.	80 1/2
Cincinnati, 6 per ct. coup.	X	89 1/2	90	Sacramento, 10 p. ct. cp. 1862-74	X	Do.	80 1/2
Chicago, 6 per ct. coup. 1875-77	X	89 1/2	90	S. Francisco, 7 p. cp. 1865, pay. N. Y.	X	May, Novemb.	78 1/2
Detroit, 7 per ct. cp. W. W. 1873-78	X	101 1/2	102 1/2	Do. 10 p. ct. cp. 1871	X	Do. do.	97
Dubuque, 8 per ct. cp. Long	X	100	105	Do. 30 do. pay. N. Y.	X	July, July	104
Jersey City, 5 p. ct. cp. W. W. 1877	X	96	96	Do. 6 per ct. pay. N. Y. 1875	X	Do. do.	60
Louisville, 6 per ct. cp. 1880-83	X	70	80	Whooling, 6 per ct. coup.	X	Divers	67 1/2
Memphis, 6 per ct. coup. 1882	X	66	70	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending March 15th, 1866.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2nd Mort. 7 per ct.	66
Ohio & Mississippi, 2nd Mort. 7 per ct.	46
Marietta & Cincinnati, 7 per cent. 1st Mort.	70
Indianap. & Cin., 2nd Mort. 7 per ct.	80
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	89
Cin., Wil. & Zanes 2d Mort. 7 per ct.	60
Covington & Lexington, 10 per ct. Income	60

STOCKS.	Per ct.
Cin., Wilm. and Zanes, 18.—Cin., Ham. and Dayton, 65.—	
Col. & Xenia, 85.—Cincinnati & Chic., 8 1/2.—Central Ohio, 12.—	
Covington and Lexington, 20.—Dayton and Western, 19.—	
Eaton and Hamilton, 25.—Fort Wayne and Southern, some.	
Indiana Central, 48.—Indianapolis and Cincinnati, 58.—Little	
Miami, 91.—Mad River and Lake Erie, 18.—Marietta and Cin.,	
16.—Ohio and Mississippi, 7 1/2.—Hillsboro' and Cincinnati, 16.—	
Junction (Indiana), 10.—Peru and Indianapolis, 17.—Cinc.,	
Herr., and Indianap. (Straight Line), 10.	

By HEWSON & HOLMES.

For the week ending March 19th, 1866.

BONDS.	Per ct.
\$2,500 Cov. and Lex., 10 per ct. Income	60 1/2
14,000 Cov. & Lex., 7 per ct. 2nd Mortgage	65 (& int.)
3,000 "	65 1/2
5,000 Ohio & Miss 7 per ct. 1st Mort.	63
3,000 Little Miami, 6 per ct. 1st Mort.	80
2,000 Cin., Wilm. & Zanes, 7 per ct. Income	41 1/2
6,000 City of Springfield, O., 7 per ct. due in 1865	80
1,400 Ind. & Cin. 7 per cent. Dividend	68 1/2
2,000 Little Miami, 7 per ct. due 1st July, 1865	97
580 Cin. Hamilton and Dayton, Dividend Scrip.	95 1/2

STOCKS.	Per ct.
150 Shares Ohio & Mississippi	7 1/2
180 "	7 1/2
40 " Covington & Lexington	15
40 " Little Miami	91 1/2
10 " "	92
125 " "	90 1/2
129 " Cin. & Chicago	8 1/2
40 " "	8 1/2
2 " Marietta and Cincinnati	17 1/2
16 " Columbus & Xenia	85
106 " Covington and Lexington, (60 days)	19
20 " New Albany and Salem	12 1/2
67 " Junction, (60 days)	8

By J. L. HICKMAN & CO

For the week ending March 20th, 1866.

STOCKS.	Per ct.
50 Shares Little Miami	92
35 " "	92 1/2
10 " "	92 1/2
30 " Columbus & Xenia	86 1/2
30 " Covington and Lexington	21 1/2
124 " Cincinnati and Chicago	8
80 " "	8 1/2
200 " Marietta and Cincinnati	16 1/2
100 " "	17
10 " Indianapolis and Cincinnati	68
100 " Peru and Indianapolis	16 1/2
8 " Eaton & Hamilton	25
10 " Dayton and Western	16 1/2
40 " Greenville and Miami	7
40 " Ohio and Mississippi	7 1/2
31 " "	7 1/2

BONDS.	Per ct.
\$2,000 Hillsboro' and Cin., 7 per cent. 1st Mort.	50 (& int.)
1,500 Cin., Wilm. & Zanes, 7 per ct. Income	41
1,000 Cov. & Lex., 6 per ct. Income	42
500 Cin. & Chicago, 10 per ct. Real Estate	42
50 Little Miami, Dividend Scrip. old.	80

Marie & Kan's Money Circular for the European Steamer of the 26th inst.

[TRANSLATED EXTRACT.]

New York, March 25th, 1866.

Since our advices of 18th inst., there has been a little more life in the Stock market, with a slight improvement in quotations. The upward movement was especially shown on the 20th, after the receipts of the Persia's advices from Liverpool under date of 8th. The wide spread confidence which seem to exist throughout Europe in the favorable termination of the Conference at Paris, added to some rather important orders for our securities, contributed to give an impulse to speculations. Nevertheless, operations continue to be conducted here with a spirit of caution which offers a striking contrast to the great activity noticed on the Stock Exchanges of London and Paris. To-day the market is heavy but inactive. The last payment of \$1,500,000 on account of the Mexican Indemnity was made on the 21st inst. by the Sub-Treasury of this city.

City and County Bonds—The increased demand referred to in our last continues to be felt. Considerable purchases chiefly for foreign account have been made of St. Louis City and County Bonds; also a few Cincinnati, Louisville, Milwaukee and Sacramento City Bonds at about former quotations.

De Coppet & Co.'s Circular.

[TRANSLATED EXTRACT.]

New York, Monday, March 25th 1856.

There is no material change in our money market since our advices of the 18th inst.

The payment by the Sub-Treasury of about \$1,500,000 on account of the Mexican Indemnity, has neutralized the effect produced by fears of specie exportations, which however are but slowly taking place.

The news from Liverpool of the 8th inst., unanimously confirming hopes of an early peace, although occasioning in our stock market no great activity, has caused for a short while a rise, which is however barely sustained, and the market closes dull.

City and County Bonds—No variations in rates, the demand being principally for small lots of Milwaukee, Cincinnati, Chicago, Sacramento and Wheeling 6s, railroad issue, and for St. Louis City and County. We notice a transaction of some importance in Des Moines County 8s; they are now held at higher rates.

Extract from the Circular of Robt. Benson & Co., per Persia.

LONDON, March 7, 1856.

The most important information connected with the peace negotiations which has transpired during the past week is that the preliminary propositions, as a basis of negotiations, have been signed by all the Plenipotentiaries, and that this act on the part of the Representatives of Russia, has been approved of by the Emperor. Confidence continues unabated in the anticipation of a successful termination of the Conference.

The money market during the week has been tight. In our last circular we quoted Consols at 91 $\frac{1}{2}$ to 91 $\frac{3}{4}$, they subsequently advanced to 92, and we now quote them at 91 $\frac{3}{4}$ to 92 $\frac{1}{2}$ for money and 91 $\frac{3}{4}$ to 92 $\frac{1}{2}$ for the 10 of April.

The buoyant tone in our market for American Securities, referred to in our last circular, was pretty well maintained during the early part of this week, and a considerable business was done in State Securities, and certain Railroad Bonds, at tolerably firm prices. There were some transactions in United States 6 per cents at 105 $\frac{1}{2}$ to 106 $\frac{1}{2}$, Pennsylvania 5 per cent. Bonds have changed hands at 83, and the 5 per cent. Stock at 75 $\frac{1}{2}$ to 76, and Massachusetts Sterling 5 per cent. at 100. There has been inquiry after Maryland Sterling Bonds at 89. The demand for Illinois Central Railroad Construction Bonds has somewhat abated, and we quote them at 84 $\frac{1}{2}$ to 85, with buyers at the former quotation. The 6 per cent. Bonds of this class have been dealt in at 77 $\frac{1}{2}$, and the Freedland Bonds at 84, exclusive interest. The shares of the Company are quoted at 3 $\frac{1}{2}$ discount. Transactions have taken place in the Erie Sinking Fund Bonds, and the Bonds of 1862, at 82; and in the 3rd Mortgage Bonds at 85. We may quote Pennsylvania 1st Mortgage at 88 $\frac{1}{2}$, and 2nd Mortgage Sterling at 91.

The sales of cotton during the week will amount to about 64,000 bales. The market has been steady without change of prices. There has been no change worthy of note in the Manchester market. The demand for most articles of production has been steady.

During the week the corn markets have been dull. Indian corn and flour are about 1-6th d. lower, and there has been a decline in wheat of about 6d. The week, however, closes with some signs of firmness.

Railroad iron has not been quite so firm, although we cannot quote any actual alteration in prices.

ROBT. BENSON & CO.

Central Ohio Railroad.

Injunction Allowed.—We are informed that Judge Searle has allowed an injunction against the creditors of the Central Ohio Railroad Company, enjoining them from levying on any of its rolling stock, fuel, materials for repairs, &c., &c.

This injunction is allowed at the instance of George S. Coe, Esq., of New York, who is the trustee for the holders of the first mortgage bonds,

to the amount of a little over two millions of dollars. Mr. Cox is the plaintiff in the suit, and claims that the mortgages held by him cover the present and future acquired property of the road, and that, as is indeed obvious, if the road be prevented from running, the interest due to the bondholders will not be paid, and they will sustain thereby that kind of injury which justifies a Court of Equity in interposing by injunction.

The same principle will doubtless apply to the receipts of the road, which must be used first in paying the laborers who keep the road in repair and perform services in running it, and next in paying the interest upon the funded debt which is secured by mortgages upon the road and its machinery, and also upon its income.—*Zanesville Courier, Feb. 19th.*

American Railroad Journal.

Saturday, March 29, 1856.

St. Croix and Lake Superior Railroad.

The construction of the Sault Ste Marie canal, has placed the Western end of Lake Superior as near New York, commercially, as is Chicago;—that is, a ton of freight can be placed in this city from either, at the same cost. Lakes Michigan and Superior lie very nearly at right angles to each other. The distance between the upper ends of each, must be something over four hundred miles. Other things being equal, they would divide the trade of the intermediate country between them. It must be expected that Lake Michigan would draw to herself the trade of the larger area. Allowing her influence to extend fifty miles beyond the dividing line between the two, this would leave an immense extent of country, the trade of which would be attracted to Lake Superior, to say nothing of a vast area lying to the West and South-west of it, which must always seek an outlet through the latter Lake. This territory embraces nearly the whole of Minnesota, which has an area of nearly two hundred thousand square miles, a portion of which, for purposes of agriculture, is one of the most attractive in the Union.

Immediately upon the settlement of this Territory, attention was directed to the subject of communication with Lake Superior. The route for such a road lay up the valley of the St. Croix, which extends in an almost direct line from the Mississippi River near St. Paul, to Fond du Lac, on Lake Superior. A charter for a road has been granted by the State of Wisconsin. A survey of the route has been had, which proves it to be very direct and favorable. A considerable amount of stock has been subscribed, and the work of construction will undoubtedly be commenced the coming season.

It is hardly to be supposed that the importance of the proposed work should be immediately appreciated. It was only last year that the completion of the Sault Canal allowed steamboats to enter Lake Superior. Up to this time, the whole country surrounding this great inland sea was a *terra incognita*. With the exception of the settlements connected with the copper mines in its South-eastern shore, it had hardly an inhabitant upon it. The prospective opening of the Canal at once suggested to several enterprising individuals the importance of the upper end of the Lake as a future commercial station. The lands upon the supposed site for a future city were selected, a town laid out which now contains 600 people. During the coming season, this site, which a year since was a

wilderness, is to be the seat of a large busy population, and the depot of a large trade. It is to go on increasing from year to year, and will repeat what Chicago has been, only on a smaller scale.

St. Paul, near the mouth of the St. Peter's River, is about 145 miles from Lake Superior. It is more than twice that distance from Chicago. The former point commands that part of the Valley of the Minnesota River, into which the great tide of emigration, settling toward Minnesota, is flowing. We think there must be in the territory at least 75,000 people. By the end of the year there will be from 125,000 to 150,000. The traffic and travel connected with which must be sufficient for the support of a first-class Railroad. The emigration that would pass over it for six months of the year would be equivalent to a lucrative business. Upon its opening, it will have the trade of an immense area of productive country, covered with a busy and thriving population. In fact, we hardly know a route possessing in a higher degree the elements of business, nor one more called for, or more indispensable to the wants of a large and rapidly increasing community.

Mobile and Ohio Railroad.

The following gentlemen were elected Directors of this road for the ensuing year, at the recent election held in Mobile; Milton Brown, of Tenn.; James Whitfield, of Miss.; W. Jones, Jr., F. B. Clark, Sidney Smith, Newton St. John, J. J. Walker, Charles Gascoigne, J. Magee, R. Lee Fearn, W. J. Ledyard, of Mobile; W. W. Roby, and David Solomon, of Miss.

At a subsequent meeting of the Board, Hon. A. F. Hopkins was elected President; superseding Sidney Smith, Esq., who had been President of the company for several years.

No reason appears to have been assigned for displacing Mr. Smith, and we presume that no sufficient one existed; or that was not founded in a spirit or motive that should have no place in a Railroad Company or Board of Directors. Mr. Smith has been the chief executive officer of the company almost since its formation. Considering the means which he had at command, and the great difficulties which at all times he had to encounter, and the unfavorable state of the times, the company has made extraordinary progress, which has been due chiefly to the credits which its good reputation enabled it to command. Without such credits, which have been secured mainly through Mr. Smith's agency, the company could have hardly taken the first step in placing the superstructure upon its road. Under his management, everything was, we believe, going on prosperously. To displace him at one of the most critical periods in the company's history, and put another in his place to whom a long experience alone can give the qualifications that Mr. Smith possesses, is certainly a very hazardous step, and can only be justified by an extreme necessity, which no one in the present case will pretend to say, existed. Other parties beside the stockholders of the road have become deeply interested in its success, and whose co-operation is absolutely indispensable to its completion. We think we are justified in saying, that such parties have a right to feel disturbed at the change that has taken place.

We do not question Mr. Hopkins' capacity for his new post. But what guarantee have we that he will be permitted to remain where he is for

more than a year. We regret to see in the change of which we complain, evidence of unsteadiness, of a lack of entire disinterestedness; a want of that hearty co-operation on the part of those interested in the management of the road, without which a work of such vast magnitude cannot hope for final success.

Great Western (O.) Railway.

According to the recently published report of this Company, for the six months ending January 31st, their earnings, expenses, &c., were as follows:—

Passengers—1st class.....	\$759,485 60
—Emigrant.....	48,954 07
Freight.....	384,701 65
Live Stock.....	85,366 04
Mails, &c.,.....	41,006 78
Rents.....	7,583 13

Total.....\$1,327,047 27

Against \$998,775.25 for the six months preceding, showing an increase in gross receipts of about 33 per cent.; while, by comparing the year's business with 1854, a gain of 68 per cent. has been realized. The principal items of expenditure were—

Maintenance of Way.....	\$124,016 62
Locomotive Department.....	202,072 43
Car Department.....	48,194 18
Traffic Charges.....	238,669 95
General Charges.....	49,519 03

\$662,472 21

Loss on Steamers.....71,477 38

\$783,949 59

Leaving as net revenue.....593,097 68

Less int't on Government and other loans. \$235,554 10

Less Suspension Bridge charges.....22,550 95

Less amount applied to Sinking Fund.....51,100 00—309,205 05

\$283,892 63

If to this be added the balance from previous six months, the actual balance applicable to dividends is found to be \$292,596 40. From this a dividend of four per cent. was declared, amounting to \$291,131 85, and leaving on hand a balance of \$1,464 55.

The unusual severity of the past season affected unfavorably both the gross receipts and working expenses. It is believed, however, that hardly any leading line north of Maryland suffered less from this cause. The receipts have kept steadily advancing—not merely in one department of their business, but in all. The working expenses proper have amounted to not quite 50 per cent. of the receipts, which is slightly higher than in the previous half year. The principal department in which an increase took place was that of Maintenance of Way. It is estimated that after the line shall have been thoroughly ballasted, it will take about \$720 per mile per annum to keep it in thorough repair, in addition to renewals. The number of miles run has been 627,143, on which the cost of locomotive expenses was 32 cents per mile run. The engines have been considerably improved, during the last year, and further changes are contemplated. Copper tube sheets have been put in to replace those of iron. Wrought iron driving wheels will be substituted for cast iron ones. The stock of engines at present is 76. Fourteen new ones have recently been received from England. Total mileage of cars, 4,367,448

miles. The expense of maintaining these has been a little over one cent per mile, which is 11 per cent. less than the previous half year. Old and worn out cars have been regularly re-placed. Twelve passenger and five baggage cars have been added to their stock, while thirteen new passenger cars are now in progress in the Company's shops. Total cars on hand, 1604; under construction 179; making a total of 1774.

The item for printing, advertising, &c., has been necessarily very large. Efforts will be made to reduce as early as possible.

On the steamers "Canada" and "America" a considerable loss has been sustained. They have, however, been instrumental in adding much business to the line. Arrangements now in progress will have a different result, as to profit and loss, for the year ensuing.

The total expenditure on account of main line and Galt Branch, is now \$15,049,016. During the past six months, bonds to the amount of \$788,000 have been converted into stock. The bonded debt, irrespective of the advance from the Provincial Government, is less than one-third the share and bond capital of the Company. The Government advance is £770,000 sterling. The annual appropriation to Sinking Fund on this loan, is three per cent., payable semi-annually.

A strong effort will be made to complete the road and equipment, the ensuing year.

The agreement made with the Galt and Guelph road has been fully confirmed. Four miles of that line were duly opened in November last. The remainder of the line has been let. It is expected to be completed this current year. Nothing further has been done, with regard to the contemplated line between Preston and Berlin.

The line from Hamilton to Toronto, opened in December last, is exceeding expectations, as to the amount of business offering. The road is nearly completed; but over \$104,000 will be needed to finish the buildings, sidings, &c. The amalgamation of the two corporations is not yet fully completed, but will be in a few weeks.

Work on the Sarnia line has, since the 1st of January, been recommenced. The President's report concludes thus—

"In concluding this fourth half-yearly report, and in laying before the shareholders the accompanying full and explicit statements of the business of the railway, the Directors feel assured that those statements cannot fail in convincing the shareholders of the intrinsic value and perfect soundness of their railway in Canada West—the rapid expansion of its traffic—and continually increasing prosperity. At first sight it may appear, to a casual observer, that its expenditure has increased in even a greater ratio than its traffic, but when it is borne in mind that such increased expenditure has arisen from an unusually great, but wise outlay in the important item of maintenance of way, owing partly to the great severity of this winter, and in order to put the main line into perfect working order, which the Directors are happy in being able to state, it is now on the eve of attaining—in the locomotive department, by keeping the engines in an efficient state, and by bringing many charges affecting the engines to the debit of the revenue account, which, when the engines were new, were not felt—by the loss on the first operation of the company's steamboats on Lake Ontario,—and by a more rigid appropriation of minor expenditure to revenue, than was possible to be done when the Line was in its infancy, and its then imperfect condition requiring so large an expenditure of capital,—the proprietors may feel convinced that the next six months

afford brighter prospects than the past, or any previous period in the history of their railway, and they have cause to congratulate themselves that so many difficulties and serious evils have been surmounted and successfully cleared away without diminishing the true net earnings of the company, below the amount divided amongst them in July last.

Arrangements have been made to introduce more rigid economy into the department having charge of the maintenance of way, into the locomotive and other departments of the company's works; also to diminish the consumption of fuel by protecting it from moisture when stored up, and preventing waste and pilferage, and when the season for navigation opens, the company's steamboats will be placed under favorable auspices, upon a different route than heretofore, whilst steps are being taken to have them more cheaply, yet not less efficiently, worked, all tending to make them a source of profit in themselves and to the railway, instead of being productive of such great loss as has had to be borne in the past half year—these and other minor details are now being brought into active operation, which, when taken together, will, it is hoped, be productive of very cheering results."

One of the resolutions passed at the meeting of stockholders, approved of a suggestion made by the London proprietors, that the company would become Insurers of their own property.

GENERAL STATEMENT.

Receipts.

Paid in on original shares.....	\$5,980,090
Bonds of 1862 and 1876, converted last year.....	788,000
Paid on new shares.....	1,109,781
	\$7,877,871
Convertible bonds, due 1862.....	\$386,500
" " " 1876.....	1,109,000
	1,495,500
Non-conv. " " 1857.....	\$1,003,500
" " " 1873.....	2,171,000
	3,174,500
Government Loan, £700,000.....	3,755,555
Forfeited shares.....	10,610
	\$16,814,036

Expenditures.

Right of way.....	\$720,531
Grading.....	4,320,334
Superstructure.....	1,940,030
Masonry.....	992,631
Bridging.....	535,211
Fencing.....	233,630
Rails.....	1,402,027
Station buildings.....	748,453
Engineering.....	367,859
Locomotives.....	1,200,332
Cars.....	1,437,963
Engine buildings and machinery, turntables, &c.....	323,550
Interest and discounts, net.....	384,216
Miscellaneous, as salaries, law charges, police, insurance, advertising, furniture, traveling, and incidental expenses.....	442,249
Sarnia Branch.....	267,187
Steamboats.....	427,959
Survey of double track.....	9,301
Balance on hand.....	560,573
	\$16,814,036

Illinois Central Railroad.

At a meeting of the stockholders of the Illinois Central railroad company, held at their office in the city of Chicago, on the 19th inst., 60,224 votes were represented. Ebenezer Lane, Thomas E. Walker, and W. H. Osborn were re-elected. A. S. Hewitt was elected in place of David A. Neal, who declined a re-election. The Board of Directors of this company are: Gov. Matteson, ex-officio; L. M. Wiley, Jonathan Sturges. J. F. A. Sanford, F. Haven, J. F. Joy, J. N. A. Griswold, Fred'k Geb-

hard, Ebenezer Lane, T. E. Walker, W. H. Osborn, Abram S. Howitt, and J. W. Alsop.

Journal of Railroad Law.

IS A COMMON CARRIER LIABLE FOR THE LOSS OF GOODS BEYOND THE LIMITS OF ITS OWN LINE?

(Continued from page 171.)

In *Wilcox vs. Parmelee*, 3 Sanford's S. C. R., 610, quoted in our last, the defendant in this case was the owner of a line of boats running between Albany and Buffalo, and he entered into the following contract with the plaintiff: "I hereby agree to forward the goods of Mr. A. Wilcox from New York to Fairport for fifty-five cents by vessel, and sixty-five cents per hundred lbs. by steam to the close of the present season. The goods marked by steam, to go by steam; all other goods to be shipped by vessel from Buffalo." A loss occurred between Buffalo and Fairport, and the defendant contended that his responsibility as a carrier ceased at Buffalo. But the Court held that his engagement was to carry the goods to Fairport, and that the natural construction of the agreement could not be controlled by the fact that the defendant's business as a carrier, was usually confined to the route between Buffalo and Albany.

The Supreme Court of Massachusetts decided, in *Nutting vs. The Connecticut River Railroad Company*, 1 Gray, 502, that where a railway company receives pay for transportation over its own line only, upon merchandise directed to a place beyond the terminus of its road, it is not liable in the absence of a special contract, for a loss beyond the limits of its line. The Court intimate, that under a special contract, a company would be liable for such a loss, but held that the receipt given in that case did not amount to such an undertaking.

The receipt was as follows:

"Received of E. Nutting, for transportation to New York, nine boxes, &c., marked G. T. Hewlett, 146 Bowery, New York."

See also *Farmers' and Mechanics' Bank vs. Champlain Transportation Company*, 18 Ver. 140; 23 Ib. 209. Thus far the American decisions differ from the English only in the presumption which arises upon proof of the delivery of goods to a company, directed to a place beyond the limits of its road, the English Courts holding that a legal presumption of liability arises in such cases, unless there is a special limitation, while the American Courts hold that there is no presumption of liability, unless there is a special contract. But the Supreme Court of Connecticut recently decided in the case of *Hood vs. The New York and New Haven Railroad Company*, 22 Conn., 1 and 502, that no liability would exist, even the case of a special contract, on the ground that such an undertaking would be void, as being *ultra vires*, a company having no power, in the opinion of that Court, to undertake to act as carriers beyond the limits of its own line. This decision is in direct conflict with the English decisions, and especially with that of *Crouch vs. The London and North-western Railroad Company*, 25 English Law and Equity, R. 287. The Court also held, in direct opposition to the above case of *Weed vs. The Saratoga and Schenectady Railroad Company*, that a company is not estopped from setting up the invalidity of such a contract. It does not appear from the case whether the laws of Connecticut provide as the laws of the States do, that one company shall have a right to enter with its cars and

pass over connecting roads with freight and passengers, in which case it would seem difficult to hold that a company has no implied right to enter into a contract to act as carrier beyond its own road.

Syracuse and Binghamton Railroad.

The report of this road for the year ending 31st October last has been received. It is well known that this company have been embarrassed by financial difficulties for some time. The report enters fully into the principal causes of these. On the item of cost it is shown, that with an abundant equipment for a much larger business than now offers, the cost has been \$28,429 per mile, or \$8,349 less than that of the average of single track roads in the State of New York. When the work was projected, it was expected that a continuous line to Oswego and having a similar gauge would be opened, by which alone the advantages resulting from a connection with such an important harbor could be enjoyed. This the Directors were unable to obtain through the existing road between Syracuse and Oswego, and accordingly another company was organized under the general law for the purpose of constructing a broad gauge line on the east side of Onondaga Lake and the Oswego river. This step, however, has been for the present defeated, by the Syracuse and Binghamton company being unable to meet their interest obligations, and the bondholders refusing to withhold action under the existing mortgages, during the construction of the new line. It is feared that a foreclosure of these mortgages will be the result, unless the bondholders adopt some course that will enlist the co-operation of all who are to be benefited by the construction of the new line.

The report of Mr. Gilbert, the Engineer and Superintendent, is full of details in reference to estimates, cost, &c. For the grading, masonry, and bridging, the work was let at \$52,436, and completed for \$88,406 less than the original estimates. The superstructure, including iron, was \$69,484 above the estimates—the difference arising from the increased cost of iron and other materials. In the item of lands, land damages, and fences, there was an increased cost of \$123,707. This is accounted for by the fact that the track was at first designed to be run along some of the public streets; but this course was subsequently abandoned, and the Board were obliged to make heavy purchases of real estate, much of which is now offered for sale. The actual cost of road and equipment, including \$289,440 for discount on bonds, was, at 1st November last, \$2,274,394. The obligations of the company at same date were—

Receipts from capital stock.....	\$768,369
First mort. bonds issued.....	1,152,500
Second " ".....	222,850
Bills payable.....	46,392
Debts in judgment.....	28,853
Dne Superintendent and employees....	8,317
Sundry acc'ts.....	19,224
Treasurer, over-draft.....	4,230
Unpd interest, 1st Feb'y, 1855.....	2,865
Do, 1st August, ".....	22,070
Do, 1st Nov., ".....	12,099
Due on real estate.....	89,985
	<hr/> \$2,371,754

The road was opened for business October 23d, 1854; and up to the present time has been operated without accident to passenger or employee.

The earnings for 11 months ending September 30th, were—

Passengers.....	\$90,965 71
Freight.....	63,879 74
Other sources.....	4,644 46

Total.....	\$159,489 91
Operating expenses.....	136,981 62

Net profits..... \$22,508 34

The original estimate of gross annual earnings was \$475,500. It is still believed that these have not been over estimated; and that when an unbroken connection shall have been secured with Oswego, the original estimate will be fully realized. On the through freight, passenger and coal businesses, a decrease has taken place. In local passengers there has been an increase. Coal, it is stated, has been so high for some time in Syracuse, that its use in the manufacture of salt has been totally excluded. The Oswego and Syracuse line has been managed exclusively for the benefit of the Central interest, who actually interdicted the transfer of freight from it to the S. and B. road.—In addition to this, the latter work has not yet been extended to the canal at Syracuse, though lands sufficient for a coal yard and basin have been purchased. The Lackawanna Coal Company are now ready to contract for 50,000 tons of coal, not a ton of which can be transported until the road reaches the canal. About 30,000 tons of coal are at present shipped from the Lackawanna valley to Oswego, most of which is used for manufacturing purposes. The carrying of ordinary through freight has been subjected to the same annoyances.

Valuable statistics as to the increase of the population and business of Oswego, are given; but we have not space to transfer them to our columns. In 1855, the import and export trade of this place with Canada alone, was \$12,000,000; while its whole business must have exceeded \$40,000,000.

Atlantic and Gulf Railroad.

The Legislature of Georgia declared, in the important bill which has just passed both branches, that it was "the intention of the State of Georgia to provide a Main Trunk Railway across her territory connecting the Atlantic with the Gulf of Mexico." The line of the Trunk, beginning near the corner of Appling and Wayne, proceeds to the vicinity of Wareboro' in the county of Ware.—From the vicinity of Wareboro' it must proceed westwardly to the Western boundary of Georgia—the western bank of the river Chattahoochee, at some point between Fort Gaines and the junction of the Flint, "to be selected by the directors after an accurate survey and estimates of cost shall have been made, and with distinct reference to a speedy connection with the Gulf of Mexico, at Mobile or Pensacola."

The commissioners named in the act, "or any five or more of them," are to open books in Milledgeville, and other places, on public advertisement of thirty days, and the books are to be kept open as long as the commissioners may deem expedient. "No one person, firm or corporation shall subscribe more than two hundred thousand dollars." When six hundred thousand dollars shall have been subscribed, it is made the duty of the Governor to subscribe, in the name of the State, for stock to the extent of five hundred thousand dollars. If individuals subscribe over six hundred thousand dollars, then the Governor is to subscribe "for such larger sums than five hundred thousand dollars as will be in the same proportion." The subscription of the State, however, is limited to one million of dollars. The railroads from Savannah and Brunswick respect-

ively are to receive equal advantages and facilities from the Main Trunk, and one or the other of them must be built up to the trunk before any iron rails are allowed to be put down on the Main Trunk. The Legislature can, at pleasure, allow the junction of any other railroads.

The city of Savannah and the inhabitants of Georgia residing in the region between the Chattahoochee and the Ocean, and between the line of Florida and those portions of Georgia already enjoying railroad facilities, have thus afforded to them a most favorable opportunity for promoting their permanent prosperity and happiness. This city has subscribed one million, and the people in our neighborhood have subscribed about three hundred thousand dollars more, to construct a road which is to join the Main Trunk at the initial point thereof—distant about seventy-three miles from Savannah. The Brunswick Company has graded about thirty miles of a line from Brunswick, which is to join the Main Trunk at the same initial point—distant about fifty miles from that city—or near Waresboro', distant from Brunswick about sixty-five miles—as that company may please. To accomplish, then, the great work of crossing the State from Savannah and from Brunswick to the Chattahoochee river by railway, the people of Savannah and of the country between here and the Altamaha must build about seventy-three miles of road, and the people interested in Brunswick must build fifty miles of road, if they elect to go to the initial point—or sixty-five miles if they shall elect to join near Waresboro'.—*Savannah Republican*.

The Canal through the Isthmus of Suez.

From the Journal of the Franklin Institute.

The Mediterranean Sea as the link of connexion of Europe with Africa, Asia, and the Indies, is one of the most important points on the surface of the Earth. By its position between these continents, by the numerous islands which it includes, by the long peninsula which stretches out into it, by the number and excellence of its harbors, by the immense riches which it distributes, it commands a collection of political and commercial elements which are not to be found on any other point of our earth. Even small, and in themselves insignificant States, obtain from their position on the Mediterranean Sea, an importance which bears no comparison with their power. Were we to place Greece with its present size on the Danube, or in Middle Europe, it would henceforth occupy as insignificant a position in politics, as Servia, Wallachia, or other continental States of similar size, in place of the inordinate interest which it now commands. And is not the real meaning of the Oriental question, of the bloody existing war, in great part, the struggle for the control of the Mediterranean Sea? On the Mediterranean Sea fought Greeks and Persians, Romans and Carthaginians, Augustus and Anthony for the Empire of the World; and Greece might, perhaps, ever have resisted her conquerors had she better treasured up the Delphic Oracle, to guard herself with wooden walls (ships).

By the discovery of the Ocean route around the Cape of Good Hope, by the discovery of America, and the conquest of Constantinople by the Turks, as well as by the piracies of the north-western African States, this significance of the Mediterranean Sea was for centuries disturbed, and only the Italian Republics, Venice, Greece, and Pisa, took advantage of it, for the naval power of the Turks was broken at the fight of Lepanto, and Spain prostrated by the Inquisition and civil wars.

How strongly the importance of the Mediterranean has been felt in modern times is shown by the seizure of Gibraltar, the Island of Malta, and the Ionian Islands, by the greatest naval nation.

And yet the Mediterranean Sea is at present only a *cul de sac* for ships. A narrow strip of land, scarcely seventy miles broad, obliges the sailor to make a circuit of thousands of miles, and subjects him to a multitude of perils, among which the poisonous fevers and destructive epidemics of the tropics are not the worst. The cutting through

the Isthmus of Suez would, therefore, create a new era in politics as well as in trade. By the connexion of the Mediterranean with the Red Sea, the voyage from Marseilles or Trieste to the East Indies will be shortened more than 3,000 miles, (French), between London, Amsterdam, or the Hanse-Towns, and China more than 2,000; and between New York and the south of Asia more than 1,000 miles. The reduction of time and capital, which is the necessary consequence of the increased rapidity of transit, will reduce the prices of the absolute necessities, coffee, sugar, and tea, as well as of cotton and silk, by a third; while, in a short time, the wants of civilization, and with them the products of our industry will spread into these lands, whose increase is even now more rapid than their resources. And yet the financial and commercial results of this undertaking, great as they may be, are but trifles when compared with the incalculable results which the opening of the projected canal must have on the civilization of the whole East.

It is true, that it may seem that by the railroad already commenced between Alexandria and Suez, the closer connexion of the two continents is accomplished. But, although the railroad will insure the desired advantages so far as the travel of passengers and correspondence is concerned, yet the most important part of the trade, the goods, must be excluded from it, in consequence of the four handlings in loading and unloading which they will require, from which so much loss and injury must result as will make the route by the Cape still the preferable one.

The importance of this canal, although never so great as at present, was known from the earliest times. The great King Sesostri or Rhameses II., (1380, B. C.), was, perhaps, the first who conceived the plan of connecting the two seas. He appears to have designed a canal from the Red Sea to Memphis; and the story is not without probability, that in his time a lively trade existed between Egypt and India. One thousand years later, King Necho or Necho resumed the old plan, but without finishing it. The first works, according to Herodotus, cost the lives of 120,000 men, and were interrupted by an oracle, which warned them of the damage which the Egyptians would suffer should they thus open the way for strangers into their land. A new attempt was made under the Persian rule, by Darius Hystaspes, but Ptolemy Philadelphus first finished the canal, (280 B. C.), which was named after him. According to Strabo, this canal was 100 feet broad, 80 feet deep, and 60 miles long. It was provided with locks, which were opened for the passage of ships, and then again closed. The largest sailing ships could use the canal, and made their passage through in from two to four days. The Ptolemaean canal extended from the Pelusian arm of the Nile, below Bubastis, to Arsinoe, a city on the north-eastern part of the Red Sea. About half-way it cut through the Bitter Lake, as the Rhone does through the Lake of Geneva. It brought with it, at the same time, the advantage of watering a large part of the heretofore desert lands of Suez, so that, in a very short time, a crowd of cities and villages sprang up along its borders.

In the times of the Romans, Trajan repaired this canal, and constructed a new arm, which opened into the Nile near Memphis. This addition was known by the name *Annis Trajanus* (Trajan's River).

Still these canals appear either to have never been finished, or to have filled up with mud, so that from time to time they had to be re-dug.

The Arabs, also, participated in these undertakings. The historian, El Mazin, relates, that, when under the caliphate of Omar, the cities of Mecca and Medina were visited with a severe famine, the Caliph ordered Amru, Governor of Egypt, to construct a canal between the Nile and Calzum, (Klysma) so as to enable the grain to be transported from Egypt to Arabia. Amru fulfilled the command, and called the canal the River of the Commander of the Faithful. One hundred and thirty years later, the Caliph Abu Djaffar Almanzor caused it to be closed for the purpose of prevent-

ing the advance of Ali, who had revolted at Medina, upon Egypt. This canal exists still at the present day. It cuts through old Cairo, and loses itself a few miles farther north-eastward in the *Birket el Hadschi*, (the Lake of the Pilgrims).—It is still yearly opened with great solemnity at the rise of the Nile. But even were it in order, it could be used only by Nile boats, not by sea ships, and by the first only at the season of the year when the river is at its highest. After this, Egypt and its importance as a passage into Asia, were for a long time laid out of mind, and although individual enlightened statesmen, such as Colbert, clearly perceived its importance, yet the French Republic was the first to resume the old plan. Gen. Bonaparte openly declared that the time was not far distant when it would be seen that to shake England's power to its foundation, it was only necessary to possess ourselves of Egypt. The Directory issued the following order on the 12th of April, 1798:

"The General-in-Chief of the Army of the East, will cause the Isthmus of Suez to be cut through, and will use every means which may be necessary to secure to the French Republic the free and exclusive possession of the Red Sea. He will expel the English from all their Eastern possessions, and will, in especial, destroy all their settlements on the Red Sea."

It is known why these plans failed. Moreover, the French Engineers affirmed that the difference of the levels of the two seas to be joined, exceeded eight metres, an assertion which is now known to be incorrect.

Now has arrived a moment, in which the generally inimical nations, France and England, are friendly, and when Turkey must be more than usually favorable to the projects of the Western powers. The time has accordingly come at which the work is to be begun.

Two plans already marked out under Mehemed Ali, were presented to the present Viceroy Said, by which the projected canal is either to cut the Isthmus in a direct north and south line from Pelusium to Suez or to follow the track from Alexandria to Suez, and so by using the water of the Nile to benefit the whole Delta. The Viceroy, by the advice of those experienced in the matter, has selected the first plan as the shortest and most effective, and, in accord with the consols of foreign powers, has issued a firman to the engineer-in-chief, Ferdinand von Lesseps, authorizing him to form a company for the canalizing of the Isthmus of Suez. This firman contains the following principal points of concession:—

1. The company assumes the expense of the undertaking. It will pay the land owners for the ground taken.
2. It binds itself to pay into the Egyptian Treasury 15 per cent., and to the original stockholders 10 per cent., of the net reveue.
3. It recognizes the supervision of the Egyptian Government over its tariff of tolls and laws.
4. It binds itself to guarantee a perfect equality in the tariff to the flags of all nations, and to allow no exclusive privileges to any one.

On these conditions the company receives:—

1. The concession of the canal for 99 years from the day of opening.
2. The gratuitous grant of all public land which may be necessary for the canal: these constitute the largest part of the necessary territory.
3. 75 per cent. of the net receipts for the stockholders.
4. The gratuitous grant of all domains of the state, which, at present uncultivated, shall, by irrigation of the company, be made fertile.
5. The right to levy a tax upon the lands of such persons as may use the water of the canal for the purpose of irrigating their land.
6. The right to take, without pay, from the State quarries, all necessary materials for the canal, and the buildings appertaining to it.
7. The entry, free of duty of all machines and materials which the company may want for the prosecution of its undertaking.
8. Remuneration for the materials left at the end of the concession.

9. And, finally, the most solemn promise from the Viceroy, that he will assist the undertaking by all means in his power.

According to the preliminary plan made by Ferdinand von Lesseps and Linant Bey in conjunction with two others of the Viceroy's engineers, the whole length of the main canal from the lighthouse at Pelusium, to the lighthouse of the Red Sea, will be 120 kilometres, (74-591 statute miles), its breadth 100 metres, (109-4 yards), and its depth 8 metres, (26-256 feet), and the cost is estimated at \$100,000,000 francs, (\$32,000,000). But in this sum is included the cost of the feeder, which is to connect the main canal with the Nile, and in time of overflow of the river, to lead its waters to the canal. This feeder passes through the Ouadi Torlat, the land of Goshen of the Ancient Hebrews.

The opening of the feeder into the main canal, Nar et Ouadi (Mouth of the Valley,) forms the Lake Temsah, which is made use of as an intermediate haven. In Moses time the Red Sea reached this point, and when we see the amount which the Isthmus has gained since that time, the geological opinion prevails, that in pre-historical times, the Red Sea was not wholly separated from the Mediterranean, and that the Isthmus has been formed gradually; an opinion rendered more probable by the shells and other marine remains which the sand and limestone hills of the Isthmus contain.

A main question, which was to be resolved by the engineers, and which was subjected to careful examination, concerns the levels of the two Seas, the believed difference of which had heretofore operated as a hindrance to this great undertaking. It appears from the most recent measurements that the level of the two Seas at low-tide, is exactly the same; that on the other hand at the flood, the Red Sea rises from 1-8 to 2-5 metres, (5-9 to 8-2 feet,) while the rise of the Mediterranean, at Pelusium, is scarcely perceptible. To overcome this disadvantage, a reservoir will be built at the Red Sea mouth by making a dam across from Suez to the Asiatic Shore. This dam will be provided with sluices, so that the water of the Red Sea, in time of flood, may be let in and retained, and the level of the canal be kept some two metres higher than the level of the Seas at the time of ebb. Although this basin will at first be costly, it is hoped by dredging machines it may be kept clear without serious expense.

In the same way the Mediterranean entrance into the canal will be protected by a dam of 6,000 metres in length (3-73 stat. mile.) Through the locks in this dam the ships will enter a basin, which will also be used as a mooring place for the boats which accumulate at the mouth.

For the purpose of assuring, for the future, the greatest security to the undertaking, a commission has been already appointed of the most celebrated experts of all nations. To this commission belong on the part of Prussia, Privy-Counciller, Lentze; on the part of Austria, Baron Negrelli, Director of Constructions in Lombardy; also, Paleocapa, Minister of Public Constructions at Turin; the English Engineer, Rendel; Konrad, for Holland; Renaud, Inspector-General of roads and bridges in France; Lerussaux, the French Marine Engineer. Austria has, moreover, honorable invited Kubli, the Architect from St. Galls, to accompany Baron Negrelli to Egypt.

It is expected that an undertaking which promises such important results for the future, will find favor with the capitalists of all nations.

Mississippi Railroads.

We had an interview yesterday with W. B. Johnson, Esq., representative in the Mississippi Legislature from Panola county. The Legislature had not adjourned when he left Jackson, but will probably do so during this week.

A very important railroad bill was passed. It gives to the Mississippi and Tennessee railroad \$100,000, and the same sums respectively to the Central, the Mobile and Ohio, and the Great Northern roads, in the form of a loan for seven years, the State paying eight per cent. interest, semi-annual-

ly, to the counties. For this purpose, the Chickasaw School debt has been funded. The Sheriffs of the various counties are to retain the amount out of the taxes collected. The fund on the Central and Great Northern road is to be extended below Canton. One hundred thousand acres of the State Internal Improvement lands are given to the Great Northern road, worth \$1.25 per acre. This is to be expended below Canton.

The Legislature, in passing this measure, has done a noble work. A new spirit will thus be infused into her great railroad enterprises, and the fruit will ripen with rapidity.—*Memphis Eagle.*

Railroad Earnings.

GREAT WESTERN (CA.) RAILROAD.

The business of this road for the week ending March 14th, was as follows—

Passengers.....	\$20,401 68
Freight.....	18,687 49
Mails, &c.....	1,341 45
	\$40,430 62

The business for the corresponding week in 1855, was \$36,159 34. Number of miles open 283, against 241 in 1855.

MICHIGAN SOUTHERN RAILROAD.

The earnings of the Michigan Southern and Northern Indiana Railroad Co. for February, were:

Passengers and mails.....	\$74,255 41
Freight and miscellaneous.....	59,534 47
Total.....	\$133,786 88
Earnings, February, 1855.....	\$107,749 39

Increase.....\$26,046 49

PHILA., WIL. & BALT. RAILROAD.

The receipts of the Philadelphia, Wilmington and Baltimore Railroad for February, were as follows:

February, 1856.....	\$94,553
February, 1855.....	76,449

Gain in 1856.....\$18,104

ERIE RAILROAD.

The earnings of the Erie Railroad for the month of

February, 1856, were.....	\$362,719 07
February, 1855.....	340,771 68

Increase.....\$21,367 39

For the five months ending with February, the total earnings were \$2,494,261, against \$2,255,439 in the previous year, and \$2,077,015 in 1853-4.

N. Y. CENTRAL RAILROAD.

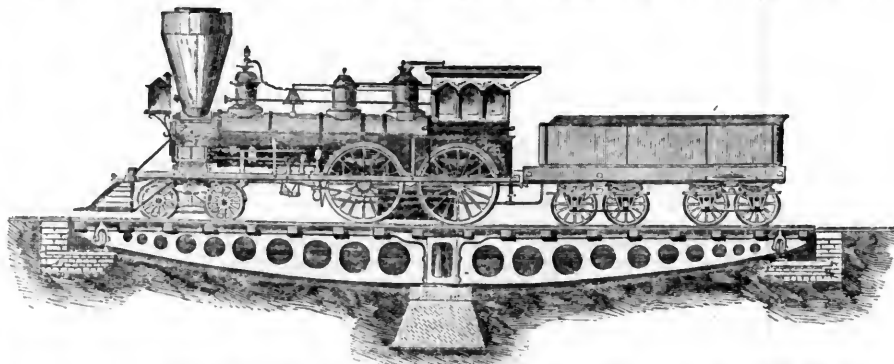
The following is a comparative statement of the receipts of the New York Central Railroad from passengers and freight during the months of February, 1855 and 1856:

	1856.
Passengers.....	\$140,919
Freight.....	230,675
Mail.....	6,807
Miscellaneous.....	582
Total.....	\$378,984
	1855.
Passengers, mail included.....	\$146,719
Freight.....	169,555
Total.....	\$316,274
Increase over 1855.....	\$62,709

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MANUFACTURE Railway Turning and Sliding Tables, and Pivot Bridges, upon a new and economical plan, and of any required length. The Turning Tables and Pivot Bridges are fitted with "Parry's Anti-Friction Box" thus enabling one man, without the intervention of gearing, to turn the largest table when loaded with engine and tender. Being of iron, they are not liable to get out of order, and water within eighteen inches of the track, will not impair their efficiency or durability.

ALSO,

Bancroft's Patent Self-Adjusting Hanger and Pillow Block Bearings, suitable for all kinds of shafting or mill-gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspend to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools or other machinery. Cast Iron Grindstone Boxes, fitted with this bearing and resting on wheels, for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns in the country, they are prepared to furnish Castings or finished Pulleys at short notice, as also Shafting, Couplings, Gear Wheels, &c., suitable for all manufacturing purposes, fitted up ready for use. They also continue the manufacture of their well known class of

ENGINEERS' AND MACHINISTS' TOOLS,

such as Horizontal Planing Machines, Vertical Planing Machines, Laces, Boring and Turning Mills, Boring Mills, Horizontal Drills, Vertical Drills, Bolt-Cutting Machines, &c.

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PATENT CAST IRON PIPES—made from best Scotch pig iron—drill easily and cast vertically.

WILLIAM RAY, Agent,
74 Broadway, NEW YORK.

Notice to Contractors.

OFFICE OF RACINE AND MISSISSIPPI R. R. CO.,
Racine, Wis., March 15th, 1856.

PROPOSALS will be received at this office until the 10th day of April next, at 12 o'clock m., for the Grading, Masonry and Bridging of the second division of the Racine and Mississippi Railroad, being from Beloit to Savanna on the Mississippi river, a distance of about sixty-eight miles. The whole work to be completed during the present year and in time for laying the track previous to January 15th, 1857. This work lies wholly through the northern counties of Illinois west of Rock river. The country is densely populated and unsurpassed in point of health and abundance of supplies.

Proposals will also be received at same time for the construction of the Bridge across Rock River at Rockton.

Plans, profiles, and specifications, together with all necessary information can be obtained on application at this office on and after the 25th instant.

HENRY S. DURAND, President.

For general information parties can refer to the Company's Agents in New York, Messrs. CLARK & JESUP, No. 70 Beaver st.

Notice to Contractors.

OFFICE OF THE DEMOINE NAVIGATION AND R. R. CO.,
Ottumwa, March 4th, 1856.

SEALED PROPOSALS will be received at this office until 12 o'clock m., of Monday the 28th day of April next, for the construction of twenty Locks and Dams for the improvement of the Des Moines river between the town of Alpine (12 miles below Ottumwa) and Fort Des Moines, a distance of about 126 miles, and also the Lock and Dam at St. Francisville, 12 miles from the Mississippi river.

The chamber of the Locks is to be 200 feet long between the quoins, and 44 feet wide. They will generally be built on rock foundations. The face of the masonry will be of hammered stone, leveled up to regular courses, and laid in hydraulic cement. The backing and interior stone will be quarried in rectangular blocks, with beds parallel to each other, and joints at right angles thereto, and will be laid in quick lime mortar, except at the head of the Lock, where it will be laid in cement.

The coping will be of cut stone doweled and clamped.

The Gates will be let in a separate contract.

The Dams will generally be about 600 feet long and 13 feet high, (resting on rock) made of timber and stone, with Bulkheads (with stone abutments) on each side of the river for the hydraulic canals.

The plans and specifications for the work will be ready for examination on the 15th of April, at which time copies of the specifications and blank forms for proposals, and information in regard to the locations of the Locks and Dams, will be furnished to the contractors at the several Engineers' Offices on the line, and at the Company's Office, No. 15 WILLIAM STREET, NEW YORK.

The contracts will contain a clause requiring the personal attention of one of the partners of each contracting firm, at each Lock and Dam; that no transfer of contract shall be made, and that no subcontract except for the delivering of materials, will be allowed.

Monthly payments will be made in cash as the work progresses, reserving 15 per cent. in lieu of other security; and the whole work will be required to be completed by the 1st of January, 1858.

Contractors who are not known to the Directors, or to the Engineers, will be required to furnish satisfactory testimonials of their skill, experience, and responsibility.

The Company reserves the right to award the contracts on such proposals as may be deemed best for the interest of the State and of the Company.

WM. C. JOHNSON, President.
EDWARD H. TRACY, Chief Eng'r.
WM. J. McALPINE, Consulting Eng'r.

312

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by
THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
March 13th, 1856. 411

Lowell Machine Works.

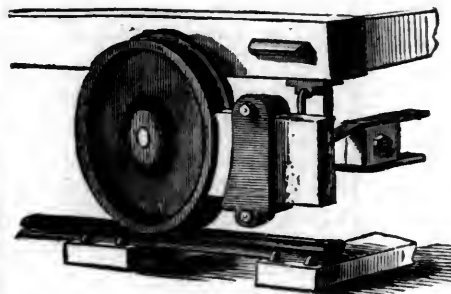
WARREN ALDRICH (late ALDRICH, TYNE & Co.) manufacturer and furnish to order, at short notice,

Machinists' Tools

of various description and with the latest improvements; as engine lathes, with swing 18, 20, 24, 28, 30, 36, 48 inches, up to 7½ feet, and bed made to turn any desirable length; planing machines, to plane 3½, 6, 8, 10, 12, 18, 20, 22 feet long, and 18, 24, 28, 36, 40, 48, 60 inches square; also hand lathes, compound planers, slotting and shaping machines, vertical drills, bolt cutters, and many other tools used in railroad repair and machine shops.

Lowell, Mass., Jan'y 1, 1858.

413

**PAIGE'S
ADJUSTABLE CAR BRAKE BLOCKS!**

BY this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

**The NEW YORK ADJUSTABLE BRAKE
COMPANY**

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent.
DINSMORE'S RAILWAY GUIDE Office, 9 Spruce st., N. Y.

Lord & Wright,

Counsellors at Law, Cincinnati, Ohio.

1st

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice
PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a. m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p. m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

1st. D. C. McCALLUM, General Supt.

**Philadelphia, Wilmington &
Baltimore Railroad.****UNITED STATES MAIL ROUTE TO THE
SOUTH AND WEST.**

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a. m. 12 45, 3 and 11 p. m.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$13 50
do do Louisville.....	14 50
From Philadelphia to Cincinnati.....	11 00
do do Louisville.....	12 00
From New York to Indianapolis.....	16 00

An extra charge will be made for meals and state rooms on board the boat.
GEORGE A. PARKER, Supt.

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IRON PAVEMENT****AND
STREET RAILWAY CO.**

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,

**AND TO
RAILROAD COMPANIES**

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

- 1st. The cheapest pavement ever used, because most enduring at least cost of repair.
- 2d. The safest pavement for either man or beast to travel on.
- 3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.
- 4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.
- 5th. The easiest and least tiresome pavement to ride upon, because most even of surface.
- 6th. The least noisy pavement to use or reside near.
- 7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$1 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSSIAN PAVEMENT HAS COST; that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad crossings, where horses are employed, and for all higher road crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, cellars, and approaches to stables—each being made as permanent, cleanly, and ornamental.

In every case **ENTIRE SATISFACTION WILL BE GUARANTEED** to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTORS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of the private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, **GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.**

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company.

HONORARY AND CONSULTING DIRECTORS.

- HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
HON. J. V. C. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. F. FRENCH, Associate Judge, Superior Court, Exeter, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES FUNNETT and others, plaintiffs, against THE
MAYSVILLE & LEXINGTON RAILROAD COMPANY
and others, defendants.—By virtue of the Judgment of the
Fayette Circuit Court, rendered in the above case, I will sell,
at public auction, on Wednesday, the 23rd day of April, 1856,
at the Public Square, in the City of Lexington, State of Ken-
tucky—

THE MAYSVILLE & LEXINGTON RAILROAD;
both that part of the road which is completed and the part
unfinished; embracing the road bed, and superstructure where
the same is laid down, the right of way, and all lots of land in
and adjacent to the road track, with all the buildings, stations,
car-houses, and improvements belonging to said railroad,
together with the franchises of the Maysville and Lexington
Railroad Company; all of which will be sold together, upon
credits of six, twelve, eighteen, and twenty-four months, in
equal instalments.

At the same time and place, I will also sell all the Lots of
Land belonging to said Company, and not adjacent to the rail-
road track—consisting of a lot of land in the City of Lexing-
ton, a tract of land in Fleming County, and town lots in Paris
and Millersburg, on credit of six and twelve months, in equal
instalments.

And at the same time and place, I will sell all the Locomo-
tives, Freight and Passenger Cars, Cross-Ties, &c.—consisting
in part of two locomotives and tenders of twenty-four tons
each, three passenger cars for sixty passengers each, one en-
tirely new and all in good order; seven box freight cars, eleven
platform cars, eleven tops for platform cars, five gravel cars,
and a top for another; fifteen pairs of car wheels, a hand car,
a lot of bridge and car irons; 9,500 cross-ties near Maysville,
1,380 of which are of locust and the remainder of oak; about
6,000 cross-ties along the line of the railroad between Lexing-
ton and Millersburg. The new passenger car, two freight cars,
and the tops for platform cars, are in Maysville, all the other
rolling stock is in Lexington, and the whole is of 4 feet 8½
inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the
purchase money, having the force of Judgments, with good
security, to be approved by me, of one of the following kinds,
to wit:—1. Personal security. 2. First Mortgage Bonds of the
Maysville and Lexington Railroad Company. 3. Mortgages in
real estate in counties near this railroad or the Covington
Railroad. 4. State and United States Bonds. 5. A First
Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of pur-
chasing, by the undersigned, who will be found in Lexington,
Ky., or by A. M. JANUARY, at Maysville. Letters of enquiry,
addressed to me, will be attended to.

EVEN MILTON,
Receiver and Commiss'r.
LEXINGTON, Kentucky

2m8

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A. W. GREENLEAF, late of No. 2 Wall st.

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P. S.—Presidents of railway companies are requested to favor
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published.

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LONDON, Oct. 1855.

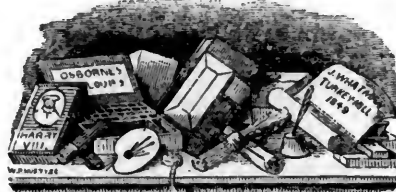
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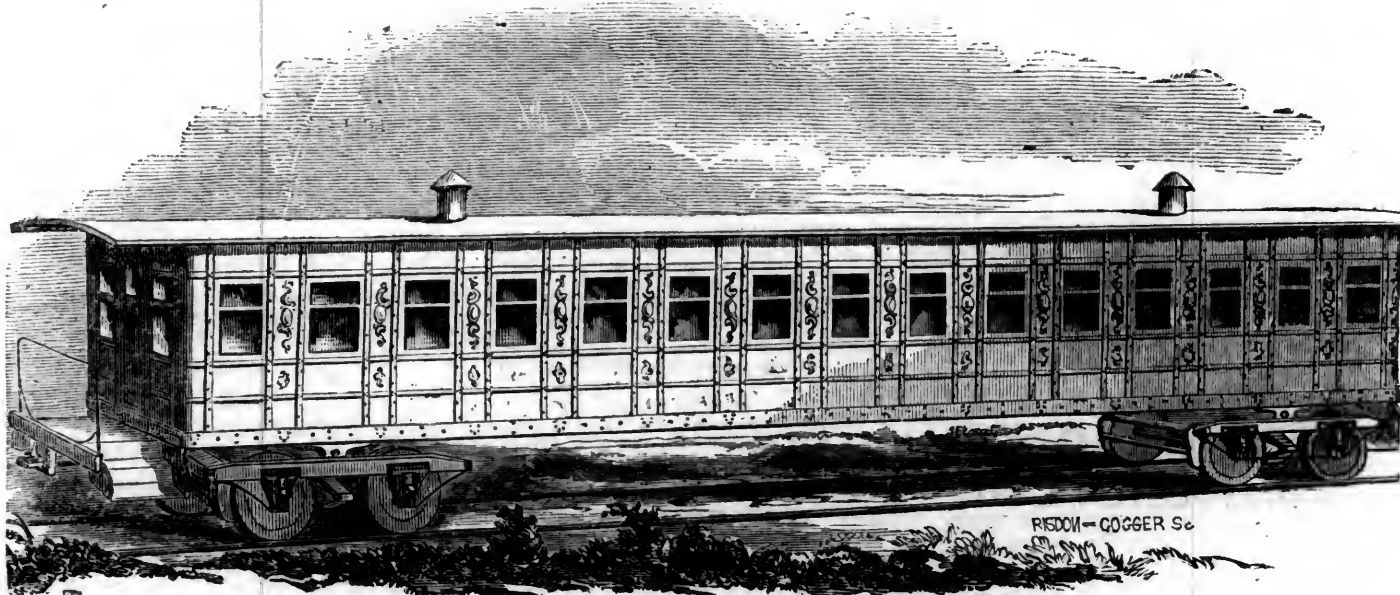
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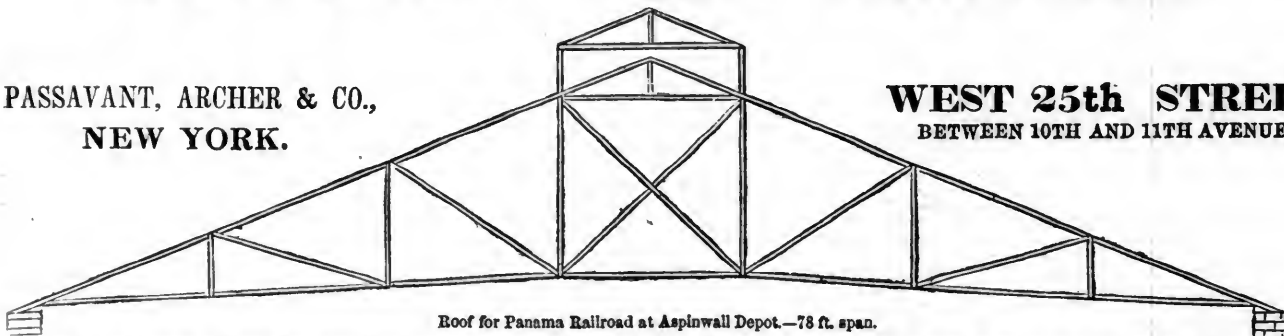
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SATURDAY, APRIL 5, 1856.

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Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, April 5, 1856.

Report of the New York and Erie Railroad.

In presenting to the stockholders of the New-York and Erie railroad company the annexed detailed statement of the present condition of their important, and to the city of New York, invaluable property, I cannot refrain from congratulating them on the greatly improved condition of the company's affairs.

During the year 1854, the road was burdened with a heavy floating debt, which was incurred in the construction of the second track, and for increased equipment, and only with great difficulty, and at great sacrifices were the necessary means obtained to meet its daily maturing liabilities.

By the aid of the individual credit of the Directors, a loan, sufficient to meet the interest and other debts payable in August, was effected; but on the 1st of September, the semi-annual interest on nearly \$10,000,000 fell due. This, with the general distrust attendant upon the bankruptcies and frauds of that season, the almost universal discredit of railroad securities, the agitated and stringent state of the money market, the want of confidence in the future, and the maturing of \$2,651,000 of its funded debt within five months thereafter, brought on a crisis in the affairs of the company, which compelled a temporary resort to the credit of two gentlemen of this city, of acknowledged wealth, to save the company from dishonor. The measure, although it was regarded at the time by many as doubtful, through the liberality of some of our leading city banks, proved successful.

The negotiation of a new loan was then regard-

ed by many intelligent capitalists, if not by all, as impossible, except at ruinous rates; but on re-organizing the Board after the annual election of Directors in October, the loan of \$4,000,000 was resolved upon and obtained.

To-day, the sacrifices made by the company to meet promptly at maturity all its engagements, have been wholly repaid. The credit of the company is entirely re-established; all the indorsed acceptances have been paid, and the two chattel mortgages satisfied and discharged of record; while the new loan, negotiated by the unwearied, gratuitous exertions of the Directors, and the generous aid and confidence of our own and foreign capitalists and merchants, enabled the company to pay at maturity the entire balance of the income bonds, and to reduce the floating debt to an amount so moderate that all further sacrifices have become unnecessary.

The rate at which the new loan was negotiated was undoubtedly low, if the security it offers be alone taken into consideration; but under the then existing circumstances, and in proportion to the rates at which other unquestioned securities were selling, it was fully as high as could have been expected. The large sinking fund established by this company, although, at present, preventing cash dividends to the stockholders, notwithstanding they are earned, has been generally considered most judicious—so much so that many other companies that have since offered new loans have established sinking funds as absorbents of their funded debts. I am confident that a more profitable use cannot be made at present of a portion of the earnings of the company. The sinking fund, by its rapid absorption of the debt, must gradually enhance the market value of the shares, as well as favorably affect the future renewal of the loans as they mature; besides which, to the permanent shareholder it acts simply as a loan to himself, to be returned at an early period in stock dividends.

In consequence of the commercial crisis and the failure of the cereal crops in 1854, by which the passenger and freight traffic of the road was greatly reduced, while undue competition forced a reduction in the rates charged on the through business in about the same proportion, the gross earnings of the fiscal year have been greatly under the estimate of the Directors, and yet the net income, after paying interest on the debt and the monthly instalments to the Sinking Fund, is almost identical with the estimate. This gratifying result has been obtained notwithstanding the drawback of several severe losses by fire, amounting in the aggregate to \$72,514 89; while at the same time the commendable condition of the road and equipments has been fully maintained, and in some respects materially improved, the highest possible condition of the road bed and rolling

stock, increases the capacity of the road, renders accidents and consequent losses less frequent, and proves in the end to be true economy.

The gross earnings of the road for the year are \$5,488,993 87
Expenses of all kinds, including interest on funded and float'g debt, the rent of Union Railroad, (52-14 per cent. of gross earnings).....\$4,655,573 50
Contributions to sinking fund..... 288,625 00
4,944,193 50

Leaving a balance to income acc't for the year..... \$544,794 87
The estimated earnings were..... 6,000,000 00
The estimated expenses, including interest on debt and the contributions to the sinking fund..... 5,459,570 00

Net revenue..... \$510,430 00
Making the actual net revenue \$1,364 87 more than estimated.

The above balance, with the contributions to the sinking fund, presents as the net earnings of the year \$833,419 87, being 8½ per cent. on the capital stock.

That the traffic of the road for the present year (notwithstanding the unprecedented severity of the winter) will greatly exceed the last, is demonstrated by the result of the business of the first quarter, which exhibits the gross earnings as.....\$1,727,989 67
Against same quarter, 1854..... 1,480,782 70

Excess of 1855 over 1854..... \$247,206 98
And the net profits are \$462,797 97, being 5½ per cent. upon the capital of the company.

A like increase upon the remaining nine months would make the gross receipts for the year nearly \$6,500,000. But owing to the great and prolonged embarrassments of the past inclement season, of which the history of railroads in this country presents no parallel, the receipts for the second quarter will give no increase upon the same period last year; and it is but reasonable to expect that the expenses will be increased during the same term. Should the result of the year's business not prove to be as profitable as may have been anticipated, the deficiency will probably be found in the three months comprising this quarter. It must be remembered, however, that the embarrassments have not been confined alone to this road. All other avenues of communication with the Atlantic seaboard have been equally blocked, and the extensive crops of the last year thus kept back, with an active foreign and domestic demand at reasonably high prices, will give full employment to the trains eastward bound; and the stimulated

movement of business westward, after a season of liquidation like the past, and accelerated by the almost unprecedented prosperity of the interior country, must inevitably furnish a correspondingly increased return trade. A large increase in the business and pleasure passenger traffic may also be confidently relied on during the coming season.

Amicable relations now exist between this company and competing lines. The temporary loss contingent upon the strife of last year with the most formidable rival, resulted in a better and more defined understanding of the rights of each, and must tend in the future to the advantage of both corporations, and it is hoped will be a permanent gain. The foregoing favorable auspices, taken in connection with the superior discipline, system and economy which characterize the Superintendent's department, promise at the close of the year an exhibit which cannot fail to be generally satisfactory to the stockholders, and indicate the period when it may be proper to resume the payment of regular semi-annual cash dividends, in addition to the stock dividends, from the accumulations of the sinking fund, as is hereinafter presented.

The Directors in their circular to the public in October, 1854, asking for proposals to the new loan of \$4,000,000, indicated to the stockholders the

FUTURE POLICY

of the Company as follows:

All bonds on being purchased by said trustees shall be cancelled by writing or printing on their face, "Held by the Sinking fund of the New York and Erie Railroad Company;" but that the interest warrants on said cancelled bonds shall be collected by said trustees as they become due, until the monthly payments of the New York and Erie Railroad Company and the accruing interest, or the conversion of Convertible Bonds into stock of this Company shall have reduced the entire debt of the Company to \$20,000,000. After which the said monthly payments shall cease and the trust vested in said trustees shall be closed, and all cancelled bonds and the unpaid interest warrants delivered to this Company.

Resolved, That as often as the bonds purchased by the Sinking Fund amount to 10 per cent. on the capital stock, this company will, upon receiving due authority from the Legislature of the State, declare at the next semi-annual dividend day a stock dividend of 10 per cent.

Resolved, That any and all future expenditures beyond the amount to be derived from the proceeds of the new loan, after re-implementing the income bonds due 1st of February next, be charged to transportation expenses.

In conformity therewith, the Company will declare a dividend of 10 per cent. in stock (the law authorizing the same being first obtained) in April, 1857; and the following is offered as an approximate estimate of the amount which will be accumulated in the Sinking fund on the respective dividend days, until the debt of the Company shall be reduced, according to the terms above recited, to \$20,000,000:

SINKING FUND.

1855—Sept. 30.....	\$322,000
1856—April 1, estim'd....	580,000
1856—Oct. 1, estim'd....	834,000
1857—April 1, estim'd....	1,065,000 1st dividend.
1857—Oct. 1, estim'd....	1,333,000
1858—April 1, estim'd....	1,609,000
1858—Oct. 1, estim'd....	1,894,000
1859—April 1, estim'd....	2,188,000 2d dividend.
1859—Oct. 1, estim'd....	2,491,000
1860—April 1, estim'd....	2,804,000
1860—Oct. 1, estim'd....	3,127,000 3d dividend.
1861—April 1, estim'd....	3,470,000
1861—Oct. 1, estim'd....	3,804,000
1862—April 1, estim'd....	4,159,000 4th dividend.
1862—Oct. 1, estim'd....	4,525,000
1863—April 1, estim'd....	4,906,000 5th dividend.
Funded Debt, Feb. 29, 1856.....	\$24,891,000
Sinking Fund, April 1, 1856.....	4,906,000

Estim'd Funded Debt, April 1, 1863. \$19,985,000

The capacity of the road for moving freights is, at present, greater than for receiving and discharging them, and in consequence of the want of suitable room for this purpose at the eastern terminus of the road, much expense and inconvenience have been experienced.

During a portion of the past season the contracted nature of those accommodations has been such as to limit the business of the road, and the present cramped and utterly insufficient depot at Jersey City, (so contracted as not to deserve the name,) with the certain prospect of a largely increased traffic in future, render it indispensably necessary that more enlarged facilities should be afforded at Jersey City and Piermont stations.

By way of explanation, I will state that the New York and Erie Railroad and its various branches, with all their extensive connections, have for their use at Jersey City but the same block of ground, 200 by 400 feet in dimensions, that was occupied by the Paterson and Hudson River Railroad, when it extended from Jersey City to Paterson—sixteen miles only. The space is barely large enough for a turning-table, and standing room for the cars, locomotives, fuel, &c., for the first-class passenger business of the Company; and yet the local freight business of the Union Road, the entire milk business of the Eastern Division, the through bonded goods, and the express parcels, are of necessity forced to take that route at serious inconvenience.

The second-class passengers and emigrants, a large portion of the express matter, and the other fast freights, which conveniently come under the same classification, are unavoidably carried via Piermont. The live stock trains run only to Bergen, three miles out of Jersey City.

The pier at Piermont extends nearly a mile into the river, with three principal tracks its whole length, and about five miles of sidings in addition; yet the area of this pier furnishes only about half the present necessary standing-room for cars—to say nothing of the extent of ground required for deposit of lumber, coal, iron, and other bulky commodities.

The construction account of this Company has but recently been closed, and it is deemed unwise now to re-open it; yet these requirements are of an imperative nature, and such as will involve an expenditure larger than can with propriety "be charged to transportation account." They are, too, of such a character that they cannot profitably be made at the present localities of those termini, even should the cost be disregarded.

The propriety of making these expenditures; the place at which they shall be made, having in view the greatest dispatch to passengers of both classes; to express and fast freight; the accommodation of shippers of property over the road; the receiving and delivery of the same in New York; economy in transportation; the greatest advantage of the Company; the general interests of this city, and that all should be duly promoted, have received the most deliberate consideration.

To this end, a few friends of the New York and Erie Railroad Company have availed themselves of a most favorable opportunity, such as might never again occur, for securing suitable and extensive grounds upon a location most fitly adapted to its present and future growing wants. The event will be regarded as the more fortunate when it is realized that the property in the immediate vicinity of New York, and especially so at Jersey City, is being daily taken up for building and manufacturing purposes, and on account of the enhanced value and extent of the ground required, any further delay would possibly have defeated the movement. The vegetable garden of to-day becomes a crowded ward of a city to-morrow—and the transition in the value of property is equally remarkable!

The property purchased, which is designed for the depot, is situated in the cove about midway between the Jersey City and Hoboken ferries, north of "Long Dock," in what was formerly known as Alarsimus, now Jersey City. It embraces all the land under water east of high water mark; between Pavonia avenue and North

Fourth street, including half of those streets, and extends into the Hudson River nearly half a mile containing about seventy acres, or about eight hundred lots of land. From this tract to the present line of the Paterson and Hudson River Railroad, a distance of two miles, a continuous right of way is secured, excepting two lots, each 25 by 100 feet, in Jersey City, and two other small lots in Hudson City, of comparatively little value. The whole purchase embraces about 212 acres, or 2,515 of lots of land. The present value largely exceeds the cost, the principal purchases having been made before the object in view became generally known. The great benefits to be derived from the rise in the value of this property, attendant upon the completion of so important a work, it is intended shall inure solely to the New York and Erie Railroad Company.

Accordingly, two charters, liberal in their character, have been granted by the Legislature of New Jersey, at its late session, conferring all the necessary powers and grants for the purposes required.

The first is an "Act to authorize the New York and Erie Railroad Company to purchase and hold lands, and to complete and finish the railroad of the Paterson and Hudson River Railroad Company. The second is an act incorporating the 'Long Dock Company,' with power 'to construct a railroad to connect with any other Railroad authorized or constructed by law;' to purchase and hold lands, to sell the same; and to make all the improvements which may be necessary for a railroad depot, with wharves, slips and storehouses. This act also confers ferry privileges.

It will be borne in mind that the New York and Erie Railroad Company are operating the Paterson and Hudson River Railroad under a perpetual lease. By the provisions of the first of the legislative acts above referred to, the New York and Erie Railroad Company may purchase the lands and improvements of the "Long Dock Company" at such time as it may be deemed advisable to do so; but it is designed at present to lease the same. And by an arrangement made with the association formed under the second act, the requisite accommodations will be furnished without taxing this Company with the onerous responsibility of providing the necessary capital.

The proposed terminus in Jersey City will not only supply the conveniences desirable at the principal passenger station of a great railway, but will also furnish the requisite area for sheds, and standing tracks for the required number of freight cars, so arranged as to render the transfer of any quantity of goods systematic, expeditious and economical.

It is not, however, the policy of this company to abandon the Piermont terminus, as that will undoubtedly be required as a depot for a large portion of the freight traffic of the road, and the immense quantities of lumber, coal, iron and other heavy and bulky commodities will be carried to and from that point as heretofore.

Consequent, and depending upon the improvements at Jersey City, arrangements are now about to be made with a single company for the transportation over the road of 800,000 tons of coal annually, to be delivered at Piermont. This is in addition to the present business of the road; and other like arrangements, contingent upon enlarged facilities, are also in prospect.

The character of the business which will be done at Piermont will be changed, but the extent of the same will not be diminished, nor the importance of the place in the slightest degree impaired.

The expense of transportation between the proposed new terminus and the Suffern Junction will not vary materially from that between the latter point and Piermont: while the cost of maintaining the ferry between New York and Piermont will be in a measure dispensed with.

With a depot so complete, and upon a scale commensurate with the magnitude of the business of the road—located, as it will be, in the heart of the business theater of the great commercial center of this country—it may be truly regarded as the crowning stone in the completion of this gigantic

work, and will forever secure to the city of New York vast advantages, and to this company the unrivaled control of a large proportion of the business of the mighty West.

In conclusion, I take pleasure in availing myself of this opportunity to express my sense of the great obligation of the stockholders to the Directors of this Company, who have, with a disinterested devotion to its interests, from time to time, during the perilous vicissitudes which have threatened its existence, most nobly risked their own credit and fortunes in sustaining the honor and solvency of the Company. The expression will apply as well to the Directors who were co-laborers in the Company's service in its earlier struggles, as to those of more recent date. But signally marked was the example of Daniel Drew, Esq., the present Treasurer, during the crisis which has but recently passed, in most generously lending his name, as indorser for the Company, for a *very large amount*. Mr. Drew's compensation is in the satisfaction of having aided the Company in the time of its greatest need, and when, but for his assistance, direful consequences might have ensued. Of like value was the clear conception and untiring exertion of Charles Moran, Esq., in devising, and with the aid of his co-directors, in negotiating the last loan of \$4,000,000.

Now, the New York and Erie Railroad Company, with good management, in conformity with the wise policy recommended by the Investigating Committee, in their able Report to the Directors last year, which, as far as possible, has been adopted, is beyond any such crisis in future as those through which it has passed.

It will soon become a dividend-paying, as it is now a dividend-earning institution.

The subjoined elaborate report of D. C. McCallum, Esq., the General Superintendent, embodies a very full and intelligent *expose* of the internal organization and working of the road, and will be read not only by the stockholders of this company, but by railroad men generally, with particular interest. In addition to the detailed account of the general division of the road, of the responsibility and duties of the superintending officers, of the operations and benefit of the telegraph, of the cost of transportation, of the expenditures in construction for the past, and estimates for the present year, it defends the broad gauge adopted by this company, showing its superiority over a narrow gauge, especially in its adaptation to a heavy freighting business, both as it regards economy and capacity, and demonstrates the position by theory and experiment.

The lateness in the season when the full returns of the year were made, and the time required in carefully arranging such voluminous statistical information, together with the demand of other imperative duties upon the General Superintendent's attention, have necessarily protracted the issuing of his report; but I believe its lucid and important character will fully compensate for any impatience the delay may have occasioned. All of which I have the honor to submit.

HOMER RAMSDALL, President.

Office N. Y. and Erie R. R. Co.,

New York, March 25, 1856.

Earnings and Expenses for Year ending September 30, 1855.

Total earnings.....	\$5,488,993 37
Trans. expenses, 47-81-100 per ct.....	\$2,625,744 87
Rent of Union R. R. ..	84,733 83
Hire of cars.....	6,659 47
Taxes.....	54,683 05
Steamer expense account.....	3,146 23
Difference between cost and net proceeds of sale of old iron.....	5,185 58
Difference between cost and net proceeds of sale of engine and car.....	725 00
Loss by fire, barge...	8,682 79

Loss by fire at Jersey City.....	36,651 69
Loss by fire at Port Jervis.....	22,863 20
Loss by fire, Lakawanna bridge.....	13,000 00

Total expenditures, [52.14-100 per ct.].....	\$2,861,875 21
Net earnings, after deduction of all expenditures, except new addit'ns to road and machinery.....	\$2,627,118 16
Interest on funded debt.....	\$1,664,889 87
Interest on floating debt.....	128,808 42
	1,792,698 29
Net earnings—equal to 8 1/2 per cent. on \$10,000,000 stock.....	833,419 87
Which has been expended as follows:	
Outlays for new machinery, &c., [14 old locomotives] under old contracts, and for old claims belonging to construction acct.....	\$245,714 11
Sinking fund [\$322,000 b'ds, 1875].	288,625 00
Floating debt paid.....	299,080 76
Total.....	\$833,419 87

Comparative Statement of Earnings, etc.—1847, to Sept. 30, 1855.

Year.	Earnings.	Expenses.*	E'ss per cent.	Exp's per mile run.
1847.	\$254,119 08	\$172,970 68	67.6	\$1.50
1848.	810,913 25	195,608 49	62.5	1.53
1849.	810,148 62	508,926 21	62.8	1.26
1850.	1,139,550 61	623,948 06	54.8	1.62
1851.	2,359,870 70	1,277,680 49	54.1	1.62
1852.	3,537,766 53	1,871,167 10	52.6	1.48
1853.	4,318,962 36	2,518,781 68	58.3	1.52
1854.	5,359,958 63	3,007,516 54	54.6	1.81
1855.	5,488,993 37	2,861,885 21	52.1	1.72

* Includes all expenses—rent of Union Railroad, loss by steamers, by fire, &c.

Statement of Liabilities and Assets for Years ending Sept. 30, 1854-55.

	1854.	1855.
Liabilities.		
Capital stock issued.....	\$10,023,958	\$10,023,958
Funded debt.....	22,641,000	24,891,000
Floating debt.....	2,435,609	1,211,769
Due income acct.....		803,482
Total.....	\$35,150,628	\$36,930,209
Assets.		
Construction.....	\$33,439,431	\$33,742,317
Union Railroad Improvement.....	433,530	425,936
Cash and cash items...	266,370	180,767
Materials.....	521,310	504,655
Fuel.....	185,896	497,115
Other assets.....	274,162	491,427
Disc't on bonds, 1875..		765,999
Sinking fund.....		322,000
Balance income acct..	29,937	
Total.....	\$35,150,628	\$36,930,209

Delaware, Lackawanna and Western Railroad.

The third annual report of this company, being for the year ending 31st December last, has just been published. The present is a document of 86 pages, and contains, in addition to the ordinary matter, a valuable sketch of the company's history, with statements from all their agents, as to the progress made and business done, during the past year. The entire line to be operated by the company is divided into four divisions—the Western, Northern, Southern and Eastern. The first of these consists of the Cayuga and Susquehanna road, 34 1/2 miles long, which was purchased in 1850, by the individual stockholders in the D., L. and W.

Co. This affords a valuable outlet, in connection with Cayuga Lake. It was at one time designed to run the Northern division from Scranton to Oswego, forming a continuous line with this road, but by a contract entered into with the Erie Company, in 1851, this plan was for the time abandoned, and Great Bend made the point of terminus for the new line. The Northern division extends from Scranton to this point. A railroad on this route was chartered as early as 1832, and revived in by the present parties in 1846, under the name of "The Legget's Gap Railroad." In 1849, the necessary surveys were made, and operations commenced in the following year. In October, 1851, it was opened to the junction with the Erie Railroad. During the same year, the Company's name was changed to "The Lackawanna and Western Railroad Company."

The Southern division extends from Scranton to the Delaware river, at the Water Gap. A charter for the construction of this part of the road had been obtained in 1849, by "The Delaware and Cobb's Gap Railroad Company." This corporation organized in 1850, and work was begun in the early part of 1853. In March of that year, in consequence of agreements entered into, an act was passed by the Legislature, authorizing a consolidation of the two companies, under the name which they now bear.

The Eastern division consists of the New Jersey Central and Warren Railroads—the latter at present nearly completed. The cost of this connecting link has been principally met by the other two companies. The charter was obtained in 1851.—Its length is 18 miles. When finished, it will be leased to the D., L. and W. Co., according to an agreement entered into between the three corporations. It was also agreed with the Central Company that, to accommodate the broad-gauge cars, they should lay down an extra rail on their road; and provide a second track having the same gauge, whenever the freight furnished by the D., L. & W. road should amount to 400,000 tons per annum.

An effort has been made to form a direct connection with Philadelphia; and though not yet successful, it is hoped that ere long the Belvidere Delaware road, already opened to Belvidere, will be extended four miles farther, so as to form a junction with the other line.

"Such were the various steps, involving in their adjustment and execution much perplexity and effort, by which our enterprise has advanced, and, from small beginnings, is now taking its legitimate place among the important undertakings of our times. These embarrassments were overcome, and the results now attained have been reached only by unceasing watchfulness, and by a liberality of views and of investment on the part of our Stockholders, worthy alike of them and of the magnitude of the objects they were eventually to secure."

Attention is directed to the other connections either completed or in progress. By one of these, the Lackawanna and Bloomsburgh, of which about 20 miles are nearly completed, communication will be opened with the Southwest and West. On account of the importance of this tributary to the Company, they have furnished a portion of the means requisite for its construction. To the North and Northwest, the Oswego, Binghamton and New York, and the Lake Ontario, Auburn and New York, besides the Great Erie line, will afford an extensive outlet for coal. It is believed

the Binghamton and Oswego will be completed through to Lake Ontario at an early day. The Auburn line also will shortly be commenced with favorable prospects. The Erie line furnishes a large and steadily increasing demand for Scranton coal.

The total expenditures on construction for the year were \$1,882,851, of which were expended—on the Northern Division, \$80,188; on the Southern, \$1,453,129; on the Eastern, \$14,455; on the Western, \$7,735; and for general purposes, \$326,844.

In carrying on operations on the Southern Division, serious difficulties have had to be contended against. Owing to the severity of the season and other causes, the contractors, in several instances, not only abandoned their contracts, but proceeded to armed resistance against the company, unless the latter would make advances up to a certain point. At first the movement was sympathized with by residents on the line, but as soon as the facts in the case were properly understood, all joined in protecting the company's rights. The whole matter has since been adjusted. A considerable portion of this Division has been graded for a second track, and 1500 tons of rails purchased for that purpose. This will be immediately commenced, and pushed forward as rapidly as their means will permit.

On the Eastern Division, (N. J. Central,) the sum of \$14,454 has been expended in building piers and trestlings for loading and unloading coal at Elizabethport. The depot grounds have not yet been paid for, owing to a delay in perfecting the titles. The laying of the third rail is nearly completed. The construction account for the single track on the Northern Division can soon be closed. A new Union Station House at Great Bend is wanted, and will soon be commenced. A lateral road through Keyser's Valley, about 2¼ miles, has been resolved upon. This will open up some very valuable coal estates. On the Cayuga Division, little additional improvement is required.

Under the head of Coal Department, the Company have expended, during the year, in opening mines and erecting working fixtures, \$90,451. They had reserved one-third the capacity of the road for their own business proper, but owing to the financial embarrassments of the year, the remaining two-thirds could not be engaged by other shippers of coal; and consequently they were obliged to increase their own mining operations. The amount of coal forwarded to market was less than estimated; but this is accounted for by the delay in getting the Southern Division opened. The total sales were 160,714 tons, producing \$608,990. The sum of \$3,304 has been received for rents. Value of coal on hand, 31st December, \$127,906. The expense of mining, transporting, repairs, &c., was \$547,369. Net revenue for coal, \$167,105. As to the quality of their coal, the Report says:—

"The Managers are happy to state that they are continually receiving the most gratifying testimonials to the excellent quality of our 'Scranton Coal,' and the superior manner in which it is prepared for use. To these they may add the personal knowledge of the President and several members of the Board itself, from trials made by them of coal received via Binghamton and the Chenango Canal. We cannot doubt that upon the completion of the Road, and the introduction of the coal into the city of New York and other Eastern markets, it will at once take high rank, as among the most desirable."

The earnings for 1855, in addition to the profits on coal, were—

Passengers.....	\$64,586
Freight.....	423,626
Mails.....	3,688
Use of locomotives.....	21,115
" coal cars.....	6,262
Rents and storage.....	785
Drawback rec'd from N. Y. & E. R. R. Co.	8,899

Total.....	\$528,911
Trans. expenses.....	269,243

Less transfer to N. Y. & E. Co.—old dis- puted acc't.....	405
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Net income.....	\$259,263
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Of this, the sum of \$61,893 has been set apart to Renewal Fund. From the remainder, the usual semi-annual dividend of three per cent. has been declared.

As already stated, the Cayuga Division belongs to the individual stockholders of the company, but under another organization. It was found, however, that the arrangement did not work satisfactorily; and accordingly in 1855, the necessary legislation having been procured, the line was leased by the D., L., and W. Co. at seven per cent. per annum, on a cost of \$1,000,000, the rent being made payable half yearly. The Cayuga and Susquehanna Co. have, by the contract, conferred the right to mine coal on their lands near Scranton free of charge. They are also obligated to extend their road, when required, from Oswego to the Pennsylvania State line. Should circumstances ever call for such, an independent line can thus be constructed from Scranton to Ithaca.

The business of the Cayuga Division last year was.....	\$135,554
Expenses of operating.....	74,036

Net revenue.....	\$61,518
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The Managers continue to make monthly payments in cash; and hence, in spite of the embarrassments of the year, the company's credit has remained unimpaired.

At the annual meeting in January, the issue of \$1,500,000 of "Eastern Extension Bonds" was authorized. Of these, \$900,000 were mostly taken by the stockholders *pro rata*. The remaining \$600,000 were offered for sale in June last, and disposed of at an average of 92½ per cent. The discount on the entire issue was only \$225,128, and of this much the greater part went into the stockholders' own pockets. The report proceeds—

"It was thought that the proceeds of the above bonds, with such temporary loans as would be readily procurable, would be sufficient for all the wants of the company, until the entire road should be opened for business. It was also hoped that the capital stock would be available to meet the floating debt that might then exist, and to complete the road; but if from any cause this result should not be realized, resort might then be had to a new issue of bonds for that purpose. In consequence, however, of the delay in opening the Southern Division, and of some increase of expense incurred in the work, the amount of the temporary loans aforesaid has been larger than was expected. To meet, then, the wants of the company, application has been made for the requisite legislative authority to execute a second mortgage on the road for \$2,000,000, to secure a new issue of bonds of that amount; making with the previous issues an aggregate of \$5,000,000.—Meanwhile, in anticipation of such authority, and

for immediate use, the Board have resolved to issue \$1,200,000 of the \$2,000,000 in the shape of seven per cent. Convertible Income Bonds, having twenty years to run; designing the latter to be exchanged for the Second Mortgage Bonds as soon as these shall be made ready.

By a circular of the Treasurer, dated December 29th, these Income Bonds were offered to the stockholders, *pro rata*, according to the amount of stock held by them on the 1st of January. In consequence of the stringency of the money market, this offer was made at a low rate, and the time within which acceptance was to be signified, was limited to the 10th of the same month. Only a portion of the amount having been taken, the offer, by vote of the stockholders, at their annual meeting, was again opened for one day, and an additional amount subscribed for. The condition of the money market, subsequently, becoming more favorable, the Board resolved to advance the price of the remaining bonds."

The report states that, in order to encourage mining operations, the Managers offered either to let shippers provide their own cars, or that the company should purchase for them the coal on the ground. Of the two proposals, the latter is generally accepted. Contracts have been made with various parties for coal, deliverable through a series of years, to an amount in the aggregate of about four million tons.

The company's prospects are considered to be most encouraging. The supply of coal is inexhaustible. It is believed that this can be furnished in New York and other Eastern markets at a less cost than from any other source. They will now be able to transport eastward and westward more than 1,500,000 tons per annum. Their means are also ample for all necessary purposes.

INCOME ACCOUNT FOR 1855.	
Balance on hand from 1854.....	\$105,381.
Net revenue for coal for 1855.....	167,105
" transportation.....	259,263
" machine shop—1854 and 1855.....	7,816

Total.....	\$539,565
Interest on \$900,000 bonds.....	\$63,000
" \$1,500,000 ".....	69,875
" Stock.....	180,723
" Floating debt.....	41,125
Rent of C. & S. R. R.....	70,000
Renewal fund.....	61,893
Coal dep't fund.....	28,977
G. W. Scranton, old oil acc't....	830
	515,923

Leaving balance on hand.....	\$23,642
GENERAL ACCOUNT.	
Construction and equipment of road..	\$6,022,667
Coal lands and mining improvements..	832,518
Materials on hand.....	89,758
Coal on hand.....	128,641
Real estate in New York.....	24,181
Stock in Warren Railroad.....	155,950
Stock in Lackawanna and Blmsburg Railroad.....	125,000
Bills and acc'ts receivable.....	287,076
Cash on hand.....	41,471

	\$7,207,257
Capital stock paid in.....	\$3,051,622
Mortgage bonds of 1871.....	900,000
Eastern Extension bonds of 1875.....	1,500,000
Interest due on bonds.....	59,267
Interest due on stock.....	96,614
Bills and acc'ts payable.....	1,892,304
Personal property received from C. and S. Railroad Co.....	92,938
Renewal fund—appropriations to credit of..	61,893
Coal department fund.....	28,977
Inc'me acc't balance on hand.....	23,642

\$7,207,257

The principal officers for 1856 are—George D. Phelps, President; Drake Mills, Vice President; W. E. Warren, Treasurer; Andrew J. Odell, Secretary; James Archibald, General Agent; E. McNeil, Chief Engineer; E. H. Dotterer, Superintendent of Northern Division; and W. R. Humphrey, of Cayuga Division. The Directors are—Messrs. Drake Mills, John J. Phelps, Wm. E. Dodge, Geo. Bulkley, John J. Blair, Geo. W. Scranton, Roswell Sprague, Moses Taylor, Henry Young, Saml. Willetts, Wm. E. Warren, Thomas McElrath, Saml. L. Mitchell, and Rufus R. Graves. Principal office, 49 Wall-st., N. Y.

Railroad Earnings.

CLEVELAND, COLUMBUS, AND CINCINNATI RAILROAD.

The business of the Cleveland, Columbus and Cincinnati Railroad for the first 11 months of 1855, was—

Passengers	\$463,005 91
Freight	651,807 21
Express, mail, &c.....	51,780 18

Total.....	\$1,166,593 30
December, estimated.....	115,000 00

Total for the year 1855.....	\$1,291,593 30
Expenses of operating and repairs, damages, &c.....	520,086 05

Net earnings for 12 months... \$761,556 65

INDIANAPOLIS & CINCINNATI RAILROAD.

The receipts of this road for the last three months, as compared with the two previous years were—

	1853-4.	1854-5.	1855-6.
December.....	\$26,081	\$32,493	\$48,652
January.....	12,284	28,505	37,500
February.....	21,598	24,202	33,000

\$59,963 \$85,200 \$119,152

showing about 40 per cent. for the three months over the corresponding term of last year. The recent opening of the Terre Haute and Alton railroad is beginning to add to the traffic on this line, and an early addition to the rolling stock of the company is now necessary to accommodate the business.

ILLINOIS CENTRAL RAILROAD.

The receipts of the Illinois Central road for February, were considerably larger than the estimate made early in the month:

Passengers.....	\$48,301
Freight.....	53,880
Received from other roads.....	7,213
Mails and expresses.....	4,511

Total.....	\$118,907
February, 1855.....	59,324

Increase.....	\$59,588
January, 1856.....	134,044
January, 1855.....	57,098

Increase.....	\$76,965
Increase in two months.....	136,539

BALTIMORE AND OHIO RAILROAD.

The revenue of the Baltimore and Ohio Railroad for February was as follows:

	Main Stem.	Washington Branch.	Total for both roads.
For pass'g's..	\$31,318 70	\$23,233 01	\$54,551 71
For freight...	146,806 56	10,155 49	156,962 05
Total ..	\$178,125 26	\$33,388 50	\$211,513 76

These figures, compared with the corresponding month of last year, exhibit a falling off of \$7,316,

81 in the receipts of the Main Stem, but an increase of \$1,927.04 on those of the Washington Branch—showing an aggregate decrease of \$5,389.27 for the past month.

The earnings of the HUDSON RIVER road for March have been \$241,131, against \$167,079 for March, 1855. Increase, \$74,061.

Bellefontaine and Indiana Railroads.

According to the last report of this company, their receipts for the year ending 31st December, 1855, were—

Passengers.....	\$123,060
Freights	150,813
Mails, &c.....	24,420

Total.....\$298,293

—an increase of \$60,283 over the previous twelve months. The ordinary running expenses amounted to \$157,470, or nearly 53 per cent., to which are to be added \$83,058 for interest, and \$8,258 for taxes; leaving as net gains \$49,237.

Two causes have contributed to increase the proportion of working expenses to gross receipts, —1st, the comparatively small amount of the latter; and 2nd, the want of harmony between the eastern and western connections, compelling the company to perform a much larger amount of passenger work than otherwise would have been necessary. It is expected that this difficulty will shortly be removed. The working expenses would not have been materially increased by the addition of one-third or even one-half more business. Estimating for 1856 only the same rate of increase upon last year's business, as it showed over 1854 (25½ per cent.), the gross receipts will amount to \$373,862, giving as net earnings \$103,304, or five per cent. on the stock. From present indications it is believed that this estimate will be largely exceeded; but the Board wish to put the figures at the safest mark.

The bonded debt of the company is \$1,214,500; and the floating debt, \$35,000. Adding \$1,181,635, capital stock paid in, makes their total liabilities \$3,181,135. Of the Real Estate bonds (\$200,000 at first) \$25,000 have been bought in. The estate will prove ample for the remainder. The total bonded debt is now \$8,903 per mile, which is less, it is believed, than on any other Western railroad. The floating debt all matures in the past and present months. The road has cost in all \$2,835,835, or \$24,332 per mile—a reasonable sum, considering the character of the work, and the amount of equipment on hand.

An issue of \$400,000 second mortgage bonds was prepared, during the year. Of this amount, \$150,000 were appropriated to payment of the floating debt and completion of ballasting, and \$49,000 sold. With the proceeds of the remainder it is expected that the construction account may be closed. The work of ballasting has been steadily continued, about 23 miles only remaining to be done. This will be finished early in the season. An engine house, the joint property of this and the Ind., Pitts. & Clev. Company has been put up at Union. At other points various improvements have been made. The rails are wearing well, and are generally in good condition. The opening of the Ohio and Mississippi railroad, from St. Louis to Vincennes, completing a direct through route between St. Louis and Cleveland, will prove highly advantageous. Difficulties have prevented

close connections being formed by this route, so far; but it is expected that these will be obviated on the return of Spring. The road will then assume its true position as an important link in the natural line between the Atlantic and the Mississippi.

The completion of the Terre Haute and Alton road will also furnish a connection with St. Louis, and throw a valuable local business on the line. By way of the Illinois Central or the Chicago Branch, a connection is also formed with the Great Western line running to Springfield and Naples on the Illinois river. The Evansville and Crawfordsville will also be a valuable feeder. It will be remembered that all these works are as yet new, and comparatively unproductive; also that last year they suffered in common from the short crops of 1854.

There is a strong probability of the completion of that portion of the Dayton and Michigan road, between Piqua and Sidney at an early day. The Mississinawa Valley road is also making steady progress; and it is expected that 52 miles of it, from Union to Marion, can be made ready for the superstructure this season.

The local business of the road has manifestly improved.

About one-third of the whole freight receipts arose from the transportation of live stock.

The freight business has suffered serious interruption, on account of various connecting lines being choked up with snow.

Mr. Godwin, in July last, resigned the Presidency of the company, and was succeeded by Mr. Brough, the present incumbent. Mr. John Canby was also, at the same time, appointed Superintendent.

GENERAL ACCOUNT.

	DR.
To 7 per cent. First Mortgage Bonds, outstanding.....	\$791,000 00
To 7 per cent. Second Mortgage Bonds, outstanding.....	49,000 00
To 7 per cent. Real Estate Bonds, outstanding.....	175,000 00
To 7 per cent. Income Bonds, outstanding.....	199,500 00
Funded Debt.....	\$1,214,500 00
Capital Stock.....	1,881,635 00
Bills and Accounts Payable.....	\$144,292 33
Less Amount of Bills and Accounts Receivable.....	115,444 16
Unpaid Dividends.....	980 62
Balance of Transportation Account.....	10,912 04
	\$3,136,875 83
	Cr.
By Construction and Equipment of Road, Buildings and Telegraph Line.....	\$2,852,652 78
Unsold Real Estate Mortgaged to secure Real Estate Bonds; original cost.....	\$143,564 04
Notes, Mortgages and Cash in hands of Trustee.....	45,000 00
	188,564 04
Unincumbered Real Estate, unsold.....	39,455 85
One Marion County Bond.....	1,000 00
200 shares Col. Piqua & Ind. R. R. Stock, at par.....	10,000 00
Materials and supplies on hand.....	27,348 82
Cash on hand.....	17,854 34
	\$3,136,875 83

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St Lawrence	149	1,538,100	2,973,700	6,019,929	470,847	90,797	none	68	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---
Androscog. & Kennebec	55	642,343	1,473,080	2,245,020	190,608	12,807	none	18	South Western	92	1,007,496	466,500	1,624,920	28,306	---	---	---
Androscoggin	20	91,192	232,193	343,317	20,396	---	---	20	Tennessee and Alabama	30	246,486	---	679,906	In progr.	---	---	---
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600	259,390	124,638	---	14	Tennessee and Missis.	---	170,931	---	175,400	In progr.	---	---	---
Port. Soc. & Portland	51	1,367,000	119,237	1,486,237	259,390	124,638	---	87	Memphis and Charleston	288	2,103,177	958,275	3,563,362	176,484	102,016	---	---
Boston, Concord & Montreal	93	1,808,093	1,059,512	2,771,310	329,744	158,832	---	2	Mobile and Ohio	158	2,668,555	1,802,921	4,536,412	199,932	109,236	---	---
Onondaga	53	2,085,925	899,313	3,179,687	300,221	143,565	---	84	Miss. Central	188	64,534	---	628,303	In progr.	---	---	---
Onondaga	53	2,085,925	899,313	3,179,687	300,221	143,565	---	84	N.O., Opelousas & G.W.	56	2,930,425	671,645	2,667,565	In progr.	---	---	---
Concord	56	1,485,000	---	1,412,576	370,629	158,299	2 1/2	41	Vicksburg, Shreveport & Tex.	---	111,750	---	107,895	In progr.	---	---	---
Northern, N. H.	52	2,768,400	---	3,016,633	182,847	55,173	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	394,917	---	---	---	East Tennessee and Va.	16	625,425	38,593	1,033,781	In progr.	---	---	---
Rutland & Burlington	120	2,293,376	2,662,896	5,378,426	119,221	214,793	---	---	Nash. and Chattanooga	161	2,319,380	1,497,081	3,843,094	316,090	112,177	---	---
Vermont Central	117	5,040,000	3,560,236	8,463,366	490,754	140,377	---	---	Covington & Lexington	93	---	---	264,973	---	---	---	---
Boston and Lowell	27	1,830,000	325,635	2,188,695	854,426	339,060	6	32 1/2	Lexington and Frankfort	29	431,091	159,299	635,369	90,930	34,864	---	20
Boston and Maine	83	4,076,974	150,000	4,179,535	89,917	8,740	---	---	Lexington & Big Sandy	---	---	---	4,806,67	In progr.	---	---	---
Boston and N.Y. Central	74	2,240,300	1,518,671	3,463,181	558,871	219,689	---	64 1/2	Lexington and Danville	---	540,117	61,525	570,483	In progr.	---	---	---
Boston and Providence	55	3,100,000	859,132	3,677,164	108,004	404,461	5 1/2	28 1/2	Louisville and Frankfort	65	698,236	669,061	1,589,566	244,014	96,902	6	---
Boston and Worcester	68	4,500,000	655,428	4,865,428	119,221	214,793	---	3	Atlantic & Gt. Western	254	866,499	77,294	618,231	In progr.	---	---	---
Cape Cod	47	681,690	280,698	997,252	286,563	103,787	5 1/2	48	Bellefontaine and Ind.	118	1,881,598	1,260,612	2,805,821	288,010	114,592	---	30
Connecticut River	52	1,501,110	273,241	1,802,244	647,281	305,998	4 1/2	43	Clev., Col. and Cin.	141	4,473,721	374,127	4,648,133	1,162,601	657,905	9	102
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	681,163	225,671	---	70 1/2	Clev., Zanesv. and Cin.	87	---	---	---	---	---	---	---
Fitchburg	67	3,540,000	154,700	3,765,998	191,857	56,877	---	80	Cleveland and Toledo	200	2,675,425	2,689,301	5,124,629	736,272	396,986	10	80 1/2
Nashua and Lowell	14	600,000	16,000	533,963	198,491	56,838	6 1/2	---	Clev. and Mahoning	103	---	---	628,533	In progr.	---	---	---
N. Bedford and Taunton	21	500,000	---	533,963	198,491	56,838	6 1/2	---	Clev. and Pittsburg	133	2,686,770	2,516,162	4,181,163	450,216	265,868	---	65 1/2
Old Colony and Fall River	57	516,100	292,650	3,262,949	369,276	87,513	---	9 1/2	Cin., Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	483,620	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,269,727	1,080,673	633,013	7	91 1/2	Cin., Wilm. & Zanesv.	131	1,120,450	1,131,255	2,326,459	In progr.	---	---	---
Western, Mass.	155	5,150,000	6,966,420	10,495,955	1,080,673	633,013	7	91 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,733	556,36	187,518	10	86
Worcester and Nashua	46	1,141,000	205,563	1,346,563	294,780	76,760	2	42	Dayton, Xen. & Belpre	63	437,838	422,668	860,496	In progr.	---	---	---
Providence and Worcester	43	1,510,020	338,461	1,800,690	311,430	138,957	---	72 1/2	Dayton and Michigan	140	1,076,692	393,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven	72	2,354,000	939,000	3,313,932	730,012	119,111	---	118	Dayton and Western	35	310,000	500,000	733,769	In progr.	---	---	---
Hartford, Prov. and Franklin	125	1,845,610	2,090,124	4,060,869	330,792	18,851	---	---	Easton and Hamilton	42	448,411	835,994	1,345,673	113,859	53,256	---	25
Housatonic	110	2,000,000	474,177	2,424,067	238,266	---	---	---	Little Miami	65	2,993,921	1,171,785	3,648,172	681,562	336,708	---	90
Naugatuck	67	1,031,800	673,995	1,577,167	936,026	341,667	---	30	Mad River and L. Erie	206	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	66
N. York and N. Haven	62	2,992,450	2,264,056	4,906,748	108,958	217	---	---	Central Ohio	138	1,520,927	3,485,076	4,283,443	Recently opened.	---	---	12 1/2
N. Haven and N. London	60	738,258	735,166	1,450,318	108,958	217	---	---	Ohio and Peon.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	66
N. London, W. & Palmer	68	609,200	1,073,671	1,684,338	124,044	68,331	---	34	Pittsburg, Mayv. & Cin.	50	---	---	343,882	In progr.	---	---	---
Norwich and Worcester	66	2,122,300	873,489	2,997,133	304,236	88,456	2 1/2	---	Sandys, Mansf. & Newk.	127	1,350,000	2,204,387	3,562,357	328,958	164,479	---	---
Albany Northern	32	439,005	1,625,098	1,840,995	117,716	9,904	---	---	Scioto & Hocking Valley	135	403,975	5,060	888,858	In progr.	---	---	---
Black River and Union	35	643,330	317,859	974,323	124,076	60,605	---	---	Springf., Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,871	1,011,183	2,819,098	288,392	31,390	---	---	Tol. Washash & St. Louis	242	2,500,000	4,530,000	---	In progr.	---	---	---
Buffalo and N. Y. City	92	798,349	2,587,849	3,401,868	288,392	31,390	---	---	Cin., Log. and Chicago	255	1,096,679	1,006,125	2,080,433	In progr.	---	---	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	386,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,641	127,400	64,562	---	8
Canandaigua and E. Mira.	47	434,111	922,393	1,275,796	174,089	69,600	---	---	Ind. and Cincinnati	68	611,400	1,442,889	2,178,461	366,012	193,142	7	58
Canandaigua, W. & Niagara F.	58	1,315,000	2,279,534	3,495,832	135,433	48,649	---	---	Indiana Central	88	212,723	1,261,179	1,907,911	350,176	134,375	---	48 1/2
Canajoharie & Susquehanna	56	687,000	508,689	1,187,567	135,433	48,649	---	---	Ind., Clev. & Pittsburg	83	834,157	1,101,971	1,671,544	---	---	---	20
Hudson River	144	3,768,496	9,250,362	12,737,898	1,812,057	608,946	35 1/2	---	Jeffersonville	66	1,014,252	694,000	206,544	---	94,318	---	---
Long Island	95	1,876,143	6,060,949	2,655,968	301,793	116,462	---	---	Madison and Indianapolis	87	1,647,500	1,589,881	3,237,381	---	---	---	---
New York Central	534	24,164,861	14,462,742	38,623,913	5,658,551	3,162,126	9 1/2	---	New Albany and Salem	288	2,536,121	5,281,548	6,643,189	645,827	371,402	---	10
New York and Erie	404	10,024,985	15,126,669	33,439,431	4,488,993	2,627,118	5 1/2	---	Peru and Indianapolis	73	---	858,314	150,000	---	90,000	---	17
New York and Harlem	118	6,717,100	4,069,769	8,758,203	1,536,717	234,129	19 1/2	---	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	96
Northern, N. Y.	118	6,833,022	4,404,874	5,470,714	1,536,717	234,129	19 1/2	---	Chicago and Rock Island	182	3,141,500	2,387,156	5,214,162	1,077,312	---	---	91
Oswego and Syracuse	35	399,000	216,681	723,683	120,540	59,982	3 1/2	---	Chicago and St. Louis	220	---	---	---	---	---	---	---
Pottsdam and Watertown	29	467,200	264,159	740,683	120,540	59,982	---	---	Chic., St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Rensselaer & Saratoga	25	610,000	140,000	596,423	241,140	82,600	7	---	Galena and Chicago	298	4,334,800	1,189,304	5,806,263	1,506,710	942,231	17	113 1/2
Saratoga and Whitehall	45	500,000	395,600	---	71,909	21,089	---	---	Illinois Central	707	1,419,440	18,001,426	17,098,099	1,532,118	---	---	98
Syracuse & Binghamton	80	768,399	1,578,804	2,272,777	150,544	25,603	---	---	Peoria and Quawwa	93	696,889	818,454	1,388,342	In progr.	---	---	---
Troy and Boston	27	437,850	787,079	1,109,222	104,374	172,474	3 1/2	---	Ohio & Miss. (Wat. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,534	---	---	Terre Haute and Alton	173	2,251,420	1,256,000	3,537,424	In progr.	---	---	---
Beidville Delaware	94	5,000,000	11,407,200	8,636,523	1,217,127	901,841	12	---	Detroit and Milwaukee	185	838,000	1,128,914	1,966,969	In progr.	---	---	---
Camden and Amboy	90	369,329	1,522,131	1,729,642	120,117	50,080	---	---	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656	---	95
Camden and Atlantic	30	3,454,560	690,000	4,310,011	861,514	500,741	10	121	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96 1/2
New Jersey Central	63	2,000,000	2,266,176	3,683,149	393,728	171,008	---	---	Green Bay, M.I. & Ch.	156	764,074	442,726	1,193,768	In progr.	---	---	---
Morris and Essex	31	1,167,805	375,000	1,366,560	225,893	102,474	6	---	Milwaukee and Miss.	106	1,826,428	2,467,889	3,678,757	691,843	417,443	17	86
Albany Valley	44	1,637,867	342,564	1,983,370	---	---	---	---	Milwaukee & Watert'n.	72	354,861	132,000	414,238	In progr.	---	---	---
Cataw. W. & Eri	63	1,700,000	1,940,000	3,640,000	219,253	62,450	---	---	Milwaukee and Horicon	16	554,200	---	854,109	In progr.	---	---	---
Cumberland Valley	56	1,099,500	1,211	1,191,833	140,381	68,994	---	---	Milwaukee & La Crosse	61	1,351,832	532,131	1,883,963	In progr.	---	---	---
Del. Lark & Western	106	2,865,175															

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	98	
Bellfontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	92½	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	92½	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1866	75	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1867	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	77½	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87½	
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861	92½	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	86½	
Cincago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	85	
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	85	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	97	
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1865	89	
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	
Jeffersonville	300,000	Do. 2d sec. conv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	
Indianapolis & C.M.T. (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	90	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76½	
Little Miami	1,500,000	Do. inconvert.	6	2 May, 2 Nov.	"	1863	79½	
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boet.	1860	89½	
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100½	
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96½	
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	96	
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	90	
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	94	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	95½	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	84½	
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	78	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	77	

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,128,500	Do.	6	Jan'y, July	alt.	1875	87½	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	93½	94
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108½	110
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	94½	95
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	92½	93½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90½	91
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83	83½
Do. do.	3,600,000	Convertible	7	Jan'y, July	"	1862	86½	87
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1862-70	97½	98
Do. do.	2,000,000	2d do.	7	16 June, 16 Dec.	"	1860	87	88
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	69	69½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	58	58
Do. (Free Land)	3,000,000	M'ge \$45,000 acrs-priv 7 shars	7	March, Sept.	"	1860	83	83½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	12	95
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	85	85½
New York and New Haven	750,000	No mortgage	7	June, Decemb.	"	1859-60		
New Haven and Hartford	1,000,000	1st mortgage	6	Jan'y, July	"	1873		97½
Northern Indiana	1,600,000	Do. do.	7	Feb'y, August	"	1861	91	92
Do. Goshen Branch	1,000,000	Do. do.	7	Feb'y, August	"	1868	56	56½
New York Central	8,287,000	No mortgage	6	May, Novemb.	"	1883	88	89½
Do. do.	3,000,000	Non'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102	102½
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	104	105
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	104	105
Reading, 1st issue	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	93	94
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	87½	88

CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. 1857	Feb'y,	100		Milwaukee, 7 per ct. coup.	X	88½	80½
Do. 5 do. 1858-59	May,	96	97½	New Orleans, 6 per ct. ep. R.R. X	Divers	75	78
Do. 5 do. 1870-75	August, and	96	97½	N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	78	83
Do. 5 do. 1880	November,	96		Philadelphia, 6 per ct. 1876-98	Jan'y, July	91½	91½
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	96	98	Pittsburgh, 6 per ct. coup.	X	76	77
Albany, 6 per ct. coup. 1871-81 X	Jan'y, July	96	98½	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	82½	
Baltimore, 6 per ct. coup. 1879-90	Quarterly	96½	98½	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	81	85
Boston, 5 per ct. coup. 1879-90 X	April, October	99	100	Rochester, 6 per cent. coup. X	Divers	79	80
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	79	80
Clev'Pd, 7 per ct. ep. W.W. 1879 X	Do. do.	100½	101½	Do. do. Municipal X	Do.	79½	80½
Cincinnati, 6 per ct. coup. 1879 X	Divers	89½	90	Sacramento, 10 p. ct. ep. 1862-74 X	Do.	81½	81½
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	91	S.F. Cisco, 7 p. ct. ep. 1865, pay. N.Y. X	May, Novemb.	78½	80
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August	100	101	Do. 10 p. ct. ep. 1871 X	Do.	97	99
Dubuque, 8 per ct. ep. Long X	March, Sept.	100	101	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	64	
Jersey City, 6 p. ct. ep. W.W. 1877 X	Jan'y, July	96		Do. 6 per ct. pay. N.Y. 1875 X	Do.	160	65
Louisville, 6 per ct. ep. 1880-83 X	Divers	79	80	Wheeling, 6 per ct. coup.	X	67½	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do.	X	97½	

Cincinnati Stock Sales,
By KIRK & CHEEVER.
For the week ending March 25th, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	45
Marietta & Cincinnati, 7 per cent 1st Mort.	70½
Indianap. & Cin., 2nd Mort. 7 per ct.	80
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	80
Cin., Wil. & Zanes 2d Mort. 7 per ct.	50
Covington & Lexington, 10 per ct. Income	60
Cin., Wilm. and Zaneav., 18.—Cin., Ham. and Dayton, 67.—	
Col. & Xenia, 86.—Cincinnati & Chic. 7½.—Central Ohio, 12½.	
—Covington and Lexington, 19.—Dayton and Western, 18.—	
Eaton and Hamilton, 25.—Fort Wayne and Southern, none.	
Indiana Central, 48½.—Indianapolis and Cincinnati, 68.—Little	
Miami, 91.—Mad River and Lake Erie, 18.—Marietta and Cin.,	
16.—Ohio and Mississippi, 7½.—Hillsboro' and Cincinnati, 16.	
—Junction (Indiana), —Peru and Indianapolis, 18.	

By HEWSON & HOLMES.
For the week ending March 26th, 1856.

BONDS.	(Int.)
\$5,000 Cinc., Ham. and Dayt. 7 per ct. 2d Mort.	85
2,000 Little Miami, 6 per ct. 1st Mort.	80
6,000 Covington & Lex., 7 per ct. 2nd Mortgage	66
1,000 Ohio & Wm. 7 per ct. 1st Mort.	65
3,000 Cin., Wilm. & Zaneav., 7 per ct. Income	40
8,000 Ind. and Cin., 10 p. ct. Income, due 1858	95
2,000 Hillsboro' and Cin., 7 per cent. 1st Mort.	50
1,500 Cin. Camb. & Chic., 10 per ct. Real Estate	40
600 Ind. & Cin. 7 per cent Dividend	69
410 Little Miami, Dividend Scrip, old.	92
STOCKS.	
54 Shares Ohio & Mississippi	6½
39 " " "	7
200 " " " (30 days)	7½
18 " Cin. & Chicago	8
25 " Columbus & Xenia	85½
23 " Little Miami	91
47 " " "	91½
36 " " "	91½
20 " " "	92
112 " Cin., Wil. & Zaneav. (60 days)	18
40 " Junction	7½
20 " Cincinnati, Hamilton, & Dayton	85
16 " Marietta and Cincinnati	15

De Coppel & Co.'s Circular.
[TRANSLATED EXTRACT.]

New York, April 1st, 1856.

The tone of our stock market has not materially changed since our advices of the 24th March; the uninterrupted favorable news from Europe gives it firmness and steadiness, but speculative spirit remains quiet, and whilst railroad stocks have generally risen, our subjoined table of daily quotations shows a decline on those of the State stocks, which have been more freely thrown on the market. Confidence in the future is clearly perceptible in the disposition of Americans as of Europeans, to participate in the negotiation of new loans of well known railroads, and even of some recently introduced, which we mention in another paragraph.

In State stocks the business has been moderate in Indiana 5s, Louisiana 6s, Virginia 6s, and active in Missouri 6s, at a rise of ½ and 1 per cent. on the two first, and a decline of 1½ and ½ on the two last.

In city and county bonds there is a steady demand for small accounts of Milwaukee 7s, Detroit 7s, St. Louis 6s, and Chicago 6s, and prices remain firm or looking up.

Railroad bonds—at the Stock Exchange, transactions in Hudson 1st mort. and Erie 7s, 1875 and 1883, have been limited, and without any variations of importance. Illinois Central Construct'ns were active, and have risen ¾ per cent. New York Central 6s and 7s quiet, and have somewhat declined. All private sale transactions have been generally moderate, but we notice the negotiation of a loan of \$4,000,000 of the Hannibal and St. Joseph railroad, and of \$600,000 1st mort. 3d section sinking fund bonds of the Milwaukee and Mississippi railroad. Prices for the several issues of the latter remain very firm.

Railroad Stocks.—The speculation in Cleveland and Toledo has been animated, and at a rise of 2½ per cent. There has also been some activity in Erie, Reading, Michigan Southern, New York Central, Cleveland and Pittsburgh, and Chicago and Rock Island, with more or less advance in rates, except on the latter. Milwaukee and Mississippi has risen 2½ per cent.; Panama declined ¾ per cent.

Money.—Loans on call from 6a7 per cent., the latter rate more general. Business paper from 7a9 per cent., according to class and time to run. Exchanges on Europe have declined in some places. Principal business in sterling, 109¼a109¼; Paris, 5.17½a5.20.

Extract from the Circular of Robt. Benson & Co., per Canada.

London, March 14, 1856.

Little of a definite nature has transpired during the week, as to the progress of the peace negotiations. It is said that the various points are all agreed to, and the admission of Prussia to a share in the remaining deliberations, is looked upon as corroborative of this report. The increased confidence thus given to the expectation of peace, has had a favorable influence on our securities. Since the settlement of the monthly account, consols have risen, and the money market, notwithstanding the payment yesterday of £2,000,000 of the new loan, is without pressure, although in the early part of the week high rates of interest were paid. Consols were quoted in our last at 91¾a 91½ for 10th April, and to-day we quote them at 92¼ for money, and 92½a93¼ for the account.

In American securities the market has been quiet. There have been few transactions in Railroad bonds, and our quotations generally are below those of last Friday. Reading bonds of 1870, have changed hands at 72. Erie 3d mort. at 85½, and sinking fund bonds at 83. We quote Illinois Central Construction bonds at 83a84, and Free-lands the same, ex-coupon. Pennsylvania Central 88a89. A considerable variety of State stocks have changed hands during the week. Tennessee bonds of 1880 have been sold to some extent at 89, and are still offered at that price. The other transactions have comprised Kent'ky bonds at 90, Alabama and Virginia sterling at 86, and Pennsylvania 5 per cent stock at 76. Pennsylvania bonds we quote at 82a83; and Maryland at 88a89.

ROBT. BENSON & CO.

American Railroad Journal.

Saturday, April 5, 1856.

City Railroads.

The Boston and Cambridge Railroad has commenced operations. The wooden cars are from the Troy Factory and are the finest specimens of that work ever yet produced. The same manufacturers have built four new cars for the Third Avenue Railroad Company in this city, said to be much lighter than those formerly built.

The Boston Company have a stock of iron cars also, to be tested in connection with the wooden vehicles. They may be seen at the establishment of PASSAVANT, ARCHER & Co., in West 25th st., New York. They weigh but 3,300 lbs., and as to form are a beautiful carriage. They have, what cannot be given the wooden cars, a tasteful shape. Wood, perhaps, admits a finer paint finish and in this respect the wooden cars will have the advantage if such it be, which really we do not see.

As the Boston companies have occasionally visited New York to examine the city railroads, we suppose they desire to learn all that can be gathered by a careful study of these conveniences. Among other accomplishments possessed in this quarter is a faculty of making roads cost apparently twice as much as by any possibility of chances they could be made to amount to; this practice of watering the stock will doubtless be as readily comprehended in State street as in Wall street. By and by the Cambridge road will pay fat dividends—the public will grow jealous insist on lower fares, more cars less crowded, and various other improvements. Where will be the

weapons to fight the public? We understand how to manage that here. Double the capital stock and let two dollars represent one. The market quotations will run down to fifty; instead of twenty per cent. dividends you will have but ten. Of course, the City Government won't be hard on you. They are not here. It might not be a bad idea to distribute a little of the diluted stock. It may not be the case in Boston, but money has a most excellent effect in our Council.

Many of the New York cars are dirty. We should be glad to have some more attention given to a cleanly condition. Some of the roads are so located that great care certainly is necessary to keep them in neat order, their tracks lie in unpaved streets and the mud or dust is a constant annoyance; still with proper care the car might be nearly as nice a vehicle as the stage. This, however, is not the case except on avenues where there is a direct competition by omnibus lines. Filthy conductors and profane drivers are not inducements to ride. Nearly every car in this city has a disagreeable odor absorbed from stable atmosphere. This is particularly unpleasant in a damp muggy day. It is produced by permitting communication between the car-house and the stable—in some cases there is no connection save by small windows for purposes of ventilation. The effect is nevertheless as bad as in any other and should be remedied. A misfortune is, that the officers being much in this gas do not discover it, and will not believe that any such nuisance exists. Strangers nostrils are more sensitive.

Second Hand Locomotive.

We call attention to the advertisement in this week's paper for the above which can be bought at a bargain of ELLIOTT & Co, No. 4 William st., New York.

Paige's Adjustable Car Brake Blocks.

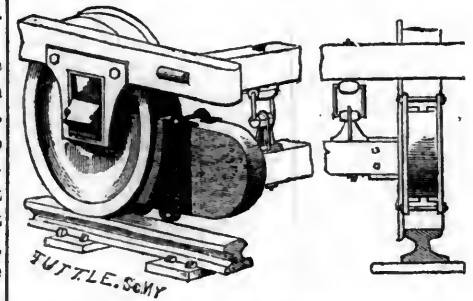
When wooden blocks were first used for bearing surface against the periphery of wheels, they were formed by cutting the required form in the side of the grain—the fibre being in a vertical position when hung. The pressure of the wheel in its frequent action caused the wood to exfoliate so that the simple wear of the block was slight compared to the constant destruction that was occurring from the other cause. Then leather shoes were added, and finally in some cases iron has been used. The repairs of the brake blocks have been a large item, and on some roads where a heavy passenger traffic is done, it is customary to devote a department to this branch of manufacture. For the purpose of economizing material, wooden brake blocks have been faced with additional wood, which is nailed to the block and may be renewed at pleasure. The difficulty of holding the additional pieces has been caused by the fact that any small metallic fixtures in contact with the tread of the wheel, are liable to become highly heated, and thus to burn themselves loose.

The arrangement contrived by PAIGE is not a revolution of old notions, but seems to have been suggested by an attempt to improve existing plans. An English inventor had patented a contrivance, which consists of a shell of cast iron filled with blocks of wood, the blocks being readily replaced by others when much worn.

Could not the shell be so arranged as to adjust the block, without renewing? Nothing was easier; knock out the back of the box and slip the block

forward as necessary; disconnect the sides and provide them with burs to clinch the wood which was placed between them with the end of the grain to the wheel, then draw the jaws together with screw bolts.

The annexed cut perfectly illustrates the contrivance.



It will be seen, that when the shoes are shortened the necessity of making new is obviated, nothing more being needed than to move the old block forward.

Wooden shoes are preferable to iron, because they hold better with less wear on the wheel, but the rapidity with which severe friction destroys them renders their maintenance a constant source of trouble and expense.

Paige's block has been thoroughly tried.

On the Hudson River Railroad where attached to a car for purposes of experiment, but three of the blocks have as yet been moved forward, although in constant use during five months. With the old block it was impossible to run to Troy and back without new-shoeing the brakes.

On the Lowell and several other roads they have been used with equally favorable results.

There can be no doubt that the manner of hanging the block, which is from the beam instead of the brake head, has an important influence in preventing wear, as a uniform bearing is secured on the face of the wheel.

The facts are such after several months' trial as to justify us in declaring them superior to all others in use. We know this to be the opinion of those Superintendents who have used them.

The beams at present in use may be employed in attaching these blocks, no change being necessary except at the ends which are easily fitted to the new arrangement.

Qualifications for Architects.

In a late architectural work published in London, we observe a position assumed by the author, that is unfortunately too common, viz: that the Architect is to be an artist and not an Engineer. It was unnecessary to impress by any further teaching such a lesson on the Architect of this day. More stupidity in building is rarely seen than in the works of those of our designers, who exhibit the most taste. Especially are men careless in selecting a foundation. We notice as an illustration a church on Cathedral street, Baltimore, opposite Richmond street, that is badly defaced by neglecting this important matter. One of the tower buttresses, has settled, dragging down the side of the tower, which is fractured through all the weak points. The buttress projects six feet at the bottom and is in this case anything but a beautiful feature.

To Run a Tangent between Two Curves already Located.

From the "Mechanic's and Engineer's Book of Reference and Engineer's Field Book," p. 383. —Published by STRINGER & TOWNSEND.

Problem by CHARLES HASLETT, Civil Engineer.

FIG. 8.

Let the curve C R A G H, of 2000 feet radius, be located from tangent C K; and let E S B D be a curve of 2605 feet radius, located from tangent E F. We are required to find the points A and B having a tangent common to both.

Suppose R to be the point in the first curve, and S the point in the second. There being obstructions in the way, we will run the zigzag line R L P S, making R L tangent to R, and P S tangent to S.

Suppose R L Q = 20°
and T P S = 15°;
let R L = 1100 feet, L P = 1300, and P S = 1400.

Assume radius N R as a meridian; that is, suppose N R to be due north. Then will R L be due west, L P south 70° west, P S south 85° west, and radius S M north 5° west. These artificial courses, then, will show the relative bearings, with which we obtain the following traverse:

Course.	Distance.	North'g.	South'g.	Easting.	Westing.
North....	2000	2000	0000	0000	0000
West....	1100	0000	0000	0000	1100
S. 70° W....	1300	0000	444.63	0000	1221.60
S. 85° W....	1400	0000	122.02	0000	1394.66
N. 5° W....	2605	2595.07	0000	0000	227.05
		4595.07	566.65	0000	3943.31

Difference northing and southing
(4595.07—566.65) = 4028.42; then

$\frac{3943.31}{4028.42} = .97882 = \text{natural tangent } R N G = 44^{\circ} 23'$
 $44^{\circ} 23' = \text{course of } N M = N. 44^{\circ} 23' \text{ west, and angle } S M D = 39.23, \text{ or } 44^{\circ} 23' - 5^{\circ}.$
To calculate M N make the difference of latitude 4028.42 = cosine $44^{\circ} 43'$, and the required distance N M = radius. Then we have by natural cosines

$$\frac{4028.42}{\cosine 44^{\circ} 23'} = \frac{4028.42}{.71468} = 5636.7 = M N.$$

Or by logarithms:

As cosine R N M = $44^{\circ} 23'$ 9.854109
Is to R 10.000000
So is difference of latitude 4028.42. 3.605134

To N M = 5636.7 3.751025

The triangles A N I and B M I being similar, we have by logarithms (Davies' Legendre, book II., prop. X)—that is, by "composition and division":

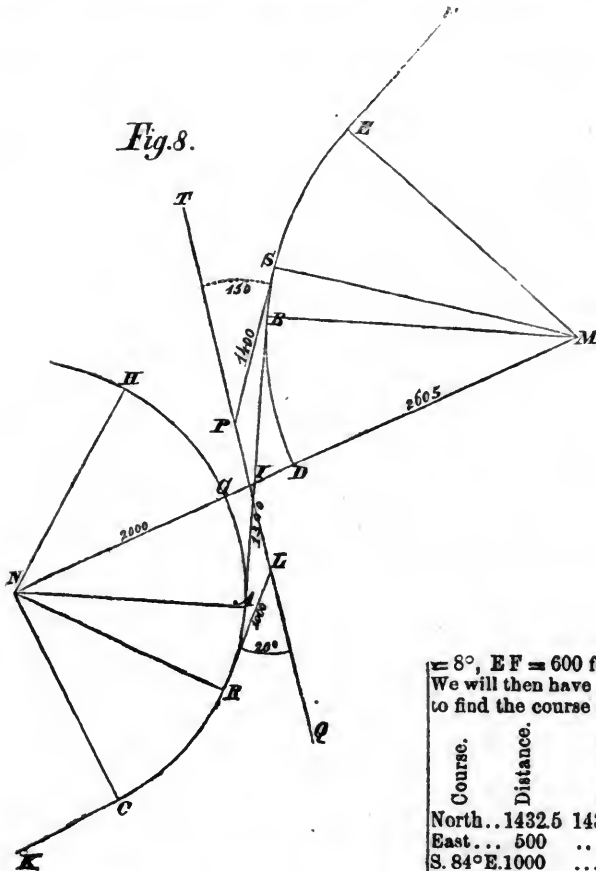
As N M = 5636.7 3.751025
Is to R 10.000000
So is sum of radii .4605 = (2000+2605) 3.663280

To cosine A N I = B M I = $35^{\circ} 13'$ 9.912205

Having now determined the angle R N I = $44^{\circ} 23'$, and the angle A N I = $35^{\circ} 13'$, the angle R N A becomes = to their difference = $9^{\circ} 10'$.

Therefore continue the curve from R towards A, $9^{\circ} 10'$ of curvature, and we have the tangent

Fig. 8.



point A required. Again, we have S M I = $39^{\circ} 23'$, and the angle B M I = $35^{\circ} 13'$, consequently curve from S to B $4^{\circ} 10'$ of curvature, and we have the tangent point B required.

Now to find the length of tangent A B, multiply the sum of the radii 4605 by the natural tangent of $35^{\circ} 13'$, and we have the length required.

CASE 2D. FIG. 9.

Suppose the two curves to be connected by a common tangent, instead of running in opposite directions as in Case 1st, curve the same way, as G H S and C D E L. It is required to find the position of the tangent S D.

Assume the points H and E; from H lay off tangent H I; from E lay off tangent E F; join F and I by a straight line, if convenient, or by a traverse, if there be obstructions. Let A H be an artificial meridian, and, as in Case 1st, calculate the distance A B, also its course = angle H A G; this will give also the angle E B A.

Suppose radius A H = 1432.5, tangent H I = 500 feet, angle M I F = 6° , I F = 1000 feet, N F T

= 8° , E F = 600 feet, and radius E B = 2865 feet. We will then have the following traverse, by which to find the course and distance of A B:

Course.	Distance.	North'g.	South'g.	Easting.	Westing.
North..	1432.5	1432.50	.....	.....	.....
East...	500	.....	.....	500	.....
S. 84° E.	1000	.....	104.50	984.60	.....
S. 76° E.	600	.....	145.20	582.20	.....
S. 14° W.	2865	.....	2780.07	.....	692.72

Total... 1432.50 3029.77 2066.80 692.72

Difference of latitude = 1597.27; departure = 1374.08.

Departure = 1374.08
diff. lat. = 1597.27 = .86026 = natural

tangent $40^{\circ} 42'$ = course A B = angle H A G.

Diff. lat. = 1597.27 = 1597.27
cosine course = cosine $40^{\circ} 42'$ = .75813 =

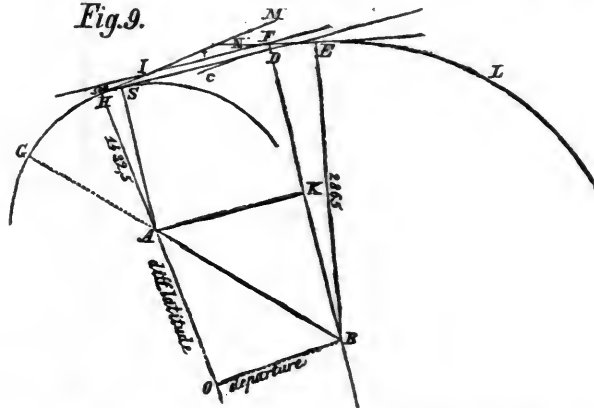
2106.86 = distance A B.

Then $\frac{\text{diff. radii}}{A B} = \frac{1432.50}{2106.86} = .67992 = \text{natural}$

cosine $47^{\circ} 10'$ = D B A = S A G.

Now $47^{\circ} 10' - 40^{\circ} 42' = 6^{\circ} 28' = \text{H A S}$. Then curve from H $6^{\circ} 28' = 162$ feet nearly to S. Now A B makes with B E an angle of $40^{\circ} 42' + 8^{\circ} + 6^{\circ} - 54^{\circ} 42' = 7^{\circ} 82'$ curvature = 377 feet

Fig. 9.



distance. The points S and D will be the termini of the required tangent.

Then difference of radii \times natural tangent (D B E = $47^{\circ} 10'$) = $1439.5 \times 1.07864 = 1545.15 = A K = S D = \text{length of tangent}$. Now when the two curves are so situated as to be seen the one from the other, assume two points as near as you can judge to the true termini of common tangent. Cause about a dozen small straight stakes or pins to be set up endway about twenty feet apart from one of the assumed points or curves. Then set the instrument at the other, and see how tangent from instrument strikes the row of stakes. Note the difference, and move the instrument until tangent therefrom strikes as tangent to the row of stakes. Make a point where it does. Set the instrument over said points, and in like manner see how tangent from instrument strikes the other curve. Thus we dispense with all the previous calculation.

Steam on the Preston and Kendal Canal.

The attempt to introduce steam on the canal between Preston and Kendal, has answered the expectation formed of it. A screw boat is at work; the engine 20-horse power, having two 8 inch cylinders, is placed in one boat, and four others are attached, forming a boat train. The quantity of coal conveyed each trip is about 200 tons, and a speed of two miles per hour is maintained. This speed might be increased, we believe, did the depth of water in the canal permit it; but at present, if a greater speed is attempted, a swell of water is created in front of the boat, reducing the level of

the canal at the bows so much as to cause the boat to scrape the bottom. By the old system, one horse dragged a boat of from forty to forty-five tons burden, at a rate of one mile and a quarter per hour. During the last fortnight of December last, an extra new iron boat, capable of carrying seventy-seven tons, has been attached to those previously towed by steam (making the 5 now used), and with this very large additional weight, it has only made a difference in speed of three-quarters of an hour per day, and the addition of this extra weight has consequently retarded the boats almost imperceptibly. A new iron boat has just been built for the same purpose, to be worked by steam power. She is a twin paddle-boat. Two boats, each sixty feet long, having one central paddle working between them, and this arrangement prevents the usual swell which the ordinary river paddle-boats create. This steamer has been tried, and found to require less power to do the same work than the screw boat alluded to above. These experiments, combined with the substitution of iron for wood in the construction of the boats, open a new feature in the history of canal navigation.—*Preston (Eng.) Pilot.*

Syracuse and Binghamton Railroad.

The financial success of this road was predicated on the formation of a *continuous* line from Binghamton to Oswego. With such a line, there seems to be no doubt that the expectations formed of it would be fully realized.

The city of Oswego is the channel or gate through which passes a large portion of the commerce between the East and the West. The commerce of this port, already immense, is increasing much more rapidly than that of any other similarly situated. This increase is founded on advantages of *position*; it being the nearest and most accessible port on the great Lakes, to tide-water. Freight once afloat on the Lakes, naturally seeks the ports nearest the great Eastern markets, before breaking bulk—as the cost of transportation by sailing vessels upon the Lakes, is far below that upon any artificial avenue, whether canal or railroad. This fact explains the rapid growth of the commerce of Oswego over that of any other port through which the trade with the West is carried on. Only a few years since, there was no means of communication between Lakes Erie and Ontario. The trade of Oswego, consequently, was confined to the territory bordering the latter Lake. The opening of the Welland Canal, at once rendered Oswego accessible from all the upper Lakes. Her intercourse with these, for the reasons stated, has increased in a surprising ratio. The enlargement of the Welland Canal (which now takes vessels of 500 tons burden,) will increase in equal degree the advantages now enjoyed by Oswego. The enlargement of the Oswego Canal is going forward with equal pace with that of the Erie. It may be proper to state, that, when the enlargement of the Erie Canal was first decided upon, the plan did not embrace the Oswego Canal. This exception became, we believe, a constitutional provision, which has been corrected, but not till the exception had operated to the serious disadvantage of Oswego.

Oswego is not only much nearer New York harbor than any other Lake port, but it has advantages which none other possesses, in a very large return freight. The canal statistics show the proportion of tonnage of *down* and *up* freight to be as five to one. Canal boats and the Lake craft have, therefore, only one-fifth the *up*, to their *down* tonnage. The ability of supplying to any port a large

amount of *up* freight, attracts to it, as a matter of course, *down* freight. It is a great consideration for a vessel to pay *expenses* by a return cargo. A very large amount of *return* freight is supplied by *salt*, which is now manufactured at and near Syracuse, to the extent of something near 200,000 tons annually. The greater part of this goes to Oswego for shipment to the upper Lake ports.—This salt of itself is the means of bringing to the place of its shipment a much larger tonnage of Western produce. This *up* freight is one of the strong points in favor of Oswego. Could it be increased, the *down* freight would increase in much greater ratio. If, say 150,000 tons of coal could be placed at Oswego for shipment, it would be the means of bringing to it twice that tonnage of Western produce. This produce would have to be sent to New York either over railroad or canal.—As before stated, the success of the Syracuse and Binghamton railroad was predicated upon the formation of the entire line. But up to the present moment it has been found impossible to effect any arrangement for a connection with the Oswego and Syracuse railroad, or even with the Oswego canal. The original scheme remains to be carried out.—When only partially executed, a result predicated upon the whole is not to be expected. It having been found impossible to effect any arrangement with the Oswego and Syracuse railroad, a company, therefore, has been organized for the construction of a *new* one on the Eastern banks of the river. The parties largely interested in the old road from Oswego to Syracuse, are fully convinced that it is the better policy to build the new road, than to attempt to use the old one. The latter neither accommodates the *way* nor the *through* business. At Oswego, it terminates upon land very much elevated above the harbor, with which it cannot be connected without the construction of a considerable piece of *new* road at a very large expense.—Should this be effected, the business of the city would then be only partially accommodated, as the most important manufacturing establishments are on the north side of the river. Parties largely interested in the old road, are those most active in the construction of the new one, which, we understand, is to be commenced at once, and pushed vigorously to its completion. When completed and connected with the Syracuse and Binghamton railroad, we have no doubt the whole line must have a very large business, as the local traffic on each is very good, while for the extent of its *thru* traffic, hardly a route in the country is more favorably situated.

The trade of the West seeks the port nearest tide-water, which is Oswego. A railroad to accommodate this must terminate at that point. We have only to refer to past numbers of the *JOURNAL* for the extent of this trade, and the ratio of its increase. But Lake Ontario itself, particularly on the Canada side, is surrounded with one of the most productive and best cultivated portions of the continent—the great market for which is New York. The recent treaty of reciprocity with the Canadas allows all their produce to come in *duty free*. This trade of itself will double the business and population of Oswego in a very few years. In return there will be an immense traffic in *bonded* goods. Canada now imports most of her foreign merchandise through New York. As a general rule, Lake Ontario can be navigated in

the winter season. With a railroad to Oswego, communication could be constantly maintained between New York and Canada the year round.

At Binghamton the road will have the advantage of two parallel roads to New York—the Erie, and the Delaware, Lackawanna and Western, which will afford ample accommodations for all the produce brought to that point. The road must constitute the northern outlet for the anthracite coal fields of Pennsylvania. The demand for coal for the Lakes, and for the City of Syracuse will soon be equal to a very large traffic. The rates at which coal can be laid down at Syracuse will give most remunerating rates for its transportation. The line from Binghamton to Syracuse holds the key to this traffic. We have little doubt that Oswego, with the above road, will soon supply a much larger amount of freight than Buffalo. Were the Erie R. R. to be built to-day, a connection with Oswego would be considered of equal importance as one with Buffalo. The great object would be to meet the trade of the *West* at the best point for its debarkation *East*—which is at Oswego. With the construction of artificial highways, the routes of commerce are constantly changing. There is no more striking instance of such change than in the rapid growth of Oswego, following its connection with the upper Lakes, through the Welland Canal.

We understand that it is proposed to commence the construction of the new line from Syracuse to Oswego with the opening of the season, with the expectation of having it in use for the winter business.

Richmond and Petersburg Railroad.

This line, though but 22 miles in length, is one of the most important in the State, forming a connecting link between the railroads extending northward to Washington, and the other Northeastern Atlantic cities, and those lines which extend to the South and South-west. It is much to be regretted that a work uniting these railroad systems, so to speak, while benefitting the public to such a degree, should have been so far comparatively unproductive to those who invested their means in its construction, and their time in its management.

The charter of the company, granted in the Legislative session of 1835-6, conferred on them the usual privileges granted to railroad companies by the general law of 1832. The stock to consist of 5,000 shares of \$100 each. Board of Public Works authorized, on behalf of the State, to subscribe for 2,000 shares, with the right of appointing two of the five Directors, who, with the President, were to constitute the Board. At subsequent dates, the company were empowered to borrow money on bond and mortgage, and various methods were devised and executed for the purpose of relieving them from financial embarrassments.

With regard to the route of this road, it is in general favorable—with the exception of river crossings. The two most important of these are, of course, the James river at Richmond, and the Appomattox at Petersburg. We believe the company's cars have not yet crossed the latter; but a substantial bridge structure is owned by them for stage travel. Other streams are Falling and Swift's creeks—the latter having a width of about 250 feet.

Shortly after organizing, in May, 1836, the com-

pany purchased the Turnpike road extending between the same termini, and connecting by a bridge of their own with Petersburg. In the summer of that year, the work of construction was commenced, under the superintendence of MONCURE ROBINSON as Chief Engineer. The estimated cost of the whole work, including buildings and equipment, was \$600,000. The financial crisis of 1837 very nearly prostrated the company, but the State came to their relief, and by anticipating the amounts due from the Board of Public Works, and granting loans, enabled the enterprise to move forward. The road was opened in May, 1838; and the bridge over James river completed in September following.

Like other works of the kind built at that date, the track consisted of a light flat bar rail, laid upon continuous string-pieces. This was subsequently altered, but again restored in 1843, when a new rail was put down $2\frac{1}{2} \times 3\frac{1}{4}$. The present superstructure was commenced in 1853, and finished the year following. The first locomotives put upon the line were brought from England.

The first President of the company was W. H. MACFARLAND, Esq. This gentleman shortly afterwards resigned, having been elected Lieut. Governor of the State. His place was taken by HOLDEN RHODES, Esq., under whose management the work was completed. It would be uninteresting to trace all the executive changes since made.

It has been already stated that the authorized capital was \$500,000. Of this, \$300,000 had been subscribed by individuals; but owing to the pressure of the times, assessments came in slowly.—The road cost, at its completion, over \$638,000.—To meet this deficiency, the managers were obliged to resort to various methods for procuring loans. Railroad first, second, and third mortgage bonds were then "few and far between." A loan of \$100,000, in five per cent. stock at par, had been offered by the State; but this was declined, as the bonds could not be negotiated on the terms specified. In 1837, the President obtained the use of a fund of \$98,000, belonging to the Board of Works, for which six per cent. interest was payable. This sum was afterwards increased to \$150,000, the principal being made payable, \$15,000 every six months from the date of the fourth semi-annual payment of interest. The company having failed to pay the interest, which kept accumulating until it reached \$35,600, the Legislature, in 1843, passed an act, authorizing the conversion of the above loan into stock, on which a dividend of six per cent., or three per cent. on the entire State investment, should be payable. This has been regularly met; though in a few instances by bonds which have, however, since been redeemed.

In December, 1837, an agent was sent to England to negotiate a loan of \$150,000, in sums of £300 each, bearing six per cent. interest, and redeemable in 1858. Of these, 41 bonds, for £12,300, were sold in course of some time. They have since been paid by the proceeds of a new issue.

The Turnpike bridge over the Appomattox river was destroyed by a freshet, in January, 1840; but shortly afterwards rebuilt by the company.

Owing to the generally depressed state of things in 1841-2, and the bad condition of the track, the company's earnings seriously diminished, and their

affairs otherwise were reduced to a very unenviable condition. With a better track, and a return of general prosperity, their earnings have since continued steadily to advance; and though no cash dividends have yet been declared, a conviction is felt that the work is now resting on such a basis, that its owners will shortly receive a reasonable return for the long years during which nothing but Hope sustained them in their efforts at final success.

At the annual meeting in May, 1842, it was resolved to construct a branch line to Port Walthall, distant from the main line nearly three miles. This was accordingly undertaken in the following year, and executed in 1844. Since then, the company have purchased a steam-tug for towing vessels up to this point. The branch has proved probably the most productive part of the company's property, costing, with the steamer "Chesapeake," about \$40,000.

On the completion of the Chesterfield or Clover Hill road, $11\frac{1}{2}$ miles long, in 1844, a contract was made whereby it was to be operated by the R. and P. R. R. Co. We believe that, with some modification in the rates charged, this line is still run by the same parties.

An attempt was made, in May, 1846, to raise \$60,000 by loan, which failed. In 1850, the increased business of the road enabled the managers to reduce their floating debt very materially. In March, 1853, in consequence of the English bonds approaching maturity, a vigorous effort was put forth by the stockholders to raise sufficient funds to furnish the line with a new rail, and pay off the bonds then at maturity. The result was most satisfactory, \$175,000 having been taken at par by the shareholders themselves. The bonds are secured by mortgage, bear six per cent. interest, and full due in 1875.

From the proceeds of the last loan, \$43,142, which had been previously issued in scrip dividends to common stockholders, was paid. This made the total returns to date about 23 per cent.

A new loan, bearing seven per cent interest, was made in 1854. Of this, \$14,500 had been sold, at date of last report.

The entire cost of relaying track, on main line and branch road, putting up buildings, and obtaining the additional equipment requisite, amounted to about \$220,000. The rail weighs 51 lbs. per yard.

The company's general account, at the 1st of October, 1854, stood thus:

Cost of road, &c.—Richmond to Petersburg.....	\$909,286
Cost of road, &c.—Br. to Pt. Walthall.....	45,539
Debts due, and other assets on hand.....	35,257
	\$990,032
Capital stock—	
Subscribed by individuals.....	\$300,000
" State—old stock.....	200,000
" —new ".....	135,600
Bonds due the State.....	\$33,408
Coupon Bonds of 1853.....	175,000
" 1854.....	14,500
Bills and accounts payable.....	78,147
Profit and loss.....	144,415
	\$1,131,070

The following table shows the cost, gross and net earnings, and working expenses of this road from its opening in 1838 to the 1st of October, 1854. The returns of last year have not yet come to hand:

Year.	Cost.	Earnings from			Total.	Expense.	Net
		Passengers.	Freight.	Mails.			Earnings.
1839.....	\$743,410	\$41,713	\$7,383	\$5,663	\$51,959	\$30,604	\$21,455
1840.....	772,915	48,144	18,765	7,243	68,299	36,194	32,095
1841.....	783,082	43,655	21,797	6,628	71,080	43,266	27,814
1842.....	789,305	40,311	20,007	6,812	66,131	43,190	22,941
1843.....	788,012	28,402	19,917	6,489	53,608	38,710	15,168
1844.....	794,091	30,655	21,295	6,311	54,268	35,689	18,514
1845.....	794,440	31,729	21,372	6,101	59,203	41,967	17,246
1846.....	*914,893	36,716	36,600	6,661	79,868	45,282	33,586
1847.....	925,793	38,613	47,437	10,359	96,310	58,319	37,991
1848.....	929,750	37,188	59,393	10,866	108,554	74,130	34,424
1849.....	938,658	36,654	52,273	10,614	99,411	72,810	26,601
1850.....	941,195	460,918	71,473	12,977	145,368	107,686	37,677
1851.....	945,187	51,640	61,640	11,632	116,362	79,110	37,242
1852.....	946,822	52,537	55,877	12,404	119,721	75,971	43,750
1853.....	968,385	57,236	62,084	14,616	130,936	86,663	42,278
1854.....	1,096,812	62,006	67,863	13,785	143,474	74,779	68,695

* Including Pt. Walthall Branch.

+ These returns are for 17 months.

Journal of Railroad Law.

CITY RAILROADS—THEIR LEGALITY.

The Philadelphia and Trenton Railroad Company are authorized by their charter to construct a railroad from their depot in Kensington District, Philadelphia, to their Depot on the corner of Third and Willow streets, along the streets of the city. Certain landowners in the city objecting to this use of the streets, the question arose as to the constitutionality of this act, allowing such a use of the public thoroughfares. In a litigation arising out of this occupation, the Supreme Court of Pennsylvania held the act constitutional. We give so much of their opinion in the case [the case of the Philadelphia and Trenton Railroad Co., 5 Wharton's R., 25,] as relates to this point.

"The remaining exception calls in question the validity of the statute which is the foundation of the proceeding, and which is said to be unconstitutional, because it impairs the obligation of contracts, by violating the chartered rights of the districts of Spring Garden and the Northern Liberties; by violating the contract under which the right of passage is assured to the inhabitants of this particular street; by taking the property of the street without compensation to the districts or individual proprietors; and by monopolizing the street in derogation of the public and private uses to which it had been applied. This, perhaps, is the substance of all these multifarious specifications.

What is the dominion of the public over such a street? In England, a highway is the property of the King as *parens patriæ*, or universal trustee; in Pennsylvania, it is the property of the people, not of a particular district, but of the whole State; who, constituting as they do, the legitimate sovereign, may dispose of it by their representatives, and at their pleasure.

Highways, therefore, being universally the property of the State, are subject to its absolute di-

rection and control. An exclusive right of ferriage across a navigable stream, which is a public highway, is grantable only by it; and the navigation of the stream may be impeded or broken up by it at its pleasure. In the construction of her system of improvements, Pennsylvania has acted on this principle. Her dams across her principal rivers to feed her canals, have injured, if they have not destroyed the descending navigation by the natural channels, and this without a suspicion of want of constitutional powers. The right of passage by land or by water is a franchise which she holds in trust for all her citizens, but over which she holds despotic sway, the remedy for an abuse of it being a change of rulers, and a consequent change of the law. No person, natural or corporate, has an exclusive interest in the trust, unless she has granted it to him. Her right extends even to the soil, and though damages for special injuries to improvements have been allowed by the general road laws, nothing has been given for the use of the ground. This principle was broadly asserted in the *Commonwealth vs. Fisher*, 1 Penn. R., 666. Such being a highway as a subject of legislative authority, in what respect is a street in an incorporated town to be distinguished from it? A municipal corporation is a separate community; and hence a notion that it stands in relation to its streets as the State stands in relation to the highways of its territory. That would make it sovereign within its precincts,—a consequence not to be pretended. The owner of a town plot lays out his streets as he sees fit, or the owner of ground in an incorporated town dedicates it to the public use as a street; but it follows not that the dominion of the State is not instantly attached. The general road law extends to every incorporated town from which it is not excluded by provision of the charter; and the statute-book is full of special acts for opening, widening, altering, or vacating streets and alleys in Philadelphia and other cities. Were it not for the universality of the public sovereignty, the public lines of communication by railroads and canals might be cut off by the authority of every petty borough through which they pass; a doctrine to which Pennsylvania cannot submit, and which it would be dangerous to urge. It would be strange, therefore, were the streets of an incorporated town, not highways, subject perhaps to corporate regulation, for the purposes of grading, curbing and paving; but subject also to the paramount authority of the legislature in the regulation of their use by carriages, rail cars, or other means of locomotion yet to be invented, and this without distinction between the inhabitants and their fellow-citizens elsewhere.—The legal title to the ground remains in him who owned it before the street was laid out; but even that is an immaterial consideration; for an adverse right of soil could not impair the public right of way over it, or prevent the legislature from modifying, abridging, or enlarging its use, whether the title were in the corporation or a stranger. I take it then that the regulation of a street is given to a corporation only for corporate purposes and subject to the paramount authority of the State in respect to its general and more extended uses, and that there would have been no invasion of chartered rights in this instance, even did either of these districts stand in a relation to the public, which would impart to its charter the qualities of compact.

What then is the interest of an individual inhabitant on a subject of compensation under the constitutional injunction that private property be not taken by a corporation for public use without it? Even agreeing that his ground extends to the middle of the street, the public have a right of way over it. Neither the part used for the street nor the part occupied by himself, is taken away from him; and as it was dedicated to the public use without restriction, he is not within the benefit of the constitutional prohibition which extends not to matters of mere annoyances. The injury of which he can complain is not direct but consequential. It consists either in an obstruction of his right of passage, which is personal; or in a depreciation of his property by decreasing the enjoyment of it; but no part of it is taken from him and acquired by the Company. The prohibition, even when it precluded a seizure of private property immediately by the State, was not largely interpreted, nor was there reason that it should be, as ample compensation was obtained from her sense of justice without it. The sufferers were overpaid, and this sort of aggression was always counted as a favor. But though she usually compensated consequential damage, it was of favor not of right. Nor did she always make such compensation. In one well known instance she destroyed a ferry by cutting off access to the shore without provision for the sufferer; and in the *Commonwealth vs. Richter* 1, Penn. R., 467, damages were unavailingly claimed from her for flooding a spring by the erection of a dam. The clause in the amended constitution which narrows the former prohibition to a taking of private property for a public use by a corporation, is to receive the same construction; the word "taking" being interpreted to mean taking the property, altogether, not a consequential injury to it which is no taking at all. For compensation of the latter, the citizen must depend on the forecast and justice of the legislature. See on the point in this case, Vol. xxviii, Am. R. R. JOURNAL, pp. 88, 266, 690.

St. Croix and Lake Superior Railroad.

We have before us a copy of the reports of the surveys made for this line, by the company's Chief Engineer. Several new routes, it is stated, have been examined; but the old one was finally retained, with such modifications as a more thorough examination had shown to be advisable. The line has been definitely located from Superior to the crossing of St. Croix river. For convenience, it is divided into two divisions—the northern and the southern. The former commences at Lake Superior, and proceeds $50\frac{1}{2}$ miles; the latter extends thence to Lake St. Croix, $55\frac{2}{3}$ miles; making the entire located line 136 miles. The northern terminus is at the confluence of the St. Louis, Nemaji, and Allouez rivers, and at their common entrance into Lake Superior. The southern terminus is at Hudson, on Lake St. Croix. A direct line between these points would be 128 miles long.

The following summary shows the estimated cost of the work. Road to have a width of 17 ft. in excavating, and 15 feet on embankments, at sub grade. Narrow gauge. Bridges over large streams to be built on Howe's plan. Rails to be 60 lbs. per yard. Cross-ties, 27 inches apart, to be 6x8 inches, and 8 feet long. Chairs to be of wrought iron. Equipment to consist of 12 loco-

motives, 16 passenger, 4 baggage, and 250 other cars.

Clearing, grubbing, grading, bridging and masonry.....	\$1,002,268
Track laid and ballasted.....	1,167,224
Rolling stock.....	296,400
Machine shop and engine houses.....	30,000
Six mile turn-outs.....	60,000
Turn-tables, frogs, signs and signals...	10,000
Passenger and freight houses.....	20,000
Wood houses and water tanks.....	12,000
Engineering and superintendence.....	50,000
Incidental.....	72,112

Total cost of 136 miles road, at

\$20,000 per mile.....\$2,720,000

The above differs very little from the previous estimate, except in the article of iron, which is now nearly 40 per cent. higher than when the former estimate was made. This will make a total increase of \$380,000, or \$2,820 per mile. On the northern division, the maximum grade has been reduced to 50; and on the southern to 60 ft. per mile.

The city of Superior presents another remarkable instance of the growth of Western towns.—Previous to 1854, the place was an unbroken wilderness. In the summer of that year it was laid out; and already it contains over a thousand inhabitants. Forty-three acres of land, with 2,000 feet of water front, have been donated to the company at this point. The bay contains ten square miles, and has an entrance three-fourths of a mile wide, and twelve feet deep. A very moderate expenditure will enable vessels to reach the shore, and load or unload their cargoes. Hudson, the southern terminus, is situated twenty-two miles above the confluence of the St. Croix and Mississippi, and already contains a population of 2,000.

It will be seen from the above that the route is very direct. The shortest curves have radii of not less than 2,640 feet. Timber, stone, and lime are abundant. Much of the land along the line is excellent for agricultural purposes. Other parts will furnish an immense lumbering business. The minerals, as copper and iron, are too well known, both as to the quantity and quality of the ores, to require description here. So far as healthiness of location, grandeur of scenery, and productiveness of the earth, whether on or below the surface, are concerned, this section of the United States is unsurpassed. It is estimated that the St. Croix pine-ries send annually to market 300,000,000 feet of lumber, worth \$30,000,000. For the past few years, this trade has increased in a ratio of 50 per cent. a year. Already, there are on the Mississippi about 55 steamboats regularly engaged in carrying passengers and freight to and from this section of Wisconsin. The receipts for these last year were \$1,060,000. The opening of the St. Mary's Canal, is also rapidly bringing a large commerce to Lake Superior, which will continually increase with the settling up of the country on its shores.

FINANCIAL STATEMENT.

Stock subscriptions, on which five per cent. has been paid.....	\$145,000
Right of way and depot grounds, granted by individuals and the Government.....	206,000
	\$351,000
Expenditures to date.....	13,642
Balance.....	\$337,358
Gov. W. A. Barstow is President; A. T. Gray	

Treasurer; E. M. Hunter, Secretary; R. Patten, Chief Engineer; and W. H. Newman, Consulting Engineer.



NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1856.

Extension of Trunk Line to Nelson's, Shubenacadie.

TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until SATURDAY, the 10th day of May next, at 12 o'clock, noon, for the Construction and finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, on the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Nails, Chairs, Spikes and Side Keys. The work to be completed by the 30th day of June, 1857.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

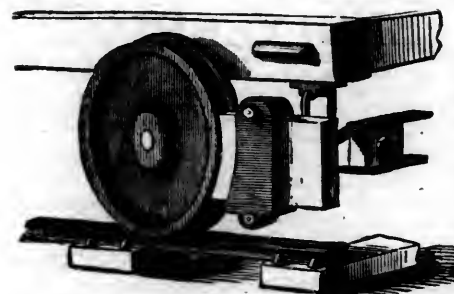
An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock A.M.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

6114

JOSEPH HOWE, Chairman.

PAIGE'S ADJUSTABLE CAR BRAKE BLOCKS!



By this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent.
DINSMORE'S RAILWAY GUIDE Office, 9 Spruce st., N.Y.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8 1/2 a.m. for Dunkirk and Buffalo, and intermediate stations—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

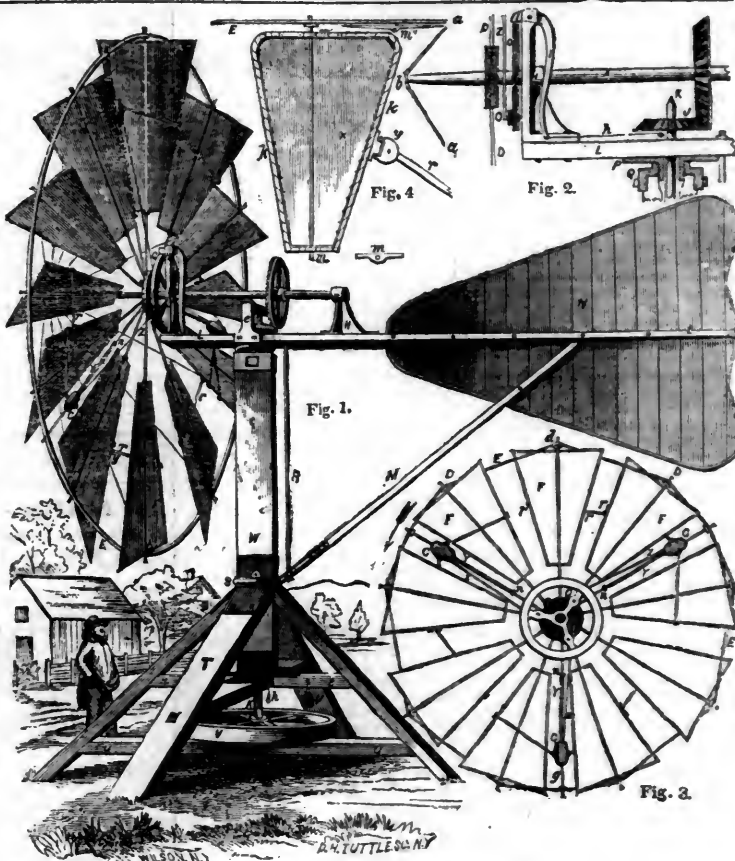
These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

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D. C. McCALLUM, General Sup't.

THIS MILL IS ADMIRABLY ADAPTED TO RAISING WATER AND SAWING WOOD AT RAILROAD STATIONS.—It is entirely self-regulating thus: The tension of the springs Y, keeps the sails F, turned or set to receive the power (wind), and the centrifugal force (of the weights G,) whenever the velocity becomes too great, turns off the power, by turning the sails out of or edgewise to the wind. Unlike steam or horse, it requires no attendance, eats no oats, burns no fuel, sets fire to no buildings, but is always reliable when there is wind. Sufficient tank capacity should be supplied to provide for calms. Sizes of mills vary from 6 feet in diameter of wheel to 50 feet, and prices from \$60 to \$900. A mill giving an average of about 5 1/2 horse power, 16 feet diameter, will cost \$200. All requisite information will be furnished on application to this office, where a model may also be seen. These mills are about being put up on the Boston & Worcester and Mobile & Ohio railroads, where their operation may also be witnessed. Address or call on

N. DAVIDSON, General Agent, No. 9 Spruce st., New York.



FRANK G. JOHNSON'S PATENT SELF-REGULATING WINDMILL,

Brooklyn, N. Y.

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK.

(ONE DOOR SOUTH OF BRAVER STREET.)

RAILROAD AGENTS AND COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best Forges, and one of the best Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorized to sell wrought and cast-iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

Notice to Contractors.



M. C. AND L. R. R. OFFICE,
Clarksville, Tenn.

THE MEMPHIS, CLARKSVILLE, & LOUISVILLE RAILROAD CO. invite sealed proposals for grading sections 1 to 30. Work generally heavy. Bridges—Cumberland 600 feet long; Red River, 400 feet long. Materials—Earth, Rock, Loose Rock, and Hardpan. Means of the Company—Cash; Tennessee State Bonds; City and County Bonds. Time of completion—December 1st, 1857. Time of letting—April 24th, 1856. Plans, profiles, and specifications may be seen at the office.

G. B. FLEECE, Engineer in charge. W. B. MUNFORD, Pres't M. C. & L. R. R.

3114

AN AGENT IS WANTED

to introduce in FRANCE a very valuable patented invention. For any gentleman possessing the requisite qualifications, and who can invest about \$5,000 in the business, this is an opening well worthy of attention, as a large sum may be realized in a few months. A person of experience in such business would be preferred; and a knowledge of Engineering and of Iron Manufacturing would also be a recommendation.

1114 Address—L. C. H., Post Office, New York.

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by THEODORE DEHON, 10 Wall st., near Broadway, N. Y. March 13th, 1856. 411

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD. No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

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A. WILKINS.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	5 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati	\$13 50
do do Louisville	14 00
From Philadelphia to Cincinnati	21 00
do do Louisville	12 00
From New York to Indianapolis	16 00

An extra charge will be made for meals and state rooms on board the boat. GEORGE A. PARKER, Sup't.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against THE
MAYSVILLE & LEXINGTON RAILROAD COMPANY
and others, defendants.—By virtue of the Judgment of the
Fayette Circuit Court, rendered in the above case, I will sell,
at public auction, on Wednesday, the 23rd day of April, 1856,
at the Public Square, in the City of Lexington, State of Ken-
tucky—

THE MAYSVILLE & LEXINGTON RAILROAD;
both that part of the road which is completed and the part
unfinished; embracing the road bed, and superstructure where
the same is laid down, the right of way, and all lots of land in
and adjacent to the road track, with all the buildings, stations,
car houses, and improvements belonging to said railroad,
together with the franchises of the Maysville and Lexington
Railroad Company; all of which will be sold together, upon
credit of six, twelve, eighteen, and twenty-four months, in
equal instalments.

At the same time and place, I will also sell all the Lots of
Land belonging to said Company, and not adjacent to the rail-
road track—consisting of a lot of land in the City of Lexing-
ton, a tract of land in Fleming County, and town lots in Paris
and Middlesburg, on credit of six and twelve months, in equal
instalments.

And at the same time and place, I will sell all the Locomo-
tives, Freight and Passenger Cars, Cross-Ties, &c.—consisting
in part of two locomotives and tenders of twenty-four tons
each, three passenger cars for sixty passengers each, one en-
tirely new and all in good order; seven box freight cars, eleven
platform cars, eleven tops for platform cars, five gravel cars,
and a top for another; fifteen pairs of car wheels, a hand car,
a lot of bridge and car iron; 9,500 cross-ties near Maysville,
1,330 of which are of locust and the remainder of oak; about
9,000 cross-ties along the line of the railroad between Lexing-
ton and Middlesburg. The new passenger car, two freight cars,
and the tops for platform cars, are in Maysville, all the other
rolling stock is in Lexington, and the whole is of 4 feet 8½
inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the
purchase money, having the force of Judgments, with good
security, to be approved by me, of one of the following kinds,
to wit:—1. Personal security. 2. First Mortgage Bonds of
the Maysville and Lexington Railroad Company. 3. Mortgages in
real estate in counties near this railroad or the Covington
Railroad. 4. State and United States Bonds. 5. A First
Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of pur-
chasing, by the undersigned, who will be found in Lexington,
Ky., or by A. M. JANUARY, at Maysville. Letters of enquiry,
addressed to me, will be attended to.

E. BEN MILTON,
Receiver and Commissioner.
LEXINGTON, Kentucky

2m8

Notice to Contractors.



OFFICE OF THE DEMOINE NAVIGATION AND R. R. CO.,
Ottumwa, March 4th, 1856.

SEALED PROPOSALS will be received at this office until the
12 o'clock M., of Monday the 28th day of April next, for the
construction of twenty Locks and Dams for the improvement
of the Des Moines river between the town of A. Pine
(12 miles below Ottumwa) and Port Des Moines, a distance of
about 1.6 miles, and also the Lock and Dam at St. Francisville,
12 miles from the Mississippi river.

The chamber of the Locks is to be 200 feet long between
the quoins, a 44 feet wide. They will generally be built on
rock foundation. The face of the masonry will be of hammer-
ed stone, leveled up to regular course, and laid in hydraulic
cement. The backing and interior stone will be quarried in
rectangular blocks, with beds parallel to each other, and
joined at right angles thereto, and will be laid in quick lime
mortar, except at the head of the Lock, where it will be laid
in cement.

The coping will be of cut stone doweled and slamped.
The gates will be in a separate contract.
The Dams will generally be about 600 feet long and 13 feet
high, (resting on rock) made of timber and stone, with Bulk-
heads (with stone abutments) on each side of the river for the
hydraulic canal.

The plans and specifications for the work will be ready for
examination on the 15th of April, at which time copies of the
specifications and blank forms for proposals, and information in
regard to the locations of the Locks and Dams, will be fur-
nished to the contractors at the several Engineers' Offices on
the line, and at the Company's Office, No. 13 WILLIAM STREET,
New York.

The contracts will contain a clause requiring the personal at-
tention of one of the partners of each contracting firm, at each
Lock and Dam; that no transfer of contract shall be made,
and that no subcontract except for the delivering of materials,
will be allowed.

Monthly payments will be made in cash as the work pro-
gresses, reserving 15 per cent. in lieu of other security; and
the whole work will be required to be completed by the 1st of
January, 1858.

Contractors who are not known to the Directors, or to the
Engineers, will be required to furnish satisfactory testimonials
of their skill, experience, and responsibility.

The Company reserves the right to award the contracts on
such proposals as may be deemed best for the interest of the
State and of the Company.

Wm. C. JOHNSON, President.
EDWARD H. TRACY, Chief Eng'r.
Wm. J. McALPINE, Consulting Eng'r.

3d12

Lord & Wright,
Counsellors at Law, Cincinnati, Ohio.

Notice to Contractors.



OFFICE OF RACINE AND MISSISSIPPI R. CO.,
Racine, Wis., March 15th, 1856.

PROPOSALS will be received at this office until the 10th
day of April next, at 12 o'clock M., for the grading, Ma-
sonry and Bridging of the second division of the Racine and
Mississippi Railroad, being from Beloit to Savanna on the
Mississippi river, a distance of about sixty-eight miles. The
whole work to be completed during the present year and in
time for laying the track previous to January 15th, 1857. This
work lies wholly through the northern counties of Illinois west
of Rock river. The country is densely populated and unsur-
passed in point of health and abundance of supplies.

Proposals will also be received at same time for the con-
struction of the Bridge across Rock River at Rockton.

Plans, profiles, and specifications, together with all necessary
information can be obtained on application at this office on and
after the 25th instant.

HENRY S. DURAND, President.

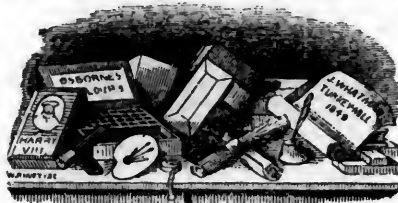
For general information parties can refer to the Company's
Agents in New York, Messrs. CLARK & JESUP, No. 70
Beaver st.

3d12

STATIONERY.

Hufty's

Engineers, Architects and Draftsmen's
STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER,
Tracing paper, Plan and Profile, Protractors, Drawing
Pins, Faber's Jackson's and other makers' Pencils; Field,
Level, and Memorandum Books of various patterns; Mathe-
matical Instruments, Tape-lines, Mouth Glue, Cross Section
paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red
Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent
Binders for letters, Portfolios, etc., together with a general
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Railroad Management.

N. Y. & ERIE R. R.—SUPERINTENDENT'S REPORT.

The present statement has a value to the Engineer, Railroad Manager and the Statist, quite distinct from its relations to the Erie Railroad. Railroad management is a science, and if there be no elaborate text-books on its general principles, here is a manual of its practice. We are not men worshipping, but we have a profound regard for devotion to duty, when mingled with an amount of talent approaching common sense. We have, in this Report, what every company should possess, but what very few really have. We have a complete field-book of the Erie road. All the location as to curves and grades—all the station houses, bridges, culverts. This work, so long neglected, is now presented. There is no reason why it should not have been given to the public years ago. The Hudson River Railroad Company in its blessed confusion has neglected to give its stockholders such information as this. So, too, the N. Y. Central.

In the midst of arduous duties this Report has been prepared, and the Superintendent of the

road has done what the constructing Engineers seem never to have thought of doing. The Report presents the most accurate detail possible of the cost of operating the road, of the organizations by which it is operated, and of the system by which that organization is governed.

We wish to call the particular attention of some of our whining neighbors to a few extracts. Says Mr. McCallum—

"In my opinion, a system of operations to be efficient and successful, should be such as to give to the principal and responsible head of the running department a complete daily history of details in all their minutiae. Without such supervision, the procurement of a satisfactory annual statement must be regarded as extremely problematical. The fact that dividends are earned without such control, does not disprove the position, as in many cases the extraordinarily remunerative nature of an enterprise may ensure satisfactory returns under the most loose and inefficient management."

While "it will scarcely be expected that we can at once adopt any plan of operations which will not require amendment and a reasonable time to prove its worth, a few general principles may be regarded as settled and necessary in its formation, amongst which are:

1. A proper division of responsibilities.
2. Sufficient power conferred to enable the same to be fully carried out, that such responsibilities may be real in their character.
3. The means of knowing whether such responsibilities are faithfully executed.
4. Great promptness in the report of all derelictions of duty, that evils may at once be corrected.
5. Such information to be obtained through a system of daily reports and checks that will not embarrass principal officers, nor lessen their influence with their subordinates.
6. The adoption of a system, as a whole, which will not only enable the General Superintendent to detect errors immediately, but will also point out the delinquent.

It is very important, that principal officers should be in possession of all the information necessary to enable them to judge correctly as to the industry and efficiency of subordinates of every grade.

To acquaint themselves in this particular, and remedy imperfections without weakening the influence of subordinate officers, should be the aim of officers of the higher grades."

Capt. Swift lays it down as granted that the cost of running a train increases as the square of the speed. Few persons can be found to substantiate this no-

tion with experience. The Erie road does not.—The Superintendent says:

"It has been stated authoritatively, that the cost of running a train is increased nearly as the square of the speed; for the correctness of which, experience will not permit me to vouch."

Concerning the importance of the telegraph:—

"The use of the telegraph is a most important auxiliary in the working of the road, enabling us to advance the progress of the trains, when retarded from any cause, to such an extent as to have lost their rights; as by the rules in force upon this road, trains moving in one direction possess positive rights to run without regard to time, or without reference to any opposing train; and an opposing train, upon reaching a point where by the "time-table" it should be met and passed by a train having a right to the road, is not permitted to leave until the arrival of such train; but, by the use of the telegraph, conductors in such cases may be immediately communicated with, and directed to move forward without the slightest danger of collision; without it, under such circumstances, they would be obliged to remain stationary, or proceed slowly at the most imminent risk.

With a proper use of the telegraph, a single track railroad may be rendered more efficient in preventing collisions than a double track railroad without its aid: as the double track can only obviate those which occur between the trains moving in opposite directions, whilst the telegraph may be used effectually in preventing them, either from trains moving in an opposite, or the same direction; and it is a well established fact deduced from the history of railroads, both in Europe and in this country, that collisions between trains moving in the same direction have proved by far the most fatal and disastrous, and should be most carefully guarded against. I have no hesitation in asserting, that a single track railroad, having judiciously located turn-outs equal, in the aggregate, to one-quarter of its entire length, and a well conducted telegraph, will prove to be a more safe, efficient, and profitable investment than a much larger sum expended in the construction of a continuous double track, operated without a telegraph."

As to general managing, Mr. McCallum says:

"It seems to have been generally conceded that the railroad companies have not the same means of controlling the various items of earnings and expenditures, as are within the reach of persons managing the same business but acting in an individual capacity; and whilst it is a humiliating circumstance that railroad companies have not, in many particulars, conducted their business with the same economy as would have been done

by private enterprise, it by no means proves that they have not the power to do so.

All that is required to render the efforts of railroad companies in every respect equal to that of individuals, is a rigid system of personal accountability through every grade of service."

We close these extracts for the present, with the following on the

REGULATION OF TARIFF.

The foregoing analysis, by showing the actual cost of the movement of freight, furnishes a useful lesson in the adaptation of the tariff of rates to the business of the road.

The regulation of rates is a subject of deep importance, both to railroad companies and the public, and in arranging a tariff, great care is needed in harmonizing the interests of both; this can be done only by fixing prices, which, whilst they are remunerative to railroad companies, are calculated to create and foster business along their lines.

The discovery that the general rates charged have proved unremunerative, is too frequently followed by a resolution for an indiscriminate increase. It may be, that on many articles the prices charged were barely remunerative to the company, but all that could be afforded by the customer; the effect in such a case would be to destroy this business, and thus, whilst obtaining higher rates for transportation, the net revenue derived would be lessened by the reduction of business.

To guard against such a result, and to establish the mean between such as are unremunerative and such as are prohibitory, requires an accurate knowledge of the cost of transport of the various products, both for long and short distances. The direction of preponderance of business must likewise be considered, and rates fixed with reference to securing, as far as possible, such a balance of business in both directions as to reduce the carried "dead weight."

It may be found advisable to increase the rates on some of the articles transported over this road; others on which but a small profit is realized and will not admit of an increase, may perhaps be more profitably transported by the exercise of greater economy; and for the purpose of encouraging a larger business, it may be deemed expedient to reduce the prices of other commodities.

The rates established for the transportation of freight and passengers, when the road was first opened, were much lower than those charged on other roads, and as a natural consequence, those that were in competition with it, were compelled to reduce their prices. Various modifications have taken place since that time, but the increase of prices has not kept pace with the increased cost of labor and materials.

An opinion for some time prevailed that reduced rates produce increased revenue, but the experience of those who have been actuated by this principle has demonstrated its fallacy. The general opinion now entertained amongst railroad managers is, that the rates charged are unremunerative. Influenced by this view, it would not be surprising to see some of them rush into the other extreme, and by the indiscriminate increase of rates, drive a large portion of legitimate business from their roads.

I have no doubt that our tariff should be carefully revised; but in arranging new prices, with the view of increasing revenue, I would respectfully submit, that to effect this end, we should rely quite as much on the reduction of our expenses, by strict economy in all our operations, as by an increase of rates."

We beg our Boston friends to give the following tables some attention. When they can make as accurate returns they will be entitled to call for more money.

NOTE.—Of the subjoined tables the first shows in abstract the number and direction of passengers carried upon the New York and Erie railroad during the year ending September 30th, 1835;—the second gives a comparison of work done upon

that road, for years ending September 30th, 1854-5.

SPECIFICATIONS.	Miles run by Passenger Trains.	Number of Passengers carried.	Miles traveled by Passengers.	Average number of Passengers per mile run.	Average distance traveled by Passengers, miles.	Miles run by Freight Trains.	Number of Tons carried.	Average number of Tons per mile run.	Average distance whole number of Tons carried.
1854.	1,496,600	1,125,123.5	96,663,709	64.6	1,466,823	180,808,034	176	177	176
1855.	1,484,839	1,083,891.5	84,069,398	57.4	1,676,500	150,673,997	90	1	177
Incise p.ct.	8	8	13	11	5%				
Decrease p.ct.									

Comparison of Expenses of years ending September 30th, 1854-5, and of the Cost per Passenger per Mile, and Cost of Freight per Ton per Mile carried.

DISTRIBUTION OF ACCOUNT.	Per Passenger per mile.		Per Ton per mile.	
	1854.	1855.	1854.	1855.
Office and Station Expenses.				
Office Expenses and Stationery .....	.018	.025	.022	.021
Agents and Clerks .....	.044	.062	.056	.051
Labor, loading and unloading .....			.097	.097
Cost of Running.				
Porters, Watchmen, & Switchmen .....	.019	.026	.024	.023
Wood and Water Station Attendance .....	.002	.004	.002	.003
Fuel, First Cost and Labor .....	.143	.157	.208	.205
Pass. Conductors, Baggage and Brakemen .....	.079	.097		
Freight Conductors & Brakemen .....			.100	.092
Passenger Enginemen and Firemen .....	.096	.107		
Freight Enginemen & Firemen .....			.099	.080
Oil and Waste for Pass. Eng. and Tend. ....	.023	.021		
Do. for Freight Eng. and Tend. ....			.024	.018
Do. for Pass. and Bag. Cars .....	.015	.020		
Do. for Freight Cars .....			.016	.022
General Expenses.				
Loss and Damage of Goods and Baggage .....	.002	.002	.024	.014

DESCRIPTION.	Number.	Traveled.	Miles.	Number.	Traveled.	Miles.	Number.	Traveled.	Miles.
1st Class Passengers	470,435	29,177,777	610,016	35,774,017	990,451	64,951,794	64,951,794	1,835,068	5,458,1%
2nd "	4,358	1,499,388	47,482	17,282,586	47,482	17,282,586	47,482	17,282,586	17,282,586
Emigrants									
Total	474,793	30,627,165	658,508%	53,442,233	1,038,931%	84,209,398			
EASTWARD.									
WESTWARD.									
BOTH DIRECTIONS.									
Damages for Injuries to Persons .....	.017	.003							
Damages to Property									
General Superintendence .....	.022	.028	.028	.023					
Contingencies .....	.035	.057	.044	.048					
Repairs of Engines and Cars.									
Engines and Tenders, Passenger .....	.137	.109							
Engines and Tenders, Freight .....			.140	.081					
Passenger & Baggage Cars .....	.082	.079							
Freight Cars .....			.094	.045					
Tools and Machinery in Shops .....	.010	.008	.010	.006					
Incidental Expenses about Shops .....	.009	.010	.010	.009					
Repairs of Track and Roadway.									
Roadbed .....	.020	.022	.024	.018					
Track .....	.168	.207	.212	.161					
Fences, Gates, &c. ....	.002	.004	.003	.003					
Repairs of Structures.									
Truss Bridges .....	.008	.009	.010	.009					
Wood and Water Stations .....	.006	.009	.007	.008					
Engine & Car Houses, M. and W. Shops ..	.001	.002	.002	.002					
Rents (dwellings)									
Telegraph									
Incidental.									
Superintendence and Office Expenses .....	.001		.002						
Taxes .....	.025	.021	.030	.022					
Contingencies .....	.003	.006	.005	.005					
Miscellaneous.									
Ferry .....			.097	.075					
Expenses of Operating Telegraph .....	.012	.014	.016	.013					
Total .....	.999	1.118	1.406	1.155					

Pacific Railroad.

SIXTH ANNUAL REPORT.

This was read to the stockholders at their annual meeting, on the 21st ult. Much of it is taken up with reference to the fearful catastrophe on the Gasconade. This sad event, and the destruction of the Morean bridge shortly afterwards by a freshet, retarded the final opening of the road to Jefferson City, until the first of March in the present year. The work has also necessarily been much more costly than was estimated. Early in August last, it became evident that sufficient resources could not be raised on the credit of the company; and the Directors were obliged to become individually liable for sums amounting in all to about \$350,000. Since then the State has come nobly forward with aid to the extent of \$3,000,000 for the main line, and a guarantee of \$3,000,000 for the South West Branch. At the same time the Company have been authorized to issue \$7,000,000 of first mortgage bonds, based on the one million acres of land granted for that purpose. In consequence of this aid, the work has been steadily proceeded with, and trains are now running to Jefferson City. The ballasting will be done forthwith. The material for this is convenient, and it can be laid down at comparatively little expense. This will render the line one of the best and safest in the Union. The report proceeds—

Now, however, a new question presents itself to your Board, and it is this: That from causes beyond our control, the 6 per cent. bonds of our State are selling at about 85 cents on the dollar! At this great sacrifice, are we justified in going on with our public works? Is there not danger, that, in the language of Poor Richard, we shall

be "paying too dear for the whistle?" We must make the necessary sacrifices to meet our existing liabilities, created under past contracts, which were beyond our control; but would it not be the part of wisdom, to pause, before adding to these liabilities on contracts never under our control? Would it not be well to husband our resources until such time as the securities we have to offer are better appreciated abroad, or the enactment of such laws by our legislature as will make them sought after by our own citizens? These considerations deserve the most careful and serious consideration of those to whom you are about to entrust the interests of this Company, and should they, after such consideration, conclude to suspend or partially suspend active operations in the construction of your road, for the time being, we trust that all will see the necessity and wisdom of the course, and readily acquiesce in what cannot be avoided, unless at too great a sacrifice.

Some further outlay will be absolutely necessary to finish and properly equip the road to Jefferson City, so as to make it complete and efficient for the business that may be offered to it. It will require an outlay of about \$67,000 to finish the balance and fence the road. You also need eight additional locomotives and six more first-class passenger cars; also, some seventy-five hand, cattle and platform cars. The cost of this rolling stock will be about \$200,000. This will fully equip the road to Jefferson City. Its prospects for business are flattering; its receipts show a steady and constant increase. For the present month, the first of its opening to Jefferson City, they will not fall much, if any, short of thirty thousand dollars. A contract has lately been entered into, by which we expect to make a daily connection with a line of packet boats from Jefferson City to Kansas, or, perhaps, to a point still higher up the river. This we confidentially anticipate will nearly double its present receipts. This contract is to go into operation on the 1st of May next. The vast increase of business and travel up the valley of the Missouri since the commencement of this enterprise, must satisfy the most skeptical mind that if the road was completed to the State line, even at a cost of twelve millions of dollars, that it would be a paying investment, in itself considered, while its incidental advantages to the citizens of our State, none could with certainty compute. When the next twenty-five miles are completed, the great physical obstacles to its progress will be overcome. It then traverses, for the most part, an open prairie country, which is in a high state of cultivation, and where the cost of constructing the road will certainly not be one-half as much as the first and second divisions.

The total amount expended by the Company at the date of the last annual report, in the construction and equipment of the road was \$4,970,266 88. The amount since expended is \$2,223,897 86. Total, \$7,194,164 69, of which about \$200,000 has been expended west of Jefferson City, and \$78,216 19 in the construction of the South-West Branch.

GENERAL ACCOUNT.

Interest, discount and commission.....	\$633,943
Contractor's account.....	2,280,321
Graduation and masonry.....	1,348,697
Superstructure.....	1,085,790
Engineering, &c.....	220,583
Land and damages.....	214,964
Office expenses and stationary.....	39,877
Ballasting.....	70,772
Bridges.....	51,797
Shops, stations, and other buildings.....	142,176
Locomotives.....	109,595
Cars.....	159,478
Engineer of construction.....	351,805
Miscellaneous.....	407,000
	\$7,115,949
Construction—South-West Branch.....	78,215
Repairs and running.....	145,183
Miscellaneous—balances due on stock, bills receivable, &c.....	1,316,408
	\$8,655,750

Capital stock subscription.....	\$2,658,000
Capital stock paid up in full.....	1,075,900
Capital stock subscription, S. W. Branch.....	350,000
Pacific Railroad depot bonds.....	90,000
Pacific Railroad anticipation bonds.....	5,000
State of Missouri.....	3,000,000
Bills payable.....	1,227,528
Premium on bonds.....	57,914
Transportation of passengers.....	24,471
Transportation of freight.....	26,043
Income from rents.....	461
Forfeited stock account.....	1,312
Interest scrip.....	8,721
Land grant sales.....	1,713
Land grant rents.....	15
Accounts audited.....	67,121
George R. Smith, agent.....	14,996
Samuel Copp, Jr., Treasurer.....	43,252
	\$8,655,750

Credits.....

By this exhibit it will be seen that the entire indebtedness of the Company at that date (with the exception of the bonded debt) was \$1,337,828.16, as follows: Bills payable \$1,227,528.41; accounts audited \$67,121.68, and fraction for over draft on bankers \$75,000, (less short county bonds and cash items in his hands \$31,748.07) \$43,178.07.—To meet which the Company have bonds of the State of Missouri \$1,700,000; bills receivable \$74,064.89. And short county bonds and the proceeds of same in the hands of Messrs. Schuchendt & Gebhard, New York, \$97,705.92, and bonds of the town of Hermann \$1,400. Total \$1,873,170.31. This is exclusive of all subscriptions, and any additional bonds to be issued by the State, whenever the Company shall be entitled to them. But it is not to be disguised, that the Company will have to raise a large amount of money from other sources than the sale of State bonds, to enable it to avail itself of the balance of these bonds, \$1,300,000, for the construction of the Kansas line. Additional subscriptions to the capital stock must be relied on for this purpose. Without these additional subscriptions, and the prompt payment of those heretofore made, the progress of construction cannot but be slow.

The balance due on stock subscriptions are as follows: On the Kansas line, \$778,596.98 of which \$300,000 are conditional. The unconditional subscriptions to the South-West Branch are \$344,581.67.

SOUTH-WEST BRANCH.

After the passage of the law of December 10th, the previous contract with Messrs. A. S. Diven & Co., was cancelled, and a new one entered into with Messrs. Diven, Stencliff & Co., for the construction of that important enterprise. But the uncertainty attending the fate of the law has in a great measure prevented much expenditure on that work. An organization has, however, been kept up on it, and some \$60,000 has been expended on it, which does not appear in the present accounts, the return of the estimates not having been made to this office until after the first of March. The subscription to the capital stock for the construction of this work are mostly in county subscriptions made in accordance with, and under the provisions of the general railroad law. They were made payable in four annual instalments.—The first was due at the commencement of this year. An agent, Mr. Lacy, was especially employed to collect these subscriptions, and although he visited every county, we regret to have to inform you that only \$8,233 from the county of Lawrence was collected by him. Nothing has been received from any other county on these subscriptions. Some negotiations are now pending for the more energetic prosecution of this great work. The great depression in State bonds, may, for the present, retard its progress. Should an advance, from any cause, take place, in these securities, this work must move on more rapidly than any other in the State, as it has a more substantial basis than any other of our roads. With \$3,000,000 of 7 per cent. bonds, guaranteed by the State, with the privilege of issuing \$7,000,000 of first mortgage bonds, the whole secured by a grant of

1,000,000 acres of valuable agricultural and mineral lands, lying along the line of the road, and of the road itself, must, in time, commend itself to the attention of capitalists, and secure its construction.

Petersburg and Roanoke Railroad.

This road was the first in point of time, and has been financially the most successful work of the kind, in Virginia. In both respects it has been exceeded by very few lines in the Union.

The Petersburg railroad was projected in 1830, at a time when the railroad and locomotive were "new things under the sun." In the winter of that year the charter was obtained, authorizing the company to build their road from Petersburg to the North Carolina State line. Towards its construction the State subscribed \$160,000. City of Petersburg authorized to take stock. Directory to consist of five shareholders, two of whom were to represent the State. Authorized capital, \$400,000, which might be increased to \$650,000, in shares of \$100 each. Right granted to borrow money, if necessary. After the net earnings should have returned, in dividends, the amount of capital paid in, the regulation of tolls for passengers and freight was left to the Board of Public Works. Several additional measures were subsequently passed for extending aid and otherwise promoting the company's interests. These we shall have occasion to observe in noticing the history of the undertaking.

From Petersburg, its Northern terminus, the road pursues a very direct southerly course, crossing the Nottoway and Meherrin rivers, to Weldon in North Carolina, a distance of 63 miles. At the latter place it crosses the Roanoke by a substantial bridge. For several years, however, their southern terminus was at Blakely, about three miles north of Weldon; their passengers and freight being carried between these places by the Portsmouth and Roanoke road. The long and intense rivalry between the two corporations, however, induced the Petersburg Company to build a bridge and an additional line of their own, which was completed in 1842. At Hicksford, on the Meherrin, the road forms a connection with the Greenville and Roanoke line, the latter connecting with the Raleigh and Gaston, the North Carolina Central and other roads. The main line is extended southward by the Wilmington and Weldon and the Wilmington and Manchester, to South Carolina.

There are no very short curves on the line. The steepest grade, except at the city of Petersburg, where it rises from the Appomattox river, is 33 ft. per mile.

The company were duly organized in the early part of 1830, CHAS. F. OSBORNE being the first President, and MONCURE ROBINSON, Chief Eng'r.

The estimated cost of construction for 59 miles, exclusive of equipment, was \$400,000; and the line was put in operation for about this sum. The superstructure consisted of the usual light flat-bar rail, resting on a hard pine 5x6 continuous sill. The first engines in use were brought from England, and weighed from four to six tons, carrying about as many times their own weight, and running with passenger trains from 12 to 18 miles an hour.

The first 30 miles from Petersburg were opened in October, 1852; and the line completed through

to Blakely on the Roanoke, in August, 1833. The Board declared for that year a dividend of three per cent., and two of five per cent. each for the three years following.

The experience of this company, in regard to the superstructure and machinery at first in use, has been that of so many other lines, both in the Southern and Northern States, that it is almost unnecessary to repeat it. The engines were found more costly and less serviceable than those of a newer description. The track needed heavy outlays, after the first year or two, to keep it in repair. Large dividends had been paid too soon. Additional means were needed, and the usual resort was to petition the State for a loan. Among the other obstacles with which the Co. had to struggle, was competition with the Portsmouth road, which was opened in 1835, and the financial revulsion, in 1837-8. Their depot and other buildings at Petersburg also were consumed by fire, in November, 1836, causing a loss of over \$20,000. In consequence of these, some of their early dividends had to be paid in scrip; and in 1842 and '43, they ceased declaring any dividends whatever.

On the other hand, the Greenville and Roanoke road, 18 miles long, was completed in 1836, and brought a very large addition to the Petersburg Company's business. This line was agreed to be operated by latter, for a certain stipulated amount, which was afterwards changed to two-fifths the gross earnings. Under the latter regulation, it continued to the latter part of 1855. In 1843, in consequence of the failure of the Portsmouth Company, a large additional business was thrown on the line, and the payment of dividends was accordingly resumed in the following year. Since that date they have declared dividends regularly.

In March, 1836, the stockholders authorized a loan of \$60,000, for finishing and properly equipping the road. The same year two steamers were purchased for running on the Roanoke, in connection with their trains.

The above loan not having been taken, in 1838, another of \$100,000 was authorized. Of this \$34,000 were disposed of. This issue has since been redeemed. A loan of \$150,000, in five per cent. stock, was also received the same year from the State. The rate of interest was subsequently advanced to six per cent. In 1844, this was, by an act of the Legislature, converted into stock, together with \$13,500 interest then due. This made the total State stock \$323,500. In 1848, this was transferred to the city of Petersburg, as a State subscription to the South Side Railroad.

The company commenced to relay the track, in 1841, with a heavier rail. About fifteen miles were laid with the edge pattern, and the remainder with heavy flat-bar. The advantages of this change, enabling them to run at a higher speed, with greater safety, and at much less expense, were immediately felt in the increased net receipts and dividends paid, from the period of its completion in 1843. This flat-bar continued in use till 1849, when a purchase was made of sufficient edge rail to finish the road, which was completed at Weldon, in 1851.

Difficulties with the Portsmouth and Roanoke Company already alluded to, led the Petersburg Company, in 1842, to commence building a bridge

of their own across the Roanoke at Weldon. This was accordingly undertaken and finished the year following, together with two and a half miles of road extending from the bridge to Weldon. Cost of the bridge, about \$53,000.

The whole of these improvements brought the cost of the road, in 1844, up to \$948,574. The capital paid in then was \$769,000. The balance consisted of bonds and notes due at various dates, with \$81,866 net earnings used in construction.

In the same year, a reduction of about 30 per cent. was made on the rates of transportation. This change, though diminishing the revenue at first, is believed to have been judicious, and to have proved advantageous to the company's interests.

The rate of dividend in 1844, when the managers re-commenced paying, was three per cent.; in 1845, five; in 1846, six; and in 1847, seven per cent. In addition to these, appropriations were regularly made to reducing the debt. On the completion of the new track, this amounted to about \$195,500.

The re-opening of the Seaboard and Roanoke (formerly the Portsmouth and Roanoke) railroad, has in some degree affected the company's earnings and expenses, for the last three or four years.

No dividend was paid for the year 1854-5; considerable sums of money having been expended for equipment and reduction of debt.

According to the company's recent report, their gross receipts for the year ending 31st January last, were \$263,874, of which \$133,678 arose from freight, and \$110,495 from travel. The running expenses were \$140,213, or, including extraordinary charges—for interest and machinery,—\$167,576. The gross receipts show a gain of \$60,168 over those of 1854-5, the excess in part arising from the sickness at Norfolk and Portsmouth during the summer. The company's entire indebtedness was \$158,502, or, including wages, &c., \$171,271. During the past year, the indebtedness was reduced \$42,907, in addition to \$19,775 paid for locomotives, passenger and baggage cars, and about \$27,000 for other improvements.

In pursuance of a resolution passed by the stockholders in October last, application was made to the Legislature for authority to issue mortgage bonds, bearing seven per cent. interest. An act was accordingly passed to that effect, with a proviso, however, that none of these should be sold under par. None of these bonds have yet been offered for sale.

For some time negotiations had been going on between the Petersburg and the Greenville and Roanoke railroad companies, with reference to a consolidation of the two interests. After various propositions to this effect had passed between the parties, arrangements were finally concluded in October last, in accordance with authority previously obtained from the Legislatures of both Virginia and North Carolina. The basis of the consolidation was, that seven shares of the Greenville should be reckoned equal to four of the Petersburg, and that the latter should issue such additional stock as would be sufficient for that purpose. The consolidation was carried into effect in November.

The road, for the most part, is now in good order, and is well equipped. Some additional build-

ings are required. It is designed to re-lay the 18 miles composing the Greenville Branch, as early as convenient. Part of the main line laid with a light edge rail, about 15 years since, will also require relaying. Should the issue of bonds be disposed of, the Board feel confident these improvements can be put down in a year or two, and the usual dividends be paid from earnings. The completion of the North Carolina Central to Charlotte will doubtless increase the company's business very considerably.

The rolling stock consists of 15 locomotives, 12 passenger, 5 baggage, 95 freight, and 15 other cars.

GENERAL ACCOUNT.

Road, equipment, &c.....	\$777,384
Re-laying railroad.....	221,997
New engine-houses and omnibuses.....	9,734
Bills and acc'ts receivable, &c.....	31,773
	\$1,040,888
Capital stock.....	\$769,000
Bonded debt.....	40,597
Bills payable.....	55,574
Scrip dividend, due 1864.....	26,915
State of Virginia.....	15,270
Dividends unpaid.....	3,391
Acc'ts payable.....	16,755
Profit and loss.....	113,386
	\$1,040,888

It should be stated that the above does not include the extra stock issue made at consolidation. To the cost of road and equipment there should also be added about \$160,000 of net earnings applied to construction, previous to re-laying the road.

The following statement shows the cost, gross earnings, expenses, net profits and dividends paid from 1835 to the present time.

Year.	Cost.	Gross Earnings.	Expenses.	Net Profit.	Dividends.
1835.....	\$614,745	\$104,260	\$53,668	\$50,592	10
1836.....	616,030	108,842	45,331	63,511	10
1837.....	690,000	103,938	80,736	23,202	None.
1838.....	690,840	121,440	92,744	28,696	7½
1839.....	769,858	148,885	101,524	37,861	6½
1840.....	795,861	174,905	116,459	58,447	3
1841.....	807,515	174,185	96,398	77,787	7
1842.....	881,544	185,343	86,889	48,454	None.
1843.....	948,574	117,729	62,203	55,526	None.
1844.....	948,574	122,870	58,718	64,152	3
1845.....	948,574	147,620	78,630	68,990	6
1846.....	948,574	163,092	87,131	75,961	7
1847.....	948,574	182,686	76,297	106,389	7
1848.....	948,574	186,192	80,212	105,980	7
1849.....	948,574	180,454	121,257	59,197	7
1850.....	923,821	211,129	114,949	96,179	7½
1851.....	991,838	192,033	87,995	104,038	7
1852.....	968,586	227,593	109,309	118,284	7
1853.....	944,508	223,898	134,015	89,872	7
1854.....	1,009,115	206,827	120,658	86,169	7
1855.....		263,874	140,213	123,661	4

Baltimore and Ohio Railroad.

The following gentlemen were on Thursday elected directors on the part of the State in the Baltimore and Ohio Railroad: John S. Gittings, B. R. Vickers, James J. Lawn, Joshua Vansant, Baltimore; James L. Schley, Cumberland; Edward Mealy, Hagerstown; Edward Shriver, Frederick; Isra Houck, do; Edward Hammond, Elliott's Mills. Wm. Gaither, Montgomery county.

Railroad Management.

Mr. Editor,—I have observed from time to time certain communications in the Commercial Advertiser in relation to railroad management and operations under the signature of "Veritas." These communications show especially a familiarity with the financial affairs of railroad companies, the method of keeping accounts, transacting business, &c., and evincing as they do candor and good sense, have been to me of no little interest.

It cannot, I think, be doubted, that there is among the managers of our railroads a considerable degree of that carelessness, or indifference to strict accuracy which "Veritas" has complained of, nor that there is a wide distrust of the statements of their Reports in consequence. Yet I am unwilling to attribute this, except in rare cases, to any intention to mislead the public. The high standing and character of the great majority of those who fill the Executive Board of railroad companies forbids this idea. It is, however, no aspersion to say that not all of them have or can be expected to have that practical acquaintance with operations of this sort, which alone can give them comprehensiveness of views and accuracy of detail in relation to all the matters embraced in said Reports. For the same reason they do not always fully appreciate the great necessity of such accuracy, nor of employing only such officers and clerks as from their thorough training or long experience are competent to systematize all their accounts and deduce the desired results from them with order and precision.

The management of railroad operations is a science which in this country is still imperfectly understood. Hitherto the directors and principal officers have been chosen by the companies chiefly with reference to their ability to raise funds, and not for their practical skill in the economic workings of the roads. They have generally been engaged at the same time in other pursuits of their own, which necessarily occupy much of their attention, and which they cannot be expected to neglect for any public duties. Nor do great ability and success in other branches of business, always capacitate them for this. A good physician may be a very poor blacksmith. A successful merchant may not know what form or weight of iron rail will wear most economically, or whether it be cheaper in the end to burn coal or wood in a locomotive engine. Very few railroad directors can tell precisely the cost of the business,—what for instance it costs to transport one passenger one mile, and what, therefore, they can afford to do it for. The number of items which enter into an exact solution of that problem is very great, and can be determined only by induction from extensive data gathered from the experience of many years, and under a great variety of contingent circumstances. How can it be expected that all these will be known to those who have had no experience of these matters themselves, and who can give to their consideration only such spare time as they may be able to abstract from their own private business?

Some of the elements upon which the most important particulars of railroad management are founded are simple *assumptions*. One of them is a prevalent idea that the expenses of railroads are about fifty per cent. of their earnings, which may or may not be true; but in either case, it is only

a mere guess. Another is the current standard of rates for freight and passenger fares, which is built on no carefully ascertained facts as to their cost, but is generally adopted by each company, because it is about the same as that which is in use by other companies.

It is believed that as a result of this lack of definite information on important points, and under the competition of rival roads, each being anxious by the cheapness of its fares to draw the largest amount of business possible, the rates in general use on all the roads are much too low. In no other way can it be fully accounted for why railroad stocks are so generally below par in the market. If their net receipts were justly proportioned to their earnings, why should they not be enabled to declare dividends and command fair prices in the stock market as well as Banks, Insurance companies, and other monied institutions?

To these causes also are to be attributed in great part the crudeness and inaccuracy so often shown in railroad reports. They are not, we believe, so much owing to an intention to misrepresent as to the crude and undigested state of the accounts and data from which they are prepared, and the incompetency of the managers generally to reduce them into any better state. Nor do we see any adequate remedy for these evils, but for the companies to select and encourage by suitable compensation those officers who by their talents and experiences as well as integrity shall be able to introduce system and order into this most important department of business, and secure in consequence the confidence and respect of the public.

A RAILROAD OFFICER.

Memphis and Charleston Railroad.

The Governor of Alabama, we understand from the President of this road, has positively refused to permit the Treasurer to pay over the \$300,000 on the bill passed by the Legislature of that State, notwithstanding it was passed over his *veto*. We are glad, however, to learn that the company has made a negotiation of \$250,000 of their company's bonds, at Charleston, at a price entirely satisfactory, which enables them to progress with their work rapidly to completion. The Eastern Division of this road from Tusculumbia to Stevenson, one hundred and twenty-nine miles, was finished on the day before yesterday, the 10th ult., and the train will be run on that division regularly on and after the 20th ult.

There are now in operation on the Western Division eighty-eight miles of road, the receipts of which the past year have been over \$250,000.—The remaining link of this road from Pocahtontas to Tuscumbia, seventy miles, is now every foot under contract; forty-five miles of it is graded and ready for the iron, and about eight hundred hands actively engaged in completing the unfinished grading. The iron is all purchased, and fifteen hundred tons of it now in New Orleans, and the balance will arrive as fast as required for the track-laying. The company will commence laying track at Tuscumbia and Pocahtontas by the 1st of May, and will progress east and west until the gap is closed, which it will be, without accident, by the 1st of January next; thereby giving to Memphis direct railroad connections with the whole of the Atlantic seaboard, within twelve months, and opening up to our city the rich trade of East and Middle Tennessee. North Alabama, too, will pour into her lap, by railroads, more trade than she now has. This connection will give to the people of the Mississippi Valley, and the entire South-west, the means of easy, cheap and expeditious communication with all the great commercial points on the Atlantic seaboard.

For these auspicious results, so near at hand, we

are largely indebted to the steam-engine energy, and active business sagacity of the President of the road, Sam. Tate, who, within the last six months, has seemed to be endowed with ubiquity, as well as the business sagacity and activity necessary to meet every exigency.—*Memphis Bulletin*.

Taxable Property in San Francisco.

F. D. Kohler, Esq., of San Francisco, furnishes the following abstract of property of all kinds, its valuation, State and County tax and aggregate thereof, rate and amount of tax, and number of polls assessed, for the county of San Francisco, for the year 1855:—

Number of acres of real estate other than city or town lots.... acres	215,500
Value of same.....	\$758,880 00
" city and town lots.....	18,625,475 00
" improvements thereon....	8,392,425 00
" personal property.....	5,065,347 76

Total value of property.....	\$32,841,027 76
State tax thereon, at 60c.....	197,046 19
County tax thereon at 92½c.....	303,779 49
Poll tax for State purposes.....	4,500 00
Poll tax for County purposes.....	3,000 00
State portion of delinquent tax of previous year.....	63,186 24
County portion of do.....	116,841 43

—*Hunt's Merchant's Magazine.*]

ABSTRACT FROM THE RETURNS OF THE RAILROAD COMPANIES IN MAINE FOR 1865

NAMES OF ROADS.	Length in operation. Miles.	Authorized Capital.	Capital paid in.	Cost of road and equipment.	Debt.	Gross Earnings.	Dividends.
Androscoggin.....	20	\$1,250,000	\$91,823	\$368,582	.....	\$196,343	None.
" and Kennebec.....	55	1,400,000	912,176	2,218,817	\$1,141,422	.....	None.
Atlantic and St. Lawrence.....	149	4,000,000	2,491,900	6,282,173	\$3,494,000	652,488	None.
Bangor, Oldtown, and Milford.....	12½	600,000	138,000	178,234	44,923	46,170	\$116,729
Boston and Maine.....	46½	4,156,700	4,076,974	4,179,546	320,141	854,426	1,246
Calais and Baring.....	200,000	100,000	.....	224,566	183,020	37,174	.....
Kennebec and Portland.....	72½	.....	1,107,526	2,766,678	1,565,911	226,064	.....
Machiasport.....	7½	100,000	75,000	100,000	None.	8,000	8 per cent.
Oldtown and Lincoln.....	Not opened.	500,000	30,768	30,738	.....	.....	.....
Penobscot and Kennebec.....	64¾	1,000,000	518,576	.....	1,161,076	38,042	.....
Portland, Saco, and Portsmouth.....	61	1,500,000	1,366,000	1,858,838	140,625	277,502	8 per cent.
Penobscot.....	None.	600,000	171,062	229,839	24,677	.....	.....
Somerset and Kennebec.....	24	700,000	256,740	561,077	88,532	.....	.....
York and Cumberland.....	18	1,500,000	294,194	774,715	415,684	89,268	.....
Great Falls and S. Berwick.....	*3	100,000	38,060	.....	25,000	.....	.....

* Three miles in New Hampshire. These figures stand for the whole.

† Included in those of Kennebec & Portland R. R.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par value of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	6	68		Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscoog & Kennebec	55	642,343	1,473,090	2,245,020	190,605	90,797	none	18	South Western	92	1,067,466	465,500	1,024,920	253,306	141,168	8	
Androscoog	20	91,192	232,193	343,317	29,396	12,907	none	20	Tennessee and Alabama	30	246,486		679,906	In progr.			
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600		none	14		Tennessee and Missis.		170,931		175,740	In progr.			
Portl., Saco, & Portsm'th	51	1,367,000	119,237	1,486,327	259,330	124,038	6	87	Memphis and Charles'tn	288	2,103,177	958,275	3,563,362	176,484	102,016		
Boston, Conc. & Montreal	93	1,808,093	1,050,512	2,771,310	233,234	120,534	2		Mobile and Ohio	153	2,568,565	1,802,921	4,536,412	199,932	109,236		
Cheshire	53	2,085,925	509,313	3,179,687	380,221	143,665	2		Miss. Central	188	642,534	none	628,303	In progr.			
Concord	35	1,485,000	none	1,412,576	329,744	168,632	8	45	N.O., Opelousa & G.W.	55	2,930,425	671,465	2,057,665	In progr.			
Concord	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	81	Vicksburg, Shreveport & Tex.		111,750	none	167,895	In progr.			
Northern, N. H.	61	1,048,145	787,608	1,780,062	162,657	55,173	none		East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Con't & Passumps. Riv.	120	2,233,376	2,662,396	5,378,428	394,971	none	none		East Tennessee and Va.	16	625,426	298,583	1,033,781	In progr.			
Rutland & Burlington	117	5,000,000	3,550,236	8,463,366	820,119	214,793	none		Covington & Lexington	161	2,319,390	1,437,081	3,843,694	316,090	112,177	none	
Vermont Central	27	1,830,000	325,635	2,188,595	439,754	140,377	6	68 1/2	Lexington and Frankfort	93	431,091	159,299	635,363	90,930	34,864		
Boston and Lowell	83	4,076,974	160,000	4,179,535	854,426	330,060	6	53	Lexington & Big Sandy	29	540,117	61,525	670,463	In progr.			
Boston and Maine	74	2,210,300	1,518,671	3,463,818	59,917	7,400	none	64 1/2	Louisville and Frankfort		698,236	603,061	1,659,566	244,014	96,902	6	
Boston and N.Y. Central	55	3,160,000	359,132	3,677,154	558,671	219,689	none	64 1/2	Atlantic & Gt. Western	264	866,939	77,294	613,231	In progr.			
Boston and Providence	68	4,500,000	655,428	4,865,499	1,008,004	404,461	6 1/2	88 1/2	Bellefontaine and Ind.	118	1,881,655	2,025,925	2,852,652	298,293	140,823	none	
Boston and Worcester	47	681,690	280,598	987,252	119,221	65,527	3	29 1/2	Clev., Col. and Cin.	141	4,473,721	374,127	4,546,133	1,102,601	567,906	9	100 1/2
Cape Cod	42	1,591,110	273,241	1,802,244	286,533	103,787	5 1/2	45 1/2	Clev., Zanesv. and Cin.	87	2,676,425	2,680,301	5,124,629	736,272	396,986	10	80 1/2
Connecticut River	60	2,583,400	2,947,737	4,621,016	647,281	205,998	4	43 1/2	Clev. and Mahoning	103	2,686,770	2,516,162	4,816,153	450,215	255,868	65	
Eastern, Mass.	67	583,000	153,700	3,765,998	681,163	225,071	7	70 1/2	Cin. and Pittsburg	60	1,100,000	1,464,304	2,961,978	483,620			
Fitchburg	21	600,000	16,000	654,603	191,857	55,877	8	86	Cin., Wilm. & Zanesv.	131	1,120,450	1,181,255	2,326,459	In progr.			
Nashua and Lowell	14	500,000	none	533,953	198,491	66,533	6 1/2		Columbus and Xenia	55	1,484,650	149,000	1,451,733	356,368	187,518	10	85 1/2
N. Bedford and Taunton	87	3,015,100	202,650	3,362,949	653,499	295,738	6	83 1/2	Dayton, Xen. & Belpre	63	437,838	422,658	800,496	In progr.			
Old Coffey and Fall River	77	2,232,541	1,033,670	3,209,727	368,726	87,313	none	9 1/2	Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.			
Vermont and Mass.	155	5,160,000	5,966,420	10,495,065	1,869,673	633,013	7	91	Dayton and Western	35	310,000	500,000	733,769	In progr.			
Western, Mass.	46	1,141,000	205,565	1,351,271	294,780	75,760	2	42	Eaton and Hamilton	42	448,411	835,994	1,385,559	113,859	63,256	25	
Providence and Worcester	72	1,510,020	335,461	1,806,696	311,430	138,057	7 1/2	72 1/2	Little Miami	65	2,963,921	1,171,785	3,648,172	651,562	336,708	12	
Hartford and N. Haven	120	1,845,610	2,090,124	4,060,899	258,685	119,611	none		Mad River and L. Erie	205	2,451,650	2,672,932	4,444,661	Recently opened.			
Hart'd, Prov. and Fishkill	120	1,845,610	2,090,124	4,060,899	258,685	119,611	none		Central Ohio	138	1,520,927	3,485,076	4,283,443	Recently opened.			
Naugatuck	57	1,031,800	573,995	1,677,167	238,266	none	4		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	692,117	9	
N. York and N. Haven	62	2,992,450	2,264,656	4,906,784	938,025	341,607	none	30	Pittsburg, Mayv. & Cin.	60	1,350,000	2,206,357	3,652,357	328,958	164,479	none	
N. Haven and N. London	50	738,258	735,165	1,450,318	103,988	217	none		Scioto & Hocking Valley	135	403,975	509,050	888,558	In progr.			
N. London, W. & Palmer	66	600,000	1,073,673	1,694,383	124,044	66,331	none		Springf., Mt. Vernon & P.	113	1,000,000	950,000		In progr.			
Norwich and Worcester	62	1,222,300	873,489	2,597,183	304,236	88,458	2 1/2	34	Tol., Wabash & St. Louis	242	2,500,000	4,530,000		In progr.			
Albany Northern	32	439,005	1,625,098	1,840,695	117,716	9,904	none		Cin., Log. & Chicago	255	4,196,679	1,066,125	2,080,433	In progr.			
Black River and Utica	35	643,330	317,859	974,323	In progr.	none			Evansville & Crawfordsv.	109	706,945	1,177,696	1,844,541	127,400	64,552		
Buffalo, Conn. and N. Y.	100	1,487,871	1,601,183	2,819,066	172,476	66,333	none		Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	58	
Buffalo and N. Y. City	92	798,439	2,537,849	3,401,868	288,392	31,896	none		Indiana Central	66	611,400	1,261,179	1,907,911	350,176	134,375	48 1/2	
Buffalo and St. Line	69	1,800,000	1,040,000	2,494,364	760,736	356,703	10		Ind., Clev. & Pittsburg	83	834,167	1,011,971	1,671,644			none	
Canadaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,506	none		Jeffersonville	67	1,014,252	694,000		206,544	94,318	none	
Canadaigua & Niagara F's	98	1,315,000	2,279,554	3,495,832	135,433	48,649	none		Madison and Indianapolis	81	1,647,500	1,589,881	3,237,381			none	
Cayuga & Susquehanna	35	687,000	506,689	1,187,562	135,433	48,649	none		New Albany and Salem	238	2,535,121	6,281,348	6,643,189	645,827	371,402	none	
Hudson River	144	2,768,466	9,250,362	12,737,895	1,812,087	608,916	none	35 1/2	Peru and Indianapolis	73	838,000	858,314		150,000	90,000	17	
Long Island	95	1,875,145	688,949	2,555,966	301,793	116,402	8	91 1/2	Terre Haute and Ind.	73	974,800	604,355	1,602,166	287,512	189,702	10	96
New York Central	534	24,554,880	14,462,742	25,523,913	6,583,581	3,622,126	8	31 1/2	Chicago and Rock Is'd	182	3,141,600	2,387,165	5,214,162	In progr.			
New York and Erie	164	10,023,958	25,126,669	33,439,431	4,848,983	2,627,118	none	57	Chicago and St. Louis	220	2,300,000	1,325,000	3,625,000	In progr.			
New York and Harlem	134	6,717,100	4,069,769	7,758,208	1,355,477	234,126	none	19 1/2	Chic., St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.			
Northern, N. Y.	118	1,633,022	4,406,874	6,470,714	520,183	135,754	none	2	Galena and Chicago	298	4,334,800	1,189,304	6,866,263	5,606,710	942,231	17	114 1/2
Oswego and Syracuse	35	399,000	216,681	723,683	126,640	59,982	3 1/2		Illinois Central	707	1,419,440	18,001,426	17,698,099	1,532,118			
Potomac and Watertown	29	467,200	294,189	749,683	In progr.	82,600	7		Peoria and Ogawka	93	569,880	818,454	1,388,342	In progr.			
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7		Ohio & Miss. (Wat.Div.)	147	1,780,295	3,292,408	4,870,586	Recently opened.			
Saratoga and Whitehall	48	500,000	395,600	719,909	71,909	21,089	none		Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.			
Syracuse & Binghamton	80	768,369	1,578,804	2,272,777	159,484	22,503	none		Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.			
Troy and Boston	27	437,380	737,079	1,109,822	156,363	55,184	3 1/2		Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656	94 1/2	
Watertown and Rome	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2		Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,356	50,080	none		Green Bay, Mil. & Ch.	155	764,074	442,726	1,193,765	In progr.			
Camden and Amboy	94	3,000,000	1,407,200	6,636,529	2,017,127	961,941	12		Milwaukee and Miss.	106	1,826,428	2,467,889	3,578,757	601,843	417,443	17	86
Camden and Atlantic	60	369,320	1,622,131	1,729,642	122,417	50,080	none		Milwaukee & Water'n	72	354,861	132,000	514,238	In progr.			
New Jersey	30	3,482,860	690,000	4,310,011	861,514	500,747	10	122	Milwaukee and Horicon	16	554,200		354,109	In progr.			
New Jersey Central	63	2,000,000	2,268,176	3,683,149	393,728	177,603	none		Milwaukee & La Crosse	51	1,351,832	532,131	1,883,963	In progr.			
Morris and Essex	53	1,157,805	875,000	1,636,650	226,560	102,474	6		Racine and Miss.	47	921,906	380,715	1,289,321	In progr.			
Allegheny Valley	44	1,637,867	342,564	1,988,377	Recently opened.				Hannibal & St. Josephs	292	292,351	580,000	823,310	In progr.			
Cataw., Wil. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	none		North Missouri	13	1,138,208	684,294	1,093,336	In progr.			
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,831	69,263	6		Pacific	130	2,803,692	3,903,174	6,483,728	160,000	In progr.		
Del. La. & Western	106	3,051,622	3,884,702	6,022,667	528,911	269,964	6		St. Louis and Iron Mt.		445,170		186,115	In progr.			
Erie and North East	20	600,000	150,000	750,000	89,535	53,325	10		Panama	49							

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	98	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	92½	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	92½	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	75	
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62½	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87½	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	92½	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	88½	89
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	85	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	90½
Port Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	96	97½
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	89	90
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	86	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1868	93	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	85
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	90	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1854	8	May, Novemb.	"	1874	85	89
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	76½	78
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	79½	80½
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Bost.	1860	99½	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100½	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96½	97½
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	96	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	97
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	94	97½
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79	81
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	96	97½
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	84½	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1868		78
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1868	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1867-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	77	78

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84½	85
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	87½	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94	94½
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108½	110
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	95	96½
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	92	92½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	91	91½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83½	84
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85½	86½
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98½	99½
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	88	89
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	71½	72
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87½	87½
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1869	93½	94
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	95
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	85½	86
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66		
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	92
Do. Goeben Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85½	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	90	90½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	102½	102½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	105	106
Do. 2d do.	1,478,000	Do. till 1856	7	Jan'y, July	"	1866	105	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	85	85½

CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int'at payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. 1857	Feb'y,	100		Milwaukee, 7 per ct. coup.	X	89	80½
Do. 5 do. 1858-'60	May,	95	97½	New Orleans, 6 per ct. cp. R.R. X	Do.	75	78
Do. 5 do. 1870-'75	August,	95	97½	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July		83
Do. 5 do. 1880	November,	96		Philadelphia, 6 per ct. 1876-'98	Jan'y, July	91½	92
Albany, 6 per ct. coup. 1871-'81 X	Feb'y, August,	93		Pittsburgh, 6 per ct. coup.	X	76	77
Allegheny, 6 per ct. coup. X	Jan'y, July	68		Quincy, 8 per ct. coup. 1868 X	Jan'y, July	92½	
Baltimore, 6 per ct. 1879-'90	Quarterly,	96½	97	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	84	85
Boston, 5 per ct. coup. X	April, October,	99	100	Rochester, 6 per cent. coup. X	Divers	96	
Brocklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	79	80
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.	100½	101½	Do. Municipal. X	Do.	79½	80½
Cincinnati, 6 per ct. coup. X	Divers	89½	90	Sacramento, 10 p. ct. cp. 1862-'74 X	Do.	80	81½
Chicago, 6 per ct. coup. 1873-'77 X	Jan'y, July	90	90½	S.F. & C. 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	78½	80
Detroit, 7 per ct. cp. W.W. 1873-'78 X	Feb'y, August,	100	102	Do. 10 p. ct. cp. 1871 X	Do. do.	97	99
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105½	Do. 10 do. pay. N.Y. X	Jan'y, July	104	
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	96		Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	60	62
Louisville, 6 per ct. cp. 1880-'83 X	Divers	79	80	Wheeling, 6 per ct. coup. X	Divers	67½	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do. X	April, October	97½	

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending April 1st, 1866.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	65
Ohio & Mississippi, 2d Mort. 7 per ct.	46
Marietta & Cincinnati, 7 per cent. 1st Mort.	71
Indianapolis & Cin., 2d Mort. 7 per ct.	80
Hillsboro' & Cin., 7 per ct. 1st Mort.	50
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	87
Cin., Wil. & Zanes 2d Mort. 7 per ct.	58
Covington & Lexington, 10 per ct. Income	60

STOCKS.

Cin., Wil. and Zanesv., 17.—Cin., Ham. and Dayton, 68.—	
Col. & Xenia, 86.—Cincinnati & Chic., 7½.—Central Ohio, 12½.	
—Covington and Lexington, 18.—Dayton and Western, 17½.	
Eaton and Hamilton, 25.—Fort Wayne and Southern, none.	
Indiana Central, 49.—Indianapolis and Cincinnati, 58.—Little	
Miami, 91½.—Mad River & Lake Erie, 10½.—Marietta & Cin.,	
15.—Ohio and Mississippi, 7½.—Hillsboro' and Cincinnati, 15.	
—Peru and Indianapolis, 18.	

By HEWSON & HOLMES.

For the week ending April 2nd, 1866.

BONDS.	Per ct.
\$3,000 Cin., Ham. and Dayt. 7 per ct. 2d Mort.	85 (& int.)
5,000 Little Miami, 6 per ct., 1st Mort.	80
2,000 Covington & Lex., 7 per ct. 2d Mortgage	65
5000 "	68½
1,200 Columbus & Xenia, Divid.	78
500 Ind. & Cin. 7 per cent. Dividend	70
610 Clevel. and Pittsb., Dividend Scrip	63
3,000 Marietta & Cin., 7 per ct. Domestic.	45
5,000 Ohio & Missa. 7 per ct. 1st Mort.	62½
350 Little Miami, Dividend Scrip	60

STOCKS.

289 Shares Ohio & Mississippi	7½	"
" "	8	"
" Little Miami	81½	"
" Clevel. Col. and Cin.	101½	"
" Bellefontaine & Indiana	40	"
" Eaton & Hamilton	23	"
" Covington and Lexington (4 months)	18	"
" Cincinnati and Chicago	7½	"
" Indianapolis and Cincinnati	58	"
" Columbus & Xenia	55½	"
" Cincinnati, Hamilton, & Dayton	67	"

Marie & Kanz' Money Circular for the European Steamer of the 9th Inst.

[TRANSLATED EXTRACT.]


NEW YORK, Monday, April 8th, 1866.

The absence of speculation which we have noticed for several weeks past still continues; and neither the abundance of capital, nor the general conviction since the Asia's arrival that peace is now a certainty, has been able to communicate a serious movement to public stocks. Quotations have been well sustained during the week, and show on the whole a slight improvement on our previous advices. The coupons due on 1st inst., on the \$400,000 Columbus, Piqua and Indiana Railroad 3d Mortgage Bonds, indorsed and guaranteed by the three following companies: Cleveland Columbus and Cincinnati Railroad, Bellefontaine and Indiana Railroad, and Indianapolis and Bellefontaine Railroad, have not been paid. This default is in consequence of an injunction served at the request of a few stockholders upon the three last companies, restraining them from paying the said interest until the courts shall have decided as to the validity of the said endorsements. The indorsements were given in consideration of a change of the gauge of the first mentioned road, and, in the case of the Cleveland, Columbus and Cincinnati, was ratified by the Directors, and by a meeting of the stockholders. But the plea urged for resisting payment is, that the charter (which is a special charter, given prior to the enactment of the General Railroad Law of Ohio) does not authorize the Company to indorse or guarantee the bonds of other companies, without being previously authorized to do so by a special act of the Legislature, which authority has in this case never been obtained. This default has called forth general reprobation, and the feeling is almost unanimous with the stockholders, the press and the public, immediately to take the necessary steps to legalize the bonds in dispute. What those steps may be it is at present too soon to determine. The coupons of the Chicago and Mississippi first mortgage Bonds have likewise been allowed to pass unpaid. Those of the Madison and Indianapolis second mortgage Bonds, which have remained unpaid for a long time, as well as those of the first mortgage, were paid on the 1st inst.

State Stocks well sustained, with some activity in Missouri; Louisiana have risen 3; Missouri, $\frac{1}{4}$, Virginia, $\frac{1}{2}$ per cent. City and County Bonds inactive, and without changes. Railroad Bonds firm but dull. Illinois Central Construction Bonds, after selling as high as 88 $\frac{1}{2}$, have fallen off 1 per cent.; Freedland Bonds have advanced 1 per cent.; Erie 1875 Bonds are firm at 91; Erie Second Mortgage have risen $\frac{1}{2}$; Erie 1871s, $\frac{1}{2}$; Harlem First Mortgage, $\frac{1}{4}$; Hudson River Third Mortgage, 2; New York Central 6 and 7 per cents. $\frac{1}{2}$ per cent.; Erie 1883 Bonds have declined $\frac{1}{2}$; Erie 1862, 1 per cent. Bonds not quoted at the Stock Exchange—no transactions, excepting a few purchases of Michigan Central 8 per cents., 1869; and of Terre Haute and Alton First Mortgage Railroad shares; trifling changes, with no speculative feeling. Chicago and Rock Island (ex. div.) $\frac{1}{2}$ per cent. higher; Cleveland and Pittsburgh, $\frac{1}{2}$; Cleveland and Toledo, 1; Hudson River, $\frac{1}{4}$; Michigan Central, 1; Michigan Southern, $\frac{1}{2}$; Panama, $\frac{3}{4}$ per cent. Cleveland and Columbus and Cincinnati has declined 2; Erie, $\frac{1}{2}$; New York Central, $\frac{3}{4}$; Reading, $\frac{1}{2}$ per cent. Money remains without change. Loans on call 6a7 per cent., chiefly at 7; first-class paper, 7a8, names less current 8a9. Exchanges weak, with the exception of France, limited business at 109 $\frac{1}{2}$ a3 $\frac{1}{2}$ for Sterling, and 5.17 $\frac{1}{2}$ for Francs. **MARIE & KANZ.**

American Railroad Journal.

Saturday, April 12, 1856.

 We take very great pleasure in presenting to our readers the first of a series of articles on the anatomy and physiology of the locomotive boiler and engine. The writer is an accomplished and thoroughly educated German Engineer, at present engaged as a draughtsman in the service of the Erie Railroad Company. These articles will be interesting to the mechanic as well as instructive to the student.

The Locomotive.

No. 1.

By THEODORE KRAUSCH, Civil and Mechanical Engineer.

Let us inquire into the different characters and constructions of machines, and who, in regard to capability, are the builders. Unfortunately we find more imperfect than perfect machines. Why is this? Simply, because of the partial or superficial comprehension of mechanical art. And here it may be observed that none but those educated, in the highest degree, practically and theoretically, can properly be considered machine builders. The builder must himself be capable of regulating the operation of the machine; so it is very necessary the locomotive builder should understand how to run an engine.

It is also of the highest importance, for a builder to be thoroughly familiar with the nature of machines; and how different is a locomotive from a stationary engine. This I will attempt to explain to the profit of the students of this art.

I select the stationary and locomotive engines, because the latter is one of the most important and interesting phenomena in our technical world.

This article is intended as a commencement of the task I have set myself, which is, to make students thoroughly familiar with the nature, principles and motions of the locomotive.

The uses which railroads have for locomotives, being various, require peculiar arrangements, as well for the machinery, as for the whole apparatus for the production of steam. The peculiar requisites arise from the nature of the locomotive engine. Let us notice them in detail.

A locomotive must possess considerable power, and the boiler, therefore, an unusually great power of evaporation.

This necessity might be doubted, in regard to locomotives on railroads, because the resistance upon them is, mostly, only .004 of the load, and a horse is able to draw, on a walk, 12 $\frac{1}{2}$ tons; but we require a speed 10 to 15 times faster. A horse draws such a load scarcely 2 $\frac{1}{2}$ miles per hour, while we expect 30 or 40 miles per hour of a locomotive. And it is as true that a higher rate of speed would require more steam, as it is indisputable that, to move the same load in one minute ten times as far, the boiler must supply ten times as much steam, in the same time, and the machine must be stronger in the same proportion. Then we must take into consideration, that the machine must be transported, as well as its supply of fuel and water; and that its weight does not increase in proportion to its power, so that the effect does increase with its power.

The principle and construction of the apparatus for the production of steam, is quite different from that of a stationary engine, in consequence of its being transportable. Weight and volume must be as little as possible; nor is a high chimney admissible. It is necessary to have a boiler with an inside furnace, containing a large fire-surface, with a strong artificial draft. What an enormous quantity of water such a boiler would have to contain, if it was designed on the principle of stationary engines, even if we should take only the quantity, which would be evaporated in 5 or 6 hours, and how large the fire-surface, where 10 sq. ft. produce only 1 lb. of steam per minute! How important, therefore, to increase the intensity of the fire to the highest degree; and this, unfortunately, is not possible without a very sharp draft.

The locomotive must carry such a quantity of water and fuel as is required for an uninterrupted run. The weight of these is considerable. The quantity of water required would be twenty times as large if the principle of condensing should be applied; but of this I will not speak further, as the high pressure principle is the only one applied to locomotives.

The balancing wheel and beam are also inadmissible in such an engine; the motion of the piston-rod is communicated, mostly, directly to the driving-shaft—giving to it a rotary motion—on which are two cranks placed at an angle, with each other, of 90 degrees.

To get a speed of from 20 to 40 miles per hour, the piston moves much faster, and performs also more strokes than a stationary engine, especially of like power. Such speeds will show, besides their disadvantageous consequences, also the difficulty of applying the principle of expansion.

The locomotion of such machines requires much more solidity and strength, in all its parts and connections, than a stationary engine, as well as arrangements to balance concussions; and also a necessity arises to modify the assisting apparatus. Feed pumps and safety valves are different, as also the regulator.


Some other particulars, in regard to locomotive engines, now come into consideration, as, the resistance of the air, which grows in the ratio represented by the square of the speed, already very great at a speed of 30 miles per hour; then the

amount of friction (adhesion) of the driving-wheels. The adhesion represents a support, and, consequently, it must be greater than the resistance. The load is thus limited by the adhesion and cannot be increased by a proportional diminution of speed. The adhesion of the driving-wheels depends on the weight of the machine which rests upon them, and the distribution of its whole weight. It is also necessary to find the according weight, for loading the drivers, in proportion to the effective power of the engine.

Finally, the locomotive is very remarkably different from the stationary engine, by working generally a variable load; its working is interrupted and not uniform. The load changes more or less by each run, freight is taken off or more put on; fuel is consumed; but the working is principally affected by the different grades. The locomotive is stopped not only at the terminal stations, but at others; and has to stop at any time that may be chosen.

It is not a question here, how to balance the momentary swings between the power and the weight, or to aim at a continued uniform motion, but how to govern and regulate its operation under all circumstances. The working of the locomotive is submitted to the engineer, and all arrangements must allow him not only to regulate the speed, but also, as occasion may require, to bring it to a dead stop, as quickly as possible, and if necessary, to reverse its motion from a forward to a backward one. The construction of the locomotive engine depends upon the use to which it is to be applied; in regard to this they are divided, at present, into five classes, as follows:

- 1st, Locomotives running express trains;
- 2nd, " " passenger "
- 3rd, " " " and freight trains.
- 4th, " " common freight trains.
- 5th, " " freight trains over heavy grades.

 We have received Mr. Prosser's last Circular of Boiler Tubes and Tools for Boiler Makers' use. Mr. Prosser keeps always on hand Krupp's best Cast Steel, which our readers will remember obtained the Council Medal at the London Exhibition in 1851. See advertisement.

The City Architect. Monthly. Folio. DAWITT & DAVENPORT; New-York.

Nothing could be more welcome than the present book, from Wm. H. Ranlett, whose practical knowledge and refined good taste have placed him among the foremost of our Architects. This work is to be issued monthly, and will be published at 50 cents a number. "It is not to be simply a collection of designs for showy house fronts, but a manual containing all the requisite information and practical directions for building a city from the start. It will, of course, contain not only plans and specifications for dwelling houses, shops, stores, manufactories, lecture rooms, academies, churches, theaters, court-houses, prisons, hotels, almshouses and hospitals, but also instructions for paving, flagging, constructing drains, culverts, docks, wharves, mills, street grading, laying out of squares, parks, and public grounds, and the fullest and most comprehensive directions will be given for ventilating, heating, and lighting all

classes of buildings." The City Architect will be completed in twenty numbers, and each part will be complete in itself and devoted to a special object.

Engineers cannot afford to be without it.

The "Vampire" Locomotive.

A good deal has lately been written of this Engine so well named. At present, the prospect is that just about the same success will attend its operation as followed the development of Capt. Ericson's last failure. The well treated reporters of the daily press are not at all times in a condition to judge accurately of velocities or the motion of machinery. They saw wonderful sights in Ericson's huge cylinders. It is hardly to be expected of machinists, who receive a stipulated sum for their work, that they should anticipate failure in any contrivance built for men having the money to pay for it. The Vampire has consumed money in construction quite in accordance with its principles of operation.

When at work, you gaze upon its huge awkward carcass and wonder how the power is supplied and how the combustion is fed, and where is all the fuel she is said to contain. So, too, if possessing a financial turn; especially, if accustomed to judge of the cost of machinery, you wonder where the \$40,000 of its cost are deposited. But that is nothing strange. We would not intimate that the Vampire could be built for less than forty thousand dollars. On the contrary, we think it might have been made to cost double that sum. The following extract is from the N. Y. Tribune of the 8th.

RAPID EXPERIMENTING.—The hot air locomotive "Vampire," which was briefly described in last Saturday's issue, ran off the track near Paterson during an experimental trial trip on Friday, while running at a rate judged to have been about *eighty miles per hour*! Fortunately no harm resulted either to the machine or its operators; the absence of any following train, even of a tender, conducing very much to the safety of such experiments at this extraordinary speed. The machine, it will be recollected, is impelled by heated air, or rather by both heated air and steam, in a manner invented by Mr. Phineas Bennett, and is, we think, the first locomotive ever tried with hot air as a motor in any form. It is, taken together, a very remarkable construction. It has cost, up to the present time, about \$40,000, but has never been altered in any material point from its original design. It has no tender, and carries its engineer on its back, or rather on its side, near the former end. Its weight, in running order, is forty-one tons, and fuel enough for a trip of 300 miles weighs only about three tons more, and is carried in its capacious furnace as a single charge. The working out of the principle has been most skillfully executed; the whole credit of this being due, we believe, to Mr. W. K. Thomas, one of the principal draughtsmen at the Novelty Works. The speed made at the moment of leaving the track as above noted indicates what the principle is capable of accomplishing, and we cannot repress a hope that the serious practical difficulties alluded to in our former notice may yet be surmounted.

Is it possible the Editors of that paper believed such a statement? A forty ton locomotive going at the rate of *eighty miles per hour*, and running off the track, is suddenly stopped by collision with some foreign body, and no injury is done. Why, the Engine would have been destroyed if it had rushed into a snow bank at that rate.

Eighty miles an hour. We will not contradict it. The statement is too silly to need correction. We do not believe the Engine has ever made over

six miles per hour. It is to be understood, that the air, which is furnished by the supply cylinders, is forced into the receiving chamber and furnishes oxygen to aid combustion, while, by its expansion, it exerts working pressure in common with the steam, which is introduced in the same compartment and vented by the exhaust.

Active measures are in course of preparation to make the surveys of the Mexican Railroad between the cities of Mexico and Vera Cruz. The company have contracted with Mr. Robt. B. Gorsuch for the Engineering. He is now on his voyage to the spot. He will take no assistants with him, but will make a reconnoissance with such aid as he can procure in Mexico. He has made no appointments, and will not till his return in the summer. Mr. Gorsuch is possessed of energy and physical vigor to combat the evils of a malarious climate, and is an accomplished Civil Engineer. We wish him a pleasant journey and a safe return.

York and Cumberland Railroad of Maine.

This road is to be sold on the 30th inst., under a judgment in favor of J. G. Myers.

The terms of sale may be found in an advertisement in another column.

The Milwaukee and Beloit Railroad.

The above company have just completed their organization and commenced the surveys under very favorable auspices. Subjoined are a list of the officers and Directors:

Horatio Hill, President, Milwaukee; A. O. Babcock, Secretary, East Troy; S. Andrews, Treasurer, Mukwonago; S. C. Kelsoy, Chief Engineer.

Directors—Wm. J. Whaling, Milwaukee; E. H. Ball, S. Smith, East Troy; P. Meacham, Troy; C. Elderkin, Elkhorn; A. H. Barnes, Delavan.—Principal office, Milwaukee.

Cleveland, Columbus, and Cincinnati, and Columbus, Piqua, and Indiana Railroads.

Much excitement has been occasioned, and indignation expressed at the refusal of the Cleveland, Columbus and Cincinnati Railroad Company to pay the coupons on certain bonds guaranteed by them to the Columbus, Piqua and Indiana Company. Assuming a legal obligation to exist, then there is good ground for complaint. If no authority existed for making the guarantee, then any stockholder may object. The odium in such case necessarily falls upon the Board of Directors, who assumed to do an act for which they had no authority. If, too, the purchaser took a security which had no legal validity, he is at least one-half in fault. He should have looked to the title.

But whatever may be the rights in the case before us, and even admitting that there is no sufficient justification for the conduct of the C., C. & C. Co. in the premises, yet we are satisfied that the default which has been made will have an excellent effect. There was no good reason for the guarantee. Railroad companies are constantly in the habit of making similar wasteful and improvident contracts with each other. It is from this quarter that the greatest danger to railroad property comes. The explosion that has just taken place will show the danger of taking any security for which no sufficient valuable consideration has been received. Henceforward, the public will not buy them. Railroad companies, consequently, will not issue them, and a fruitful source of fraud and loss will be closed up. Confidence in railroad securi-

ties will be strengthened rather than weakened, should the C., C. & C. Co., even not be held. For what safety is there, so long as any body of Directors may enter into agreements not contemplated in the original scheme, and which may ruin (as is often the case) the work of which they have charge.

Population of Alabama.

The census in Alabama for the year 1855, taken under a special act of that State, classifies its present population as follows:

White males under 21 years.....	138,824
White males over 21 years.....	96,895
White females under 21 years.....	134,992
White females over 22 years.....	90,768

Total whites.....	460,979
Insane persons.....	474
Number of slaves.....	371,290
Free persons of color.....	2,449

Total inhabitants.....	835,192
Number of colleges.....	17
Number of academies.....	191
Number of common schools.....	1,098
Number of children at school.....	40,280
White children between 8 and 16 years... ..	93,443

Amboy and Upper Mississippi Railroad.

A convention of the friends of the Amboy and Upper Mississippi railroad is to be held at Oswego, Kendall Co., Miss., on the 27th inst. It is said that stock to the amount of \$300,000 will be represented.

Railroad Earnings.

The following are the principal returns that have yet been published for March:

HUDSON RIVER R. R.

The earnings for March, 1856, were.....	\$241,141
March, 1855.....	167,079

Increase	\$74,061
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NEW HAVEN R. R.

The receipts of this road for March, were—

Passengers.....	\$63,783
Freight	10,000

Total.....	\$73,783
Less paid Harlem Co.....	3,834

Balance	\$69,948
March, 1855.....	63,977

Gain.....	\$5,971
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LA CROSSE & MILWAUKEE R. R.

The earnings of the La Crosse and Milwaukee railroad company for the month of March, after deducting the proportion payable to the Milwaukee and Horicon railroad company, have been as follows:

From passengers.....	\$11,527
From freight.....	14,348
Transportation of U. S. mails and other services.....	1,350

Total	\$27,226
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ILLINOIS CENTRAL R. R.

The business of the road for March last was \$137,400, against \$92,622 in 1855. The annexed statement shows that of the first three months of 1856, against the corresponding period of 1855:

	1855.	1856.
January	\$57,088	\$134,044
February.....	59,324	118,907
March.....	92,622	137,400

Total	\$209,035	\$390,351
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—showing an increase of nearly 100 per cent.—
If this should continue during the year, the aggregate would reach about \$1,900,000.

HARTFORD, PROVIDENCE & FISHKILL R. R.

The receipts of this road for the six months ending March 31st, were \$154,268, against \$99,488 for the same period in 1854-5. Increase, \$54,780.

KENTUCKY CENTRAL R. R.

The earnings of the Kentucky Central railroad for the month of March, were \$27,247.64.

Chattanooga and Cleveland Railroad.

We are pleased to be able to announce that the work upon this road has actually begun and under auspices most favorable for its early completion. Major Wallace, President, and John D. Gray, Contractor, have been in our city for the past week in consultation upon the final plans—arrangements and manner of operations, and nothing now remains but to go ahead, the preliminaries of which are now being made in preparing shanties, bringing men and tools upon the ground. The Tunnel route has been decided upon as the most practicable and will be adopted. Commencing at Chattanooga the road will leave the Western and Atlantic at Messrs. Eastman & Lees foundry, and strike through the valley crossing the Western and Atlantic near Col. Brabson's residence, and strike the ridge near Mr. Scott's, some four and a half miles from Chattanooga. Tunneling the ridge at that place it will again pass over the Western and Atlantic by bridge and thus to Cleveland. The distance will not vary far from thirty miles. The work will be completed in fourteen months at the farthest, tunneling and all. The tunnel will be a fraction over nine hundred feet, and in the whole distance there will be but one bridge of any importance to be constructed. Well may the citizens of Hamilton and Bradley counties congratulate themselves on the prospects before them and so soon to be consummated. This road forms a link in the great chain of roads that must ultimately, and at a time not far distant, constitute the one great thoroughfare from the North to the South and South-West. The work will be prosecuted with energy. Mr. Gray has had an experience of years in railroading and knows just what and how every movement should be made. We congratulate the friends of the enterprise that its commitment has been put in the hands of such men as Campbell Wallace and John D. Gray. The road is a certainty, and that within the time above named. —Chattanooga Advertiser.

Eaton and Hamilton Railroad.

The third annual report of this company shows their earnings for the year ending 31st December last, to have been—

Passengers.....	\$73,366
Freight.....	96,456
Mails, &c.....	2,107

Total.....\$171,929

—being an increase over 1854 of \$45,777, or 36½ per cent. The current expenses, including rent, interest, and depreciations, were \$154,424, leaving as net profits \$17,504.

The company have experienced their full share of the effects of 1854. Various methods of securing funds sufficient to thoroughly finish the line, have been tried, but without success. They have on hand an issue of mortgage bonds of \$175,000, besides property unsold worth over \$110,000. To the stockholders, the residents on the line, and the people of Cincinnati, the importance of sustaining the enterprise is strongly urged. The capital stock is set down, in round numbers, at \$460,000, and the indebtedness at \$910,000; making a total of \$1,370,000. Against this, there are 42 miles of road worth, on an average, \$30,000 per mile, or \$1,260,000. The real estate will bring its value at least up to the liabilities. The gross earnings last year were above 13½ per cent. on cost. Next

year these will doubtless reach 16 per cent. or 8 as net profits. Over \$27,000 were paid last year for the use of rolling stock. The necessity of operating with their own engines and cars is apparent. A large revenue will soon be drawn from the line. The Cincinnati and Chicago road, of which it forms a link, is already ironed from the north-west terminus to Logansport, 105 miles. Within the current half-year it is expected to be completed to Chicago. With this and the various connections in progress, the company look with confidence for further valuable accessions to their business. Their relations with the Cincinnati, Hamilton and Dayton Company have been harmonious. No accidents involving loss of life to passengers, have occurred.

GENERAL ACCOUNT.

Capital Stock.....	\$454,690
Cincinnati Loan.....	150,000
Sterling Bonds.....	130,784
Dollar Bonds.....	449,000
Domestic Time Loan.....	56,910
Bills and Accounts Payable.....	117,845

Transportation, Profit and Loss, and Dividend.....	\$1,359,179
	179,546

	\$1,538,725
Construction.....	\$1,057,313
Equipment.....	97,822
Real Estate.....	187,018
Machine shop, building.....	13,232
Due from other companies, &c., &c.....	55,265

	\$1,410,650
Expense and Interest Accounts.....	128,075
	\$1,538,725

Cincinnati, Wilmington & Zanesville R. R.

At a meeting of the stockholders of this road, held at Circleville, the following gentlemen were elected Directors:—F. Corwin, J. A. Adams, Dan. McLean, D. Tallmadge, W. Medill, J. Boggs, Jr., and Isaiah Morris.

Strength of Compound Beams.

In the JOURNAL of the 8th of March was published a short article under this head. It is not in accordance with the common practice of this Journal to publish purely elementary matter, because the day has gone by, when the periodical press can profitably devote its space to this kind of reading. Our proper position as to practical science, is, to note important changes and improvements, when they occur, and to lend these columns to all discussion that shall tend to a more perfect development of existing laws. In short, while we are not teachers of primary pupils, we shall be always glad to aid in distributing that information that will be of value to readers. And nothing gives more pleasure than to know that among them are nearly all the Civil Engineers in the United States, and that this paper has been their accepted medium since the profession has needed one in this country.

With new papers conducted by young men, who have little knowledge, but inordinate ambition to appear something, it is not unusual to observe a different course. We have no objections. They begin a series of articles on Mechanics not quite equal in perspicuity to Lardner's little three shilling treatise, nor as profoundly scientific as the "Child's Multiplication Table." With the discussions of these papers the JOURNAL never meddles. They are worthy only of a boys' evening-

school debate. For once we depart from this course, because there is reason to believe a few readers desire it—not in accordance with our own pleasure.

A few weeks ago an individual living in the vicinity of New York sent to this office a slip on "single and double beams," which he had cut from that sheet and which he complained was unsatisfactory to his understanding, though he had not made the original inquiry. We declined noticing the article, because it would bring us into useless discussion. A second note contained a rewritten query much like the original, but sufficiently different to justify us in noticing it. The article containing a few thoughts concisely written and intended only for the young members of the Engineering profession was published in our issue of the 8th of March. Thereupon, we stir up a young sniperty-nicket out west who has been a flourisher in the quarrelsome sheet we have mentioned and who follows his master's benignant commands with commendable obedience.

Had the remarks on our articles been made by the editor of that sheet we should not have noticed them. Mr. Geo. L. Vose, however, is a respectable young gentleman and writes over his own name. Moreover, we have received other assurances that mechanics do sometimes assume what we said they did not. Mr. Vose is a young man, has little experience and evidently less reading. If he wants information, we refer him to Professor Barlow's Essays, to Tredgold, Muschenbrock, Ebbels, Hodgkinson's Experiments, &c., &c., &c. He has an ambition to be much in print. That may be commendable or it may not. If he or any other individual need assistance in our power they can have it by addressing us through the right channel. We are not oracles, however; Mr. Vose is. We do not know every thing; Mr. Vose does. We do not think our opinion will affect the practice of all the bridge builders; Mr. Vose thinks his will. We are not Chief Engineer of a Western railroad, though our last rodman enjoys that honor. Mr. Vose does, however, enjoy the honor of being a junior assistant to a Chief. We do not intend to annihilate Mr. Vose; Mr. Vose does intend to annihilate the RAILROAD JOURNAL. We do not intend to have the last word; Mr. Vose does, and he'll get it. We are in sound health with a hard skin; poor Mr. Vose is not in good health. He has a chronic disorder that seriously affects all his senses and prevents a clear perception of the phenomena of daily occurrences. On the 18th of March Mr. Vose was suffering a severe attack of that disorder; it is a species of *diarrhæa* known to the doctor as Egotismus. During the spasm Mr. Vose was strained nearly blind, so much so that he was unable to distinguish either from which. He was delivered of an intense desire to utter himself in print, which intention had been fiercely irritating his system a long time and which, when it was voided he sent carefully to his scavenger friend and mentor, whose drawer is the fitting receptacle for such excrements. The mentor seems to have admired the specimen; for it is carefully folded in the issue of March 29th, and presented to his gawking friends. We proceed to satisfy Mr. Vose, if it be possible, that he is not hurt.

First, let us take a general view of the letter of Mr. Vose. The succeeding copious extracts indi-

cate the tone of the article. "Fool." "I have—I did—I don't—I am—I ever—I do not deny—I do deny—I have seen." "NOW I MAINTAIN." This last effort seems to have exhausted Mr. Vose; for he eventually faints away into the modest "We" of editors, who are known to be exemplary in the exercise of that virtue, and winds up with a statement of interest because of recent date, viz:—"G. L. Vose."

Second. Having shown the tone of the article it is right next to present the object. The style of Mr. Vose is compact and his matter concentrated. So we are enabled by very brief analysis to ascertain his object, which is original and to him of paramount importance—more so indeed than to anybody else,—that object is—G. L. Vose.

Third. We will now strive hard to be serious because there may be young men anxious to learn some truth from everything they read, who will be misled if we do not set them right. Mr. Vose had but one object in writing. His mentor was confused and turned to Vose. Once in olden time Balaam couldn't speak, so his ass spoke for him. He has taken the liberty of assuming as doctrines held by us, certain stupidities of his own conception which he has valiantly battered.

Vose thinks it quite strange we should be widely acquainted with the mechanics of America; Vose has heard mechanics say, it strengthens a beam to saw it open and reclose it with tree-nails or bolts. Well, if he has, we can only say our associations have been different. We said that no mechanic ever uttered such a thought. We were too sweeping, we do not know all the mechanics. Vose does. We continued by describing the method actually pursued and we gave the reasons for it. (We refer the reader to the article.) The first reason for building such a beam, "it was impossible to procure a stick of clear timber of the size demanded for any thing like a reasonable amount of cost whether of labor of search or money." This without elaborating, seems sufficient to indicate the circumstances under which such beams are built; being in situations where suitable timber cannot be procured. Another reason given, was "the beam is stronger than a simple stick, if it has been properly constructed." Had a simple stick been selected under the circumstances that made necessary so expensive a beam (and yet the most economical to answer demands) what would it have been? Vose does not comprehend. We should be glad to walk with him through some forests where we have seen bridge contractors sweat. However we forget; Vose knows all the mechanics. We do not. We may suggest that all timber is not clear of knots and shakes—that all trees do not possess a straight grain. We are modest in saying so, because we know Vose will say, "I don't believe it yet."

We did not advise in any instance to split a stick of timber. We simply stated the reason for doing it where it actually takes place; under some circumstance compound beams are made of the same stick because of the poor quality of the timber and of such we said—

"If this beam be entirely constructed of the same stick of timber, as is frequently the case, you have still an advantage besides crossing the grains. By splitting and turning each alternate plank, end for end, you disperse the defects and splice by the weak points with sound timber, as

it is hardly possible that two unsound spots should come together on adjacent planks. Moreover, if the middle of the wood be shaky, the openings are bound as with cleats."

We did not specify poor timber, we should think this descriptive extract sufficient to indicate its own meaning. If any one misunderstand it we have no ambition to make it clearer.

We illustrated the motive for laying the grain in opposite directions. Vose says "but that the strength is increased any by reversing the grain I do deny; I have seen considerable in practice against any such conclusion and nothing in favor of it." Now as Vose declares this to be so, it cannot be otherwise. Of course we never saw any thing, have no experience;—Vose has seen everything and took all the experience when it was given out. He distributes it from time to time through the organ of "No. 210."

Let us see what Vose means by "reversing the grain." After quoting our illustration he says, "Now I maintain that the lattice has no points in common with the split and reverse piece; the grain of the wood in the lattice is at right angles to each other, (beautiful English, is it not?) while in beam the grains are parallel and not at all as in the lattice." If any boy of ten years can surpass that we desire to see him. We wrote an illustration of the effect of reversing the grain. To show the effect in the strongest possible light we supposed the grain to make an angle of 45° with the axis of the plank. Vose is determined we shall not introduce a cross grained plank, and so he tells us our lattice illustration was not correct at all, since, even after the grain is reversed in building a beam its direction remains parallel,—a condition of things that could exist only in a straight grained stick. Vose made this mistake; when he reversed the stick, *he also inverted it*; this made the fibres parallel. Allow us to assure Vose, that if he take two cross-grained planks and lay them together with the directions of the grain opposed, the fibres of the wood will cross each other and as shakes pursue the course of the fibres *somewhat* they will be secured by such an operation as if bound with cleats. We make the suggestion timidly.

Vose gives a reason for reversing sticks of timber. It is entertaining, and betrays a profundity of knowledge in the anatomy of woods quite worthy to rank Vose by the side of Boucherie, Lodiges and Dr. Lindley. He says "the beam is stronger at the end which is lowermost in the tree than at the top. If we split a beam, and reverse, we move one (1) strong end to the weak one (2) and one (3) weak one (4) to the strong one (5)." More beautiful English. Let us inform Mr. Vose that where timber is clear and straight, the reason for reversing is not as he supposes for increasing the strength. He is combating an error that does not exist. In large timbers it is sometimes customary to split them a single time and simply turn them inside out, bolting them together—this is a precautionary measure, and is designed only to examine the heart and to aid seasoning. Vose, in the full blaze of his dazzling stupidity, imagines that we said it strengthened a beam *vertically* to spread its factors.—He does not say so, but puts in evidence a quantity of his nursery whittlings, which he presumes to dignify with the name of experiments; these

are experiments on the vertical strength of the cross-section of the sticks, and were intended to upset all we said about beams. The truth is, we made the distinct remark, that "*lateral strength is gained by increasing the width of the stick, supposing it properly braced and bolted.*"

As to the experiments—they were made with small sticks of straight grain, of very sound, clear, well-seasoned wood. Any builder, who would cut up such timber to gain strength in building a bridge, would deserve a severe penalty for his immeasurable greenness—he should be condemned to spend a week—yes, we should say a whole entire week in the society of—Vose.

These experiments do not in any manner touch the matters of which we were speaking. Mr. Vose may not know it, but it is nevertheless true, that all the timber growing is not quite as fine as those little sticks of his—4½ feet long, 1 inch wide by 2 inches deep.

Vose says, "beam No. 2 (simply screwed) turned over while under a weight of 900 lbs.; while a solid one with the same unequal loading (the weight being placed on one side) did not upset because the halves were so completely joined by the natural fibre." This original argument is applied to a beam two inches wide and two inches deep, under a weight of 900 lbs. When one-half the beam came the other came with it—the same work was done by the weight, whether it were a simple or a compound beam.

It is sufficient for us to say, in conclusion, that we intended to lay down no new principles. We do not assume that we have the ability to do anything of the sort. We are not a fountain of knowledge; Vose is. We are a medium only by which some truths may be transmitted to those who look this way. We have learned enough to know that as compared to the sum of knowledge we have scarce entered on the threshold.

Having said all that is necessary as to the remarks made by "Sir Oracle," on what we chose to say of compound beams, will he permit us to give him some useful advice? We volunteer to give it, because we know his diffidence would never permit him to ask it of us.

And first, George, do not write so much—but read more. The neutral axis of wood is not exactly one-third the depth from the convex side, the distance is about three-eighths if we are to believe the best authorities.

Second, never sign your name twice to what you write; you open your article on "single and double beams," as you call them, by using the name "fool"—you close by writing "G. L. Vose." Now, George, do not repeat such an act. You will be set down as an egotist, and we know you are nothing of the sort. Be advised.

Again, child, do not be too free with the first person singular. As to Geo. L. Vose, it matters very little to any body what he "maintains" or what he "denies." When you state propositions they will be worth just as much as the reason on which they are based; nothing more. If they are cogent you will receive attention.

In an argument, never make use of facts to which the other side cannot by any possibility of chances have access. It is a trick resorted to by dishonest men to fortify weak positions. Your experiments do no harm—their results are all sufficiently correct; we did not make a statement

that they in the slightest disprove, even if they were of value.

When you have a position in your profession, or can produce men holding rank that gives them public confidence, to be your witnesses, then your experiments will be worth something.

Your worthy mentor in the same precious number that contains your letter, publishes an account of some remarks made by Robert Hunt, F. R. S., in a lecture before the Royal Cornwall Polytechnic Society, and asks his friends for information whether Robert Hunt is correct or not. So you have good precedent. Mr. Barlow being a Fellow of the Royal Society, and one of the most profound Civil Engineers of the day, it is only natural that you should repudiate his "old foggy" experiments and make some for yourself.

As to your experience, you haven't any yet that's worth sixpence outside your own pocket-book.—If you had very much more, you would be less satisfied with it than at present you seem to be.

The Illinois Central Railroad Company's Land Sales.

The Illinois Central railroad company's land sales thus far in 1856, have been :

Prior to March 1, 16,440.40 acres...	\$251,013 55
Month of March, 26,880.14 acres...	827,331 54
Total	\$578,345 09

The sales in 1855 were—

February and March	\$137,683 84
April	250,847 96
May	573,219 08

Cincinnati and Fort Wayne Railroad.

The annual meeting of this corporation was held in Winchester, Ind., on the 21st of February last. From the report then presented we learn that the contract for constructing the road-bed, which had been entered into in 1854, was cancelled by mutual consent in the beginning of last year, on account of the impossibility of meeting the cash payments. Subsequently small sections were re-let, at lower prices, and more favorable terms. The work on these progressed slowly through the summer season; but they have since mostly been abandoned, from the want of means. The total expenditure on construction amounts to \$90,840; on engineering, to \$21,550, on general expenses, to \$24,739; on right of way and depot grounds, to \$41,357; on losses from sales of bonds and real estate, \$21,765—making an aggregate of \$200,254. The company's indebtedness consists of—

Eight per cent. real estate bonds, due 1864	\$98,000
Seven per cent. first mortgage bonds, due 1874	1,000
Bills and accounts payable for salaries, right of way, engineering, and construction	25,774

\$124,774

Indebtedness, as per previous report 136,604

Decrease

There is a contingent liability as endorser, amounting to \$9,036. The endorsement of \$100,000 of the bonds of the Four Mile Valley Railroad Company has been cancelled. The total payments for work done and other objects last year were \$34,956. The total subscriptions amount to \$273,221, of which \$231,925 have been collected in real estate; and \$31,749 in cash and notes; leaving \$9,547 still due. Of the real estate there has been disposed to the amount of \$41,681;

and mortgage executed on \$101,900; leaving \$81,976 unsold and free of mortgage. The length of road from Richmond to Fort Wayne will be about 86 miles. Efforts were made both in New York and Cincinnati to raise money on mortgage; but owing to the embarrassment of the time and the want of confidence felt in new railroad enterprises, these have proved unsuccessful. A strong appeal is made to the shareholders to put their shoulders still more resolutely to the wheel.

Numerous and important connecting lines are in progress. The Lake Erie, Wabash, and St. Louis road has been for some time in operation from Toledo to Fort Wayne, and will be completed through to Danville, Ill., this ensuing summer. By midsummer, the Fort Wayne and Chicago will be opened to Plymouth, 75 miles. The importance of securing the business thus presenting itself is pointed out. A road from Ft. Wayne running north to Grand Rapids, Mich., has, a large portion of it, been put under contract. Efforts to divert the business from these tributaries by way of Union have been made, and may prove successful, unless this undertaking is pushed forward in good earnest.

The Iron Trade of Scotland 1855.

It appears that the year 1855, though an oscillating one, has been one of prosperity to the iron manufacturers. Extensive transactions were made during the year in pig iron, at from 55s. to 82s. 6d.; in rails, £7 10s. to £8 15s.; in bars, £7 15s. to £9 10s.; in cast-iron pipes, £5 to £6 15s.; railway chairs, £4 15s. to £5 7s. 6d. per ton. And the foundries and malleable iron work continue still generally active and well employed.

Owing to the peculiar adaptation of Scotch pig-iron for foundry and forgo purposes, the sphere of its consumption is rapidly extending, and it is penetrating quarters never reached before. Whilst the beneficial consequences which must ultimately accrue to the iron trade from the recent modification of the French import duties, and from the liberal movement of the Spanish government, in regard to the importation of British iron into that country, have not as yet been experienced.

We subjoin a statement of the number of furnaces in blast on the 31st of December in each month of the undermentioned years, and also the number of tons made:—

Year.	Furnaces.	Tons.	Year.	Furnaces.	Tons.
1849.....	112	690,000	1853.....	114	710,000
1850.....	105	595,000	1854.....	117	770,000
1851.....	112	780,000	1855.....	121	825,000
1852.....	113	775,000			

—Hunt's Merchant's Magazine.

The Frigate Merrimac.

The last Congress provided for the construction of six new war steamers of the first class, and of the number five have been launched—the Merrimac, at Boston; the Wabash, at Philadelphia; the Minnesota, at Washington; the Roanoke, at Norfolk, and the Niagara, at New York. The Colorado is on the stocks at Norfolk. The Merrimac, the first launched, has completed her equipment, and has gone to sea on her trial trip. The others will soon be ready for active service, and in model, speed, strength and force, they are, it is believed, superior to anything of their class among the navies of the Old World.

The Merrimac's spar deck is 281 feet long, from the knight heads to the taffrail, and is of 52 feet moulded breadth. The wales are 14 inches thick, seven on each side, which makes the actual measurement 53 feet 4 inches. The wales contain two through bolts clinched on the inside, and two short fastenings in each frame. Her bolts are all copper below one foot above the berth deck waterway. There have been driven into her hull 226,740 pounds of iron, and 139,778 pounds of bolt copper, 1½, 1¼, ¾ and ¾ inch in diameter.

The measurement of the ship is, by carpenter's tonnage, 3,800 tons, and she is about 4,000 tons capacity. Draught of water, 23 feet.

The ship throughout is constructed in the most substantial manner. The *U. S. Nautical and Naval Journal*, in describing her, says:

The main keelson is bolted through each floor timber, with two copper 1½ inch bolts, clinched on the under side of the keel. The entire depth of the keel is two feet, with a three inch shoe beneath. The frame is of live oak, sided 14 and 13 inches—this is coaged together sideways, and doweled endways. The keel, stem and stern posts, are built inside of the ship 10 inches. The greatest siding size of the stern post is 29 inches in the wake of the shaft. The frame is filled in solid, and caulked 14 feet out from the keelson. The dead wood is coaged together throughout. The after dead wood is secured by copper bolts, the length of which are from 14 to 17 feet of 1½ and 1¼ inches diameter, driven with a pile hammer weighing 110 pounds. Forward, she has ten live oak breast hooks, fastened through and through with copper, under the water, and iron above. Aft, she has 7 breast hooks, that side 14 stanchions, white oak, and side 10 inches. Her dead rise is 3 feet at half floor.

The boiler and engine keelsons are of white oak, siding eighteen inches.

Garboard strakes, ten inches thick, and bolted through and through from side to side, make the seats of floor three feet in length. The bottom plank is of white oak, five inches thick. The after cants are fitted closely together as high as the berth deck, and bolted edgewise. The frame is crossed-strapped by iron bands, four and a half inches by three quarters inch, running from stem to stern, and from the spar deck clamps down to the turn of the bilge. These are bolted into each timber and into each crossing with one and a quarter inch bolts, riveted on the inside. The strapping aft runs down to the dead wood. The depth of the hold from the berth deck is eighteen feet.

Her engine is, we believe, about eight hundred horse power, and her propeller, one of Griffith's patent, has two blades of seventeen feet diameter. The blades may be altered to suit any angle from thirty-six to forty-four degrees. The apparatus is fitted in a manner to admit of its being hoisted to the spar deck, and lowered to its bearing without trouble, that she may use her steam or not at pleasure. Her interior arrangements and all her accommodations for officers and men are spacious and well ventilated.

The Merrimac rates as a 40 gun frigate, but can carry metal to make her equal to a ship-of-the-line of 90 guns, of the old class. She is armed with twenty-four 9 inch shell guns, each weighing about 9,000 lbs.; and fourteen 8 inch shell guns, each weighing about 7,000. She has also (mounted fore and aft) two heavy pivot 10 inch shell guns, weighing 12,000 lbs. each, and throwing 100 lb. shells. The "boat guns" of the Merrimac, three in number, were cast at the Washington Navy yard, and can either be used in boats or mounted as field pieces, to use on shore. One is a twelve pounder, weighing 430 lbs., another, a twelve pounder, weighing 760 lbs.; and the third a twenty-four pounder, weighing 1,200 lbs.

The guns and carriages are of peculiar construction; the former very large at the breech, and beginning to taper abruptly near the centre, terminating small at the muzzle. These guns are provided with an elevating screw, and will elevate 9° 45' and depress 7° 30'. They are provided with carriages of a new model, having no after trucks. The guns thus provided will be more steady upon the deck, and not so liable to break from their breechings at sea; while in firing, the recoil will be sufficient to throw them back.

ULSTER IRON.

THE subscribers keep on hand a full assortment of this superior make of iron, suitable for railroad, locomotive repairs, &c., &c. EGGLESTON, BATELL & CO., 166 South st.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.
JAMES PUNNETT and others, plaintiffs, against **THE MAYSVILLE & LEXINGTON RAILROAD COMPANY** and others, defendants.—By virtue of the Judgment of the Fayette Circuit Court, rendered in the above case, I will sell, at public auction, on *Wednesday, the 23rd day of April, 1856* at the Public Square, in the City of Lexington, State of Kentucky—

THE MAYSVILLE & LEXINGTON RAILROAD;
both that part of the road which is completed and the part unfinished; embracing the road bed, and superstructure where the same is laid down, the right of way, and all lots of land in and adjacent to the road track, with all the buildings, stations, car-houses, and improvements belonging to said railroad, together with the franchises of the Maysville and Lexington Railroad Company; all of which will be sold together, upon credits of six, twelve, eighteen, and twenty-four months, in equal instalments.

At the same time and place, I will also sell all the Lots of Land belonging to said Company, and not adjacent to the railroad track—consisting of a lot of land in the City of Lexington, a tract of land in Fleming County, and town lots in Paris and Millersburg, on credit of six and twelve months, in equal instalments.

And at the same time and place, I will sell all the Locomotives, Freight and Passenger Cars, Cross-Ties, &c.—consisting in part of two locomotives and tenders of twenty-four tons each, three passenger cars for sixty passengers each, one entirely new and all in good order; seven box freight cars, eleven platform cars, eleven tops for platform cars, five gravel cars, and a top for another; fifteen pairs of car wheels, a hand car, a lot of bridge and car iron; 9,500 cross-ties near Maysville, 1,350 of which are of locust and the remainder of oak; about 6,000 cross-ties along the line of the railroad between Lexington and Millersburg. The new passenger car, two freight cars, and the tops for platform cars, are in Maysville, all the other rolling stock is in Lexington, and the whole is of 4 feet 8½ inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the purchase money, having the force of Judgments, with good security, to be approved by me, of one of the following kinds, to wit:—1. Personal security. 2. First Mortgage Bonds of the Maysville and Lexington Railroad Company. 3. Mortgages in real estate in counties near this railroad or the Covington Railroad. 4. State and United States Bonds. 5. A First Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of purchasing, by the undersigned, who will be found in Lexington Ky., or by **A. M. JANUARY**, at Maysville. Letters of enquiry, addressed to me, will be attended to. **EBEN MILTON,**
Receiver and Commiss'r.
LEXINGTON, Kentucky

2m8



NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1856.

Extension of Trunk to Nelson's, Shubenacadie.

TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until **SATURDAY**, the 10th day of May next, at 12 o'clock, noon, for the Construction and Finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, on the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Rails, Chairs, Spikes and Side Keys. The work to be completed by the 30th day of June, 1857.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock A.M.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

814

JOSEPH HOWE, Chairman.

New York and Erie R. R.

On and after *Monday, Dec. 31st, 1855*, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8¼ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

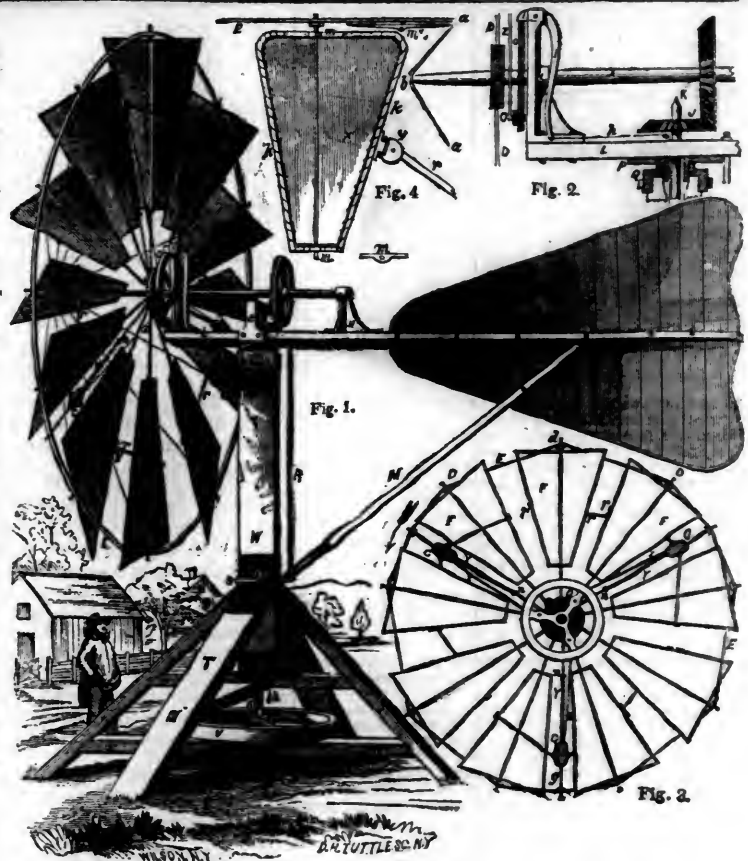
No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

Lt. **D. C. McALLUM**, General Supt.

THIS MILL IS ADAMABLY ADAPTED TO RAISING WATER AND SAWING WOOD AT RAILROAD STATIONS.—It is entirely self-regulating thus: The tension of the springs Y, keeps the sails F, turned or set to receive the power (wind), and the centrifugal force (of the weights G), whenever the velocity becomes too great, turns off the power, by turning the sails out of, or edge-wise to, the wind. Unlike steam or horses, it requires no attendance, eats no oats, burns no fuel, sets fire to no buildings, but is always reliable when there is wind. Sufficient tank capacity should be supplied to provide for calm. Sizes of mills vary from 6 feet in diameter of wind-wheel to 50 feet, and prices from \$60 to \$800. A mill giving an average of about 5½ horse power, 16 feet diameter, will cost \$200. All requisite information will be furnished on application to this office, where a model may also be seen. These mills are about being put up on the Boston & Worcester and Mobile & Ohio railroads where their operation may also be witnessed. Address or call on

N. DAVIDSON, General Agent, No. 9 Spruce st., New York.



**FRANK G. JOHNSON'S
PATENT SELF-REGULATING WINDMILL,**
Brooklyn, N. Y.

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK. (ONE DOOR SOUTH OF BEAVER STREET.)

RAILROAD AGENTS AND COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

Notice to Contractors.



M. C. AND L. R. R. OFFICE,
Clarksville, Tenn.

THE MEMPHIS, CLARKSVILLE, & LOUISVILLE RAILROAD CO. invite sealed proposals for grading sections 1 to 30. Work generally heavy. Bridges—Cumberland, 500 feet long; Red River, 400 feet long. Materials—Earth, Rock, Loose Rock, and Hardpan. Means of the Company—Cash; Tennessee State Bonds; City and County Bonds. Time of completion—December 1st, 1857. Time of letting—April 24th, 1856. Plans, profiles, and specifications may be seen at the office.

G. B. FLEECE, Engineer in charge. **W. B. MUNFORD**, Pres't M. C. & L. R. R.

SCOTCH IRON.

PIG IRON, Bars, Boiler Plates, Sheets, Hoops, Railroad Bars, Tyres, &c.

CALEDONIAN PATENT LAP-WELDED TUBES.
PATENT CAST IRON PIPES—made from best Scotch pig iron—cast vertically and drill easily.

WILLIAM ROY, Agent,
74 Broadway, New York.

6m13

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by **THEODORE DEHON**,
10 Wall st., near Broadway, N. Y.
March 13th, 1856. 4111

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

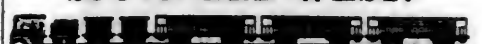
THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

31*

A. WILKINS.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

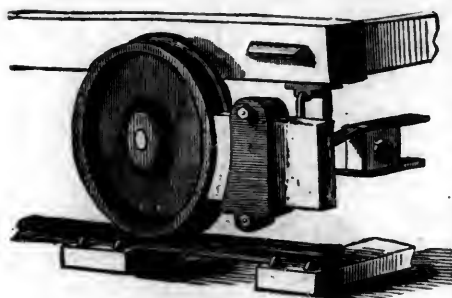
From New York to Wilmington	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	6 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati	\$13 50
do do Louisville	14 50
From Philadelphia to Cincinnati	11 00
do do Louisville	12 00
From New York to Indianapolis	16 00

An extra charge will be made for week and state rooms on board the boat. **GEORGE A. PARKER, Supt.**

PAIGE'S. ADJUSTABLE CAR BRAKE BLOCKS!



BY this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent.
DINSMORE'S RAILWAY GUIDE Office, 9 Spruce st., N.Y.

NOTICE TO Contractors and Capitalists.



San Francisco and Sacramento Railroad.

SEALED PROPOSALS will be received by the undersigned in New York City from April 10th, until May 10th, 1856, for the construction and equipment entire of the SAN FRANCISCO AND SACRAMENTO RAILROAD, California, from the City of Sacramento to the City of Beucia, a distance of 53 miles.

The Railroad is upon the main trunk line from San Francisco to the Interior, over which passes three-fourths of the entire inland trade and travel to California, saving 30 miles to distance over the present route, reducing the time from 8½ to 3½ hours, and passing through the fertile lands of Solano and Yolo Counties, the richest agricultural counties in the State. It connects at Sacramento with the Sacramento Valley Railroad now built and running, and is the key to San Francisco for all lines running from Northern and Eastern California.

Maps, profiles, and specifications can be seen and every information obtained upon application to the undersigned Room No. 7, Metropolitan Bank Building, cor. Broadway and Pine st., New York.

THEODORE D. JUDAH,
Chief Eng'r and Commissioner, S. F. & S. R. R.
New York, April 7th, 1856.

York and Cumberland R. R.



NOTICE.

To the York and Cumberland Railroad Company, and all whom it may concern.

BY virtue of the Deed of Conveyance to me, executed by said Company, and of the Trust powers therein named, which deed bears date the Sixth day of February, A. D., 1851; and by the concurrence of several of said bondholders, as well as in my own behalf, as grantee and bondholder, this is to give notice to said Company, pursuant to the terms of said deed, and to all whom it may concern, that for breaches of the conditions and covenants in said deed contained, by said Co., to and with the undersigned as contractor, and to and with the bondholders, described in said deed, I did, on the Thirty-first day of March last, past, and for the purposes of the deed and trust aforesaid, take full and complete possession of the premises and property therein described, both "personal and real, rights of way and corporate franchise, with all its privileges and immunities, as the same

exist by virtue of the said Company's act of incorporation and the laws of the State, together with all the buildings upon said premises," excepting only the Depot and lot of land whereon the same stands, situated in the City of Portland, but meaning to include all iron rails, road-bed, track, and other structures of said Corporation, that has been acquired by said Corporation, "be the same more or less, and throughout the whole line of said road, and including all cars, engines and furniture, that have been purchased by said Company;" and that I shall dispose and sell the same for the purposes aforesaid, by public vendue, on WEDNESDAY, the Thirtieth day of April current, at the Depot of said Company, in the City of Portland, at Ten of the clock in the forenoon, to the highest bidder, for cash, payable at the close of the sale, and on execution of the deed of sale, and to the full extent of the powers derived to or by me, under and by virtue of said deed, and not otherwise. Said deed is recorded in the Registry of Cumberland County, book 226, page 467; and in the Registry of York County, book 216, page 472; and in the records of the town of Westbrook, Vol. 3, page 20, and in the records of Gorham, book 1, pp. 144, 145, 146, and in the records of Portland, Vol. 7, page 145—to which several records reference is made for more precise information, as also to the several printed annual reports of the acting Directors and Treasurer of said Company, in August of the years 1851, 1852, 1853, 1854 and 1855. For all other desirable information which the Treasurer of said Company can furnish from his books, application can be made to S. W. EATON, Treasurer, who will cheerfully facilitate inquiry respecting the premises.

Portland, April 3d, 1856.

J. G. MYERS.

3c15

Notice to Contractors.



OFFICE OF RACINE AND MISSISSIPPI R. R. CO.
Racine, Wis., March 15th, 1856.

PROPOSALS will be received at this office until the 10th day of April next, at 12 o'clock M., for the Grading, Masonry and Bridging of the second division of the Racine and Mississippi Railroad, being from Beloit to Savanna on the Mississippi river, a distance of about sixty-eight miles. The whole work to be completed during the present year and in time for laying the track previous to January 15th, 1857. This work lies wholly through the northern counties of Illinois west of Rock river. The country is densely populated and unsurpassed in point of health and abundance of supplies.

Proposals will also be received at same time for the construction of the Bridge across Rock River at Rockton.

Plans, profiles, and specifications, together with all necessary information can be obtained on application at this office on and after the 25th instant.

HENRY S. DURAND, President.

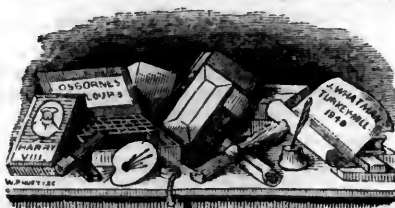
For general information parties can refer to the Company's Agents in New York, Messrs. CLARK & JESUP, No. 70 Beaver st.

The time for receiving proposals as above is hereby extended until the 20th day of April.

STATIONERY.

Hufty's

Engineers, Architects and Draftsmen's
STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tapes, Mouth Glue, Cross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Palettes, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books.

All goods packed with care, and forwarded to any part of the United States.

JOSEPH HUFFY,
Successor to H. L. Lipman,
140 Chesnut St., Philadelphia.

May 14, 1856.

BUSINESS CARDS.

H. M. SMYTH, COMMISSION MERCHANT

AND
MANUFACTURERS' AGENT,
No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axles, wrought Iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

Rollins & Haviland,

STOCK BROKERS,

38 Exchange Place NEW YORK.

JOHN T. ROLLINS.

WALTER HAVILAND.

London Agency for Sale of Bonds, &c.

MESSRS. LANCE & CO. are making more generally known in England, the great advantages of American Securities for investment.

During the present year Messrs. Lance & Co. have disposed of a large amount of American and Canadian Railway Bonds, and are fast extending their connection, they will be happy to correspond with parties having good Amer. Securities for sale.

Messrs. LANCE & Co. have had experience in the purchase and shipment of iron, and offer their co-operation to those about to negotiate for the disposal of bonds and the purchase of rails.

P.S.—Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published.

10 Regent st., WATERLOO PLACE.

LONDON, Oct. 1855.

6m46

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.

A. W. GREENLEAF, late of No. 2 Wall st.

REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank.

1y18

ELLERY & GIBBONS,

No. 10 WALL ST.,

BANKERS, DEALERS IN DOMESTIC AND FOREIGN EXCHANGE, &c., are prepared to negotiate Stocks, Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't Oc'n Bk,

SILAS K. EVERETT, of Everett

& Brown, N. Y.

WELLS, FARGO & Co. 18tf

CORNELIUS W. LAWRENCE,

Esq., N. Y.

DEUEL & Co., Bank'rs, Philad.

SAMUEL WILLETS, Pres't of

Am. Exchange Bank, N. Y.

Lord & Wright,

Counselors at Law, Cincinnati, Ohio.

16t

ENGINEERS.

LITHOGRAPHIC AND DRAUGHTING.

Office 131 Fulton st., NEW YORK.

G. WEISENBORN,

CIVIL AND MECHANICAL ENGINEER,

employs Draughtsmen, and is at all times prepared to execute his work with promptness. He will furnish Architectural and Mechanical Drawings, Linear and Perspective, and if desired they will be lithographed in the HIGHEST STYLE OF THE ART.

W. G. ATKINSON,

CIVIL ENGINEER, SURVEYOR AND DRAFTSMAN,
CUMBERLAND, Maryland.

RAILROAD routes located, planned and estimated. Maps and Reports furnished. Researches made for Coal, Iron, Copper, Lead and other Minerals, Metals, &c. Contract work in Tunnels and heavy Graduation measured and reported in detail. Topographical Drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological Plans prepared.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dudgeon's Hydraulic Jack, Sewall's Sainometers, etc., etc.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, etc.

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1y17

ENGINEERING WORKS.**LYONS' TABLES.**

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.

SHEET NO.	General Table for all Bases and all Slopes.	SHEET NO.	for Base 18 ft. Slope.
1.	14	13.	20
2.	15	14.	21
3.	16	15.	22
4.	17	16.	23
5.	18	17.	24
6.	19	18.	25
7.	20	19.	26
8.	21	20.	27
9.	22	21.	28
10.	23	22.	29
11.	24	23.	30
12.	25	24.	31

The Tables are printed in clear, bold type on tinted paper; sheets 25x16 inches. They may be used by candle-light without injuring the eye-sight. Each sheet is complete in itself, and embraces all that is wanted in connection with the Base or Slope designated, whether on level or side hill cross section.

Sold in separate sheets, at 25c. each, or the whole handsomely bound in cloth in one volume for \$7.50, by JOSEPH HURTY, 139 Chestnut st., Phila.; WM. MINNIN, Baltimore, Md.; ENTWISTLE & SON, Alexandria, Va.; McCLELLAN & Co., Toronto, O. W.; also

For sale at the office of this paper.

SCIENTIFIC WORKS,

PUBLISHED BY

D. APPLETON & CO.,

346 and 348 BROADWAY, NEW YORK.

Appleton's Dictionary of Mechanics, Machines, Engine Work, and Engineering, 2 vols. 8vo.	\$12.00
Bourne's Catechism of the Steam Engine, Bourne's Treatise on the Screw Propeller, 4to	\$9.00
Gillespie's Treatise on Surveying, 8vo.	\$2.00
Griffiths on Marine Architecture	\$10.00
Henck's Field Book for Railroad Engineers	\$1.75
Holbyn's Dictionary of Scientific Terms, 12mo.	\$1.50
Knapen's Mechanic's Assistant	\$1.00
Lyell's Principles of Geology, 1 vol. 8vo.	\$2.25
Lyell's Manual of Geology, 1 vol. 8vo.	\$1.75
Overman's Metallurgy, 8vo.	\$6.00
Templeton's Mechanic's, Millwright, and Engineer's Pocket Companion	\$1.00
Ure's Dictionary of Arts, Manufactures, and Mines, 2 vols. 8vo. new edition.	\$5.00

D. APPLETON & Co. have on sale all the important English Engineering Works.

IMPORTANT TO

ENGINEERS, RAILROAD CONTRACTORS, and others.

Messrs. WILEY & HALSTED, 351 BROADWAY, New York,

BEG to inform those interested in Engineering, either Civil, Mechanical, Military, or Naval, that they keep constantly on hand, and offer for sale on reasonable terms, all the best and most approved works on the above-mentioned subjects, both

ENGLISH and AMERICAN.

They will also continue to supply the following Magazines punctually to subscribers at the annexed prices per annum:—

Civil Engineer and Architect's Journal	\$7.50
Mechanic's Magazine	4.00
Practical Mechanic's Journal	3.50
Repository of Patent Inventions	12.00
Artizan	4.00
Mining Journal	9.00

W. & H.'s CATALOGUE OF ENGINEERING AND MECHANICAL WORKS GRATIS TO ALL WHO DESIRE IT.

W. & H. will give especial attention to the importation of Engineering and Architectural works, either by the single volume or quantity, from England, France, and Germany.

ENGINEER'S FIELD BOOK

By O. S. CROSS, Civil Engineer.

THIS work is designed as a pocket companion, and embraces all the necessary tables for prosecuting railroad surveys, in the most compact form.

It is subdivided as follows:

- 1st. The method of staking out railroad curves and keeping field notes.
- 2d. Railroad curve tables for expeditiously determining the points at which commences the curving.
- 3d. Application of the Prismoidal formula in determining the quantities of excavation and embankment of canals and railroads from transverse sections.
- 4th. Excavation and embankment tables for expeditiously determining the cubic yards from mean area.

It is a plain, clear and most valuable book for practical Railroad Engineers.

For sale at this office. Price \$1.

New Book for Engineers.**Pocket Book**

FOR

Railroad and Civil Engineer's.

Containing new, exact, and concise methods for laying out Railroad Curves, Switches, Angles, and Crossings; the staking out of work, levelling; the calculations of cuttings and embankments, earthwork, &c.

By OLIVER BYRNE.

A FEW NOTICES FROM ENGINEERS AND THE PRESS.

"It is an excellent book. Out of half a dozen pocket books of that sort which I have and of all I have seen, it is decidedly THE BEST."

Byrne has a good many new things in his book and he puts all in a better shape than most writers. Much of this will be useful to me immediately, as I shall be calculating EXCAVATIONS and EMBANKMENTS considerable this year."—From a practical Engineer at the South.

"This little volume is intended for the pocket of the practical Engineer and is filled with valuable rules and directions to aid him in his work."—*Albany Evening Atlas*.

O. SHEPARD & CO., Publishers, 152 Fulton st., N. Y.

N.B.—Price \$1.50, and sent by mail free of postage. The above book is got up in the most convenient style for Engineers, being in tucks, and containing blank paper for drawings with a drawing pencil attached. 3m7

New Works on Civil Engineering.

THE Field Practice of laying out Circular Curves for Railroads.—By JOHN C. TRAUTWINE, Civil Engineer—3d edition in pocket-book form.

A new and rapid method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Diagrams.—By John C. Trautwine, Civil Engineer—2nd edition with 10 Copper Plates.

Price One Dollar each—postage on the Curves Three Cents—on the Excavation and Embankments, Six Cents.

For sale by

WILLIAM HAMILTON,

Hall of the Franklin Institute,

Philadelphia.

January 1st, 1884.**PROFESSIONAL CARDS.****Atkinson, T. C.,**

Mining and Civil Engineer, Alexandria, Va.

Barnes, Oliver W.,

Chief Eng. Pittsburg and Connellsville R.R. Co., Pittsburg, Pa.

Edward Boyle,

Chief Engineer, 2d, 3d, and 9th Avenue Railroads New York Office 123 Chambers st.

Clement, Wm. H.,

Little Miami Railroad, Cincinnati, Ohio.

James Converse,

Chief Engineer Galveston, Houston & Henderson Railroad, Galveston, Texas.

Alfred W. Craven,

Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,

Steam Marine and Railway Engineer, 64 Broadway, New York.

Davidson, M. O.,

Civil and Mining Engineer. Office Swanton Coal and Iron Co., 51 Exchange Place, BALTIMORE, Md.

C. Floyd-Jones.,

Division Eng'r 3d and 12th Divisions, Illinois Central R. R., Vandalia, Ill.

Gay, Edward F.,

Civil Engineer, Philadelphia, Pa.

Gilbert, Wm. B.,

Syracuse and Binghamton Railroad, Syracuse, N. Y.

Gzowski, Mr.,

St. Lawrence and Atlantic Railroad, Toronto, Canada.

Grant, James H.,

Nashville and Chattanooga R. R., Nashville, Tenn.

Theodore D. Judah,

Chief Engineer, Sacramento Valley Railroad, Sacramento, Cal. 1y23

Robert B. Gorsuch,

Civil and Mechanical, Steam and Hydraulic Engineer, Tabernacle Building, 340 Broadway, N. York. 18y

S. W. Hill,

Mining Eng'r and Surveyor, Eagle River, Lake Superior.

D. Mitchell, Jr.,

Chief Engineer Pittsburgh and Steubenville, and Chartiers Valley Railroads, Pittsburg, Pa.

Samuel McElroy,

Assistant Engineer, New York Navy Yard.

Mills, John B., Civil Engineer,

Sackett Harbor and Saratoga R. R., 24 William St., N. Y.

Saml. & G. H. Nott,

Civil Engineers, No. 6 Niles' Building, Change Avenue, Boston.

Osborne, Richard B.,

Civil Engineer, Office 73 South 4th st., Philadelphia.

Prichard, M. B.,

East Tenn. and Georgia Railroad, Knoxville, Tenn.

W. Milnor Roberts,

Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,

Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

J. S. Sewall,

CIVIL ENGINEER,

ST. PAUL MINNESOTA.

Charles L. Schlatter,

Chief Engineer Brunswick and Florida Railroad, Brunswick, Georgia.

Shipman & Hammond,

Civil Engineers, 63 Trinity Building, 111 Broadway, N. Y.

Straughan, J. R.,

Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,

Chief Eng'r Dytown and Prescott Railway, Prescott, Canada.

Steele, J. Dutton,

Pottstown, Pa.

Charles B. Stuart,

Consulting Engineer, 23 William str., New York.

Edward W. Serrell,

Civil Engineer, 23 William st. New York.

Trautwine, John C.,

Civil Engineer and Architect, Philadelphia.

A. B. Warford,

Chief Engineer, Susquehanna Railroad, Harrisburg, Pa.

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Feb 1, 1853

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THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned soil is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands is carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it com-

nects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1853, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent per annum, may be negotiated by special application. Twenty per cent from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

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Land Commissioner of the Illinois Central R. R. Co.,
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 16.]

SATURDAY, APRIL 19, 1856.

[WHOLE No. 1,044; VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, April 19, 1856.

Railroad Bridges--Suspension Bridges.

No department of Civil Engineering is more interesting and important, and certainly none has received so considerable a degree of attention in this country as that of Bridging.

The abundance of wood—the diversity in the character of difficulties to be overcome, no less than in the characteristics of the mechanics, who plan the various designs, have had the effect to develop and perfect the art of Bridge building, as it could not be developed where these causes have no existence. Yet we must not take too much credit to ourselves as Americans, for having so completely analysed the principles of trussing—the truth is, that some of the ablest Engineers in this country are foreigners; and the very best argument in favor of an elaborate education for the profession is to be found in the fact, that these gentlemen coming among us, prepared for the duties of mechanical construction by a careful training in the Polytechnic Schools of Europe, are able to adapt themselves at once to our wants, and by the aid of that superior mental discipline they have received at home, succeed in solving the most important problems in American Engineering. It is, moreover, true, that among American mechanics, those who have been the most successful in this important branch of art, have been the best educated. The great problem that presents

itself in the United States to every Engineer is not simply, What is the most complete way to overcome a certain difficulty? But, How can that difficulty be subdued at the least expense? We are forced to study economy. Compared with the miles of territory to be intersected by Railroads, we have few dollars. Yet we build Railroads continually, and they cost scarcely as much per mile when complete as the land damages of an English line. So, too, of our wooden Bridges. When they do undertake a work of this kind in Europe, they build nothing to compare in economy with our own structures. Not as regards the price per foot—that is inevitably greater on that continent—but as to weight or solid measurement.

We are led to these remarks by thinking of some important works now attracting attention.—The Legislature of this State has just granted a charter to a company to bridge the Hudson at Albany, where the river is nearly 2000 feet in width.

The Grand Trunk Railway Company of Canada, has resolved to bridge the St. Lawrence at Montreal, at distance of 7000 feet; and the Lexington and Danville Railroad Company of Kentucky are constructing a bridge to cross a chasm of 1200 ft. width by a single span.

The last will be a Suspension Bridge, built by Mr. John A. Roebling, a German Civil Engineer, to whose genius this country is indebted for the adaptation to railroad uses of the structure over the Niagara river, below the Falls. This is the first successful attempt to make use of the Suspension Bridge for the constant transit of Railroad trains—though such use was long ago advocated by Mr. Charles Ellet, Jr.

When first built in Europe, Suspension Bridges were for the passage of pedestrians only; that was more than a hundred years ago. In 1741, a bridge was built in England, across the Tees, for the use of the miners. The span was 70 feet, over a chasm of 60 feet deep. It is about 40 years since such bridges were first constructed for the passage of common carriages.

The Suspension Bridge at Wheeling, is the longest single span in the world, being 1010 feet from centre to centre of the supporting towers. It was constructed with twelve cables of 550 strands each, of No. 10 iron. The Engineer was our distinguished countryman, Chas. Ellet, Jr.

The longest span in Europe, is a Suspension Bridge over the Saane Valley, in Switzerland, built in 1834. Its length is 870 feet, and its cables are in the aggregate composed of 4224 strands, of iron wire, No. 12 gauge. Mr. Chaley, Engineer.

The Bridge over the Niagara river below the Falls, was first built by Mr. Ellet. The span was 759 feet.

The Fairmount Bridge over the Schuylkill, was erected by Mr. Ellet in 1841. Its span is 400 feet, and it is supported by 2500 strands of No 10 wire.

The cables of these Bridges were all constructed of wire. This has not been customary in Europe, where the Bridges have generally been suspended on chains formed of wrought iron bars.

A Bridge over the Thames, at Charing Cross, is suspended on four of these chains, having an aggregate cross-section of 296 square inches, the span being 677 feet,—deflection of catenary, 50 feet.

Mr. Telford built a Bridge over Menai Straits, of 570 feet span. This structure was begun in 1819, and completed in 1826. It is suspended on 16 wrought iron chains, having an aggregate cross-section of 260 square inches. This bridge is 100 feet above the spring tides, which rise to a height of 20 to 30 feet.

A Suspension Bridge over the Tweed, near Berwick, was built in 1820. It is suspended on six chains, whose links are made of wrought iron bars, two inches in diameter, the aggregate cross-section being 38 square inches. The span is 450 feet.

The Kelso Bridge over the Tweed, was built the same year. The span is 437 feet, suspended on 12 iron chains, arranged in pairs.

A Bridge was built over the Esk, in Scotland, in 1829, and was partially destroyed by the wind in October, 1838. It is suspended upon 4 chains, with links made of wrought iron, five inches by one inch. Aggregate cross-section of the chains, 30 square inches. It spans 482 feet, deflecting 42 feet.

The Marlow Bridge has a span of 426 feet; deflection, 29 feet. The floor is suspended upon four chains, and the aggregate cross-section of the iron is 64 square inches.

The Hammersmith Bridge, connecting Hammersmith with the Surrey side of the Thames, was

completed in 1824. Span, 422 feet; deflection, 29 feet. It is suspended on eight chains, arranged in pairs. Aggregate cross-section, 180 square inches.

The Conway Bridge, in Wales, was built by Mr. Telford in 1826. Span, 327 feet; deflection, about 23 feet. It is suspended on eight chains, of which the aggregate cross-section is 130 square inches.

In 1848, Von Metis completed a Suspension Bridge over the Danube, at Vienna. The suspension chains, two in number, are made of steel bars, 2.42 inches by 0.8 inches in thickness. The span is 334 feet; deflection, 2.5 feet. Aggregate cross-section of the chains, 15.5 square inches.

Another Suspension Bridge over the Danube, near Pesth, in Hungary, was completed in 1849.—This bridge cost more than three millions of dollars. The center span is 670 feet long—the total water-way being 1,250 feet. The towers were 150 feet high above the water. The chains were of wrought iron, having an aggregate sectional area of 521 square inches. During the Revolution, this bridge sustained without injury the immense strain imposed upon it by a retreating army.

A failure was the consequence of attempting to pass Railroad trains over a Suspension Bridge that spanned the Tees; although its length was but 300 feet. Another plan has been substituted for it.

A Suspension Bridge at Broughton, near Manchester, was destroyed in 1851 by the vibrations resulting from the marching of a company of soldiers.

Suspension Bridges have suffered more from the effects of the wind than from any other cause. The wind destroyed the noble Wheeling Bridge. It injured the Chain Pier at Brighton in 1833, breaking many of the suspension rods, and carrying away a considerable portion of the road-way. It nearly destroyed the Montrose Bridge in 1838, raising portions of the chains and flooring of the bridge, and letting them down again; Mr. Cresy, we believe, attributes the destruction to a defect in forming the suspension rods. In 1839, more than one-third of the suspension rods in the bridge over Menai Straits, were broken by the action of the wind. Nearly 200 feet of one carriage-way were destroyed. "During the height of the storm, a wave was observed to traverse the platform or flooring of the bridge, in an oblique direction; the height of which wave was estimated by the bridge keeper to be not less than 16 feet. The motion was observed to be greatest about half way between the tower, or point of suspension at one end of the bridge, and the center of the catenary. The wave increased in height in its progress from the tower, until it attained its maximum altitude near the end of the first quarter of the distance across the bridge, and at the same instant the extreme depression was near the termination of the third quarter. The wave then gradually diminished to the center of the bridge, or the point where there was usually the lowest deflection of the catenary; and it afterward increased its altitude to the third quarter of the distance across the bridge, where it again attained its greatest height. At that moment, the greatest depression was at the end of the first quarter, where the wave had before been the highest. The flooring, or platform of the bridge, and the main chains upon which it was suspended, were equally subjected to this undulatory motion."

It is said that the lightness of the Suspension

Bridge on long spans is the cause of its liability to danger from the wind. It may happen, however, that accidents will follow the course of construction, that relies entirely on weight to counteract this effect. The most remarkable disaster on record, is the destruction of the bridge at Wheel'g. In his report to the Bridge Co., Mr. Ellet says:—

"We may multiply our wires, and the additional permanent load, until we obtain inertia sufficient to sustain lightly the momentum of the heaviest locomotive engines and their trains." Again:—"Although, as an auxiliary, and within moderate limits, trusses may be advantageously applied, permanent strength and stiffness can be most cheaply obtained in suspension bridges of very great span, by the addition of weight." The total weight of this bridge was estimated to be 920 lbs. per lineal foot. On the 17th of May, 1854, it was thrown down by a tornado. It is stated by an eye witness, according to Mr. Roebling, that the waves of the floor, caused by the wind, rose to a height of over 20 feet. The same Engineer says:—"The destruction of that bridge was clearly owing to a want of stability, and not to a want of strength. This want of stiffness could have been supplied by over-floor-stays, truss railings, under-floor-stays, or cable-stays."

The effect of this catastrophe was to weaken the confidence of men in the Suspension Bridge. Many such disasters had occurred in Europe; it was supposed that in this bridge a new arrangement and a judgment enlarged by experience of those Eastern works, would effectually guard against such dangers. It is very possible that if the bridge had been lighter, the cables would not have been torn away. The momentum of the body of the structure falling through 20 feet in its terrible throes was enormous, and the cables could not sustain it. But trussing or stays would have prevented such plunges.

Notwithstanding the hesitation of the public to trust such structures, the Bridge at Niagara is completed, and has been in successful operation more than a year. It has thus far accomplished all that its Engineer promised for it. On the 18th of March, the Railroad track "was opened for business by passing an experimental train composed of 20 full loaded cars, pushed by a 26 ton engine from the Canada to the New York depot."

The gross weight was estimated at 326 tons.

Tension of cables resulting, 590 tons.

Aggregate section of cables, 240 sq. in.

Therefore tension per square inch, 4917 lbs.

" " of single wire, 82 lbs.

Average length of cables and chains, 1359 feet.

Elongation of wire per square inch caused by 2240 lbs., 0.0001.

Elongation of cables by 2240 lbs., 0.1359 feet.

From these data now we can find the elongation of the cables caused by 326 tons,

$2240 : 4917 = 0.1359 : x$ and $x = 0.2983$ feet.

The depression of the bridge, caused by this elongation is found by the following formula:

$$X = \left\{ \frac{1}{2} (Z^2 - Y^2) \right\}^{\frac{1}{2}}$$

where Z expresses half length of curve, or.....416 feet.

Y represents half length of chord, or 410.66 "

The deflection was.....57.50 "

The elongation of the whole cable.. 0.2983 "

One half.....0.1491 "

Add value of Z.....416.0000 "

Gives value of Z to be substituted in formula.....416.1491 feet.

The above quantities substituted, make

$$X = \left\{ \frac{1}{2} (416.1491^2 - 410.66^2) \right\}^{\frac{1}{2}}$$

or X =.....58.34 feet.
deduct former deflection.....57.50 "

And we get the depression caused by the load.....0.84 feet.

The actual depression ascertained by the instrument was.....0.82 feet,

Calculation therefore, and fact, agree almost exactly. On the removal of this train, the structure rose again to its former level. Ordinary freight, or large passenger trains cause a depression of 3 to 5 inches, which is as much the result of elongation as of disturbance of equilibrium. A short heavy freight train will produce as much, or rather more depression than a very long passenger, or empty freight train of greater weight, for the single reason, that the equilibrium is more disturbed by the short train, than by the long one. To construct a Suspension Bridge which shall not sink under heavy loads, or by an increase of temperature, cannot be done. These motions are a legitimate result of the nature of a Suspension Bridge, and are rendered harmless by its elastic properties.

Mr. Roebling also mentions in his report the effects of the temperature as observed and finds that a change of 100° causes a difference in the level of the floor of 2.25 ft.

A bridge of this character is the one designed for the Lexington and Danville railroad in Kentucky. The span is 1224 feet long across the Kentucky river and the chasm 300 feet deep. A train moving at the rate of 3 miles an hour will occupy about 5 minutes in passing, so that having fair time for trains to clear each other it will be easy to pass 4 trains an hour if necessary. The speed at Niagara river is but about about 3 miles, though it may be increased to 5 miles an hour if demanded. The following is a tabular statement of the quantities in this bridge.

"Length of Bridge from centre to centre of tower, 821 feet 4 in.

Length of Floor between towers, 800 ft.

Number of Wire Cables, 4.

Diameter of each Cable, 10 inches.

Solid Wire Section of each Cable, 60.40 sq. in.

Aggregate " " of the four Cables, 241.60 sq. in.

Aggregate Section of Anchor chains, lowest links, 276 sq. in.

Aggregate Section of Anchor chains, upper links, 372 sq. in.

Ultimate strength of Chains, 11904 tons.

Aggregate number of Wires in Cables, 14560.

Average strength of one Wire, 1648 lbs.

Ultimate strength of four Cables, 12000 tons.

Permanent weight supported by Cables, 1000 tons.

Tension resulting, 1810 tons.

Length of Anchor Chains, 66 feet.

" upper Cables, 1261 ft.

" lower " 1193 ft.

Deflections of upper Cables at medium temperature, 54 ft.

Deflections of lower Cables at medium temperature, 64 ft.

Average deflection, 59 ft.

Number of Suspenders, 624.
Aggregate ultimate strength of Suspenders, 18720 tons.
Number of Overfloor Stays, 64.
Aggregate strength of do. 1920 tons.
Number of River Stays, 56.
Aggregate strength of do., 1680 tons.
Elevation of Railway Track above middle stage of river, 245 ft."

To find tension of cables :

Let x represent deflection.

y " half the span.
z " half the length of cable.
W " weight of cables and load equally distributed.

T " tension resulting,
and the following formula will give the value of tension.

$$T = \frac{W}{4x} (4x^2 + y^2)^{\frac{1}{2}}$$

The length of span and deflection being known, to find the length of the cable, calculated as a parabola :

$$\text{Then } Z = \left(y^2 + \frac{4}{3} x^2 \right)^{\frac{1}{2}}$$

The following formula will give deflection when length of span and of cable are known.

$$X = \left(\frac{1}{3} (Z^2 - y^2) \right)^{\frac{1}{2}}$$

Covington and Lexington Railroad.

The earnings of this road for the year ending 31st October, 1855, were—

Passengers.....\$112,053
Freight.....141,106
Mail, &c.....11,714

\$264,973

Current expenses.....126,279

Net profits.....\$138,694

—or over 52 per cent. of gross earnings.

The road has been very regularly, economically, and safely operated, no passengers having been injured, and no train having lost an entire trip, during the year. The short crops of 1854 have diminished business. The connecting lines thro' Kentucky and Tennessee are making steady progress. Ample means have been obtained to secure the completion of the Lexington and Danville road southward to the State line. This link, about 80 miles long, is expected to be completed in about twelve months. From Danville to Nashville, vigorous means are being taken to have the line put under contract and finished at an early period. The city of Cincinnati will then have direct railroad connections with Charleston, Savannah, and the intermediate towns, with all the Gulf ports in Alabama, Louisiana, and Florida. Destined, as she is, to become the great manufacturing centre of the West, her facilities for transporting fabrics to all sections of the country will be unsurpassed. The completion of all the connecting lines now in progress, must make this road, it is believed, one of the most remunerative in the country.

In December, 1854, the company took possession of that part of the Maysville and Lexington road between Paris and Lexington, under an 18 months' lease, for \$1,250 per month. The track was out of repair, and the company were allowed by the contract to spend the first five months' rent in improving it. It is now in good repair, but that has been accomplished at a much greater ex-

pense. They have also an independent line of their own between Paris and Lexington, which is now nearly completed. About \$150,000 will be required to finish it. The remainder of the line has been much improved, and is now well ballasted. The whole work has been executed at a low price, notwithstanding much of it had to be built on the credit system. The floating debt has been reduced; but is not yet all funded. About \$356,000 mortgage bonds have been disposed of for this purpose. The following statement shows the stock subscriptions made, and the various kinds of debts contracted :

Subscriptions—

City of Covington.....	\$300,000
" Cincinnati, collateral.....	200,000
County of Pendleton.....	50,000
" Harrison.....	117,330
" Bourbon.....	100,000
" Fayette.....	200,000
Town of Paris.....	20,400
Contractors' stock.....	282,841
Right of way, ties, salaries, &c.....	71,950
Individual cash subscriptions.....	283,250

Total stock.....	\$1,625,771
Am't collect'd.....	1,302,804
Bonds, 1st mort., 6 and 7 per cent.....	400,000
" 2d " 7 ".....	861,000
" endorsed by city of Covington..	200,000
" Cincinnati.....	100,000
" Pendleton county.....	50,000
Income bonds, 10 per cent.....	269,000
" " 6 ".....	86,000
Floating debt.....	469,939

Whole cost of road\$3,738,743

A large part of the floating debt has been funded, since date of report, by the sale of \$130,000 second mortgage bonds at 90 per cent. The company have assets nearly sufficient to liquidate the remainder, in addition to an issue of \$600,000 third mortgage bonds. The earnings are rapidly advancing, and it is estimated that for the first year after opening the Lexington and Danville road, these will reach \$500,000.

Baltimore and Ohio Railroad.

At the last regular monthly meeting, we learn that the Directors of this road, by a vote of 17 to 12, adopted resolutions in favor of loaning to the North-western Virginia Railroad, \$500,000 of the Baltimore City loan, created under the Act of 1852. The question of declaring a dividend out of the net earnings of the Company for the six months ending April 1st, was taken up, but after some discussion referred to the Finance Committee with instructions so report to the Board at a special meeting to be held on the 29th inst. for the settlement of the question.

A Railroad in Brazil.

The building of a railroad from Rio de Janeiro to the coffee districts has been commenced, and some portion of the track has already been laid with heavy rails. The correspondent of the New York Herald says:

The grant is for 90 years, and seven per cent. is guaranteed by the Imperial government for the cash capital invested for 33 years. The dividends are made payable every six months. The entire distance is about 180 miles—the first 48 and last 115 miles are a dead level, and the intervening 17 miles, although hilly, present no engineering difficulties, and the road is expected to be finished in one year from this date. Its advantages to the coffee market, of which the North Americans are the best customers, will be immense. The districts through which it runs are the richest and most populous coffee and sugar districts of this interesting empire, embracing the towns of Vassau-

tas, Paty de Alferes, Parahyba de Sul, Valenca, Pirahy, Barra Mansa, Regende, Camp Bello, San Juas de Principe, Bananal, Ares, Ouelug and Laena. Of the entire number of shares of this company—100,000, at 200 miteas or \$100 each—50,000 shares have been issued and taken up to defray the expenses of the first section of this railroad of Don Pedro Segunda.

Railroads in New Brunswick.

A movement of very great importance is on foot in the Legislature of this Province, contemplating the completion by Government of those several railroad lines undertaken three or four years ago, but since abandoned by the contractors. Much blame has been attached to the present Provincial Administration, on account of its supposed indifference to the promotion of public works. From the documents laid before the Legislature, it would appear, however; that if any such negligence has ever existed, the most ample amends are about being made for the future. In October last, the Board of Directors of the European and North American road appointed Hon. John Robertson as a delegate to wait upon the London contractors, Messrs. Peto, Brassey & Co., and to urge upon them the necessity of proceeding with the work of construction in accordance with their contracts. At the same time, the Lient. Governor of the Province also determined upon sending an agent thither to ascertain what could be done in the shape of a guarantee by the British Government, or a loan on Provincial Debentures from capitalists. Hon. Charles Fisher, the Attorney General, having been selected for this purpose, proceeded to London in December last, in company with Mr. Robertson. The effort to obtain a guarantee to a loan by the Home Government proved unsuccessful, the principal objection urged arising from the immense expenditures then required to carry on the war. An application was accordingly made to Baring Brothers to ascertain on what terms a Provincial loan of about £800,000 sterling could be negotiated, the proceeds to be applied exclusively to the construction of railroads, and the bonds to be issued over a period of three or four years. In the then existing state of money matters, the answer may be regarded as very satisfactory. The bonds were offered to be taken at par, if bearing six per cent. interest, maturing in a period of from 20 to 30 years from date of issue, and not to exceed in the aggregate the sum above named. These are the principal points in the proposition submitted by Messrs. Baring Brothers. Should peace be finally concluded, still more favorable terms can doubtless be secured.

In accordance with this, the Government have submitted to the Assembly of New Brunswick a bill providing for a transfer of the European and North American railway, including work done, rolling stock and machinery, &c., from the contractors to the Government. For these the latter are to pay £46,800 sterling in Provincial debentures at 6 per cent. interest, and redeemable in 30 years, in addition to the £43,200 already paid the contractors. The assent of the E. & N. A. Co. must be obtained previous to making the transfer; and the Governor in Council may make the shareholders such compensation as may be deemed equitable. The Provincial revenues are to be charged with the payment of interest, and redemption of principal of these securities.

In connection with the above, another bill has been introduced, authorizing the introduction of railways into the Province. This bill provides that the railways to be constructed shall be Public Provincial Works; that they shall consist of a line from St. John to Shediac; and from St. John to the State of Maine; with extensions to Woodstock via Fredericton; and from some point between the Bend and Shediac to Miramichi.

The line from the Bend to Shediac shall be first completed; next, the line from St. John to the Bend; and while that is going on, £50,000 sterling shall be expended on each of the extensions—that is, on the lines from Shediac to Miramichi, and from St. John to Woodstock; after that, the line to the State of Maine is to be proceeded with; and the two extensions are to go on by an equal annual expenditure on each.

The construction and management of these railways is to be vested in five Commissioners, to be appointed by the Governor in Council during pleasure; not more than one of such Commissioners to hold a seat in each branch of the Legislature.

The works are to be built by contract and tender, with the approval of the Governor in Council, who may appoint a Chief Engineer and other necessary officers, to hold their situations during pleasure.—No member of the Legislature shall hold any office of emolument under the Commissioners, or be a party to any contract with them.

The Commissioners charged with carrying out the provisions of this bill have power to enter any lands and take them or deposit thereon any articles they choose, to alter the course of rivers, and run the lines through any lands or streets they see fit. The expenditure for all purposes is limited to £200,000 per annum.

No lands reserved for naval or military purposes shall be entered upon, without consent of Her Majesty.

As the railways are completed, the Governor in Council may make arrangements for working them. The salaries of the Commissioners will be fixed by law, and the salaries of all other Officers by the Governor in Council. The Commissioners to render quarterly accounts to the House.

The third of the series is entitled, "A Bill to provide funds for the construction of Railways." It authorizes the Governor in Council to contract a loan on the pledge of the revenues of the Province, not exceeding the rate of £200,000 sterling per annum. Bonds are to be issued, with coupons annexed, for any sum not less than £100, bearing interest at 6 per cent., payable half-yearly, the principal to be paid in 30 years. A sum equal to one and a-half per cent. interest on the whole sum borrowed for railways, is to be deducted from the profits of such railways; and this, with the proceeds of land and timber in the Counties through which the road passes to form a Sinking Fund for the final redemption of the loan.

The faith and credit of the Province, its ordinary revenues and any special impost, are pledged for the payment of the loan and interest, subject only to the Civil List and any previously existing liability. The rest of this Bill relates to the mode of receiving and paying money and keeping accounts, with a provision that the Legislature shall

confirm by law any agreement made by the Governor in Council not inconsistent with this bill.

The fourth of these is designed to levy an impost for Railway purposes. It provides, that an impost of 2½ per cent. shall be levied upon all goods, wares, merchandise, chattels, and things not therein specially excepted, brought into the Province, in addition to any duties now or hereafter imposed on all such articles; the money raised by such impost to form a separate fund for the purpose of paying interest and principal on Railway Debentures.

The only articles exempted from this impost, are those specified in the Reciprocity Treaty; any articles the growth or produce of a British Colony which may be exempted by law; the baggage, apparel, household effects, and working tools of persons arriving in the Province, which have been previously in use; and the carriages of travellers not intended for sale. Everything else will pay the extra duty of 2½ per cent. to the railway fund.

We understand that the above measures are progressing rapidly, and likely to pass the Provincial Legislature. The following table shows the lengths of the different roads embraced in the Government scheme:

	Miles.
From St. John to the Nova Scotia line.....	132
" to St. Andrews.....	66
The Bend of Petitcodiac to Shediac....	15
Dorchester to Shediac.....	16
Shediac to Richibucto.....	36
Richibucto to Chatham.....	40
Miramichi to Pokemouche.....	62
Pokemouche to Bathurst.....	51
Bathurst to Belledune.....	23
Belledune to Metis Road.....	62
Newcastle to Bathurst.....	50
" to Fredericton.....	102
Fredericton to St. John.....	25
" to Woodstock.....	63
Woodstock to River DeChute.....	40
River DeChute to Grand Falls.....	38
Grand Falls to the Canadian Boundary.....	50
Little Falls to St. Francois.....	32
Grand Falls Lower Landing to the American Boundary.....	3
Pickard's Store to the Am. Boundary....	5
Buttermilk Creek to the Am. Boundary....	9
Woodstock to Houlton.....	11
Fredericton to St. Andrews.....	78
Waweig to St. Stephen.....	9
Roix to Oak Bay.....	18
Oak Bay to Eel River.....	74
Dead Water Brook to St. Stephen.....	17
Lower Trout Brook to the Town of Magaguadavic.....	20
Salisbury to Harvey.....	45
Isaac Derry's to Point Wolf.....	25
St. John, through King's County to Crooked Creek, in Albert County....	72
St. John to Quaco.....	30
Hampton to Bell Isle.....	8
Scribner's to the Head of Bell Isle.....	25
Nerepis to Georgetown.....	23
Fredericton to Jamseg.....	30
Jamseg to the Finger Board.....	20
Coles Island to Cape Tormentine.....	40
Fredericton to the Kent County line towards Richibucto.....	56
Kent County line to Richibucto.....	44
Tilley's Landing to Little River Mills....	12
Sussex Vale to the Baptist Meeting House, Upham.....	12

The Chief Commissioner, by whom the above statement is furnished, says that there are, so far as he can ascertain, not less than 1630 miles of railway within the Province on which sums of money have from time to time been expended by the Government. There are 415 bridges of con-

siderable size, and numerous smaller ones. There are 48 Supervisors whose services cost the Province £2,500 annually, in the shape of commission or per centage on the amount expended.

REPORT ON

G. T. Parry's Anti-Friction Bearing.

We recommend the following, from the Journal of the Franklin Institute, to the attention of our readers:

The Committee on Science and the Arts, constituted by the Franklin Institute of the State of Pennsylvania, for the promotion of the Mechanic Arts, to whom was referred for examination, "Conical Anti-Friction Bearings," invented by G. T. Parry, of Philadelphia, Pennsylvania—*Report:*

That, the object of the invention is to reduce the friction incident to revolving surfaces sustaining pressure, and it is intended to be applied principally to turn-tables, and to shafts transmitting end pressure, as propeller shafting, or vertical shafts whose weight is to be supported. It consists of a series of rollers shaped like double frustra of cones united at their bases, and therefore larger in diameter at some point between the extremes, to which the rollers taper uniformly. These rollers are interposed between two flat surfaces indented by grooves opposite each other; which grooves are shaped so that the extreme diameter of the rollers touches them at the deepest point only; and very nearly touches at the extremes, thus permitting a slight rocking motion.

It has been customary to support turn-tables on conical rollers, having the longest diameter furthest from the centre of revolution, and to restrain them in their tendency to separate by rods arranged as radical axes; but so far as the Committee is aware, Mr. Parry's idea of adding the outer cone for the same purpose is original with him. It has also been proposed to construct bearing collars for receiving the end thrust of propeller shafting, with one-ended cones as above described. This plan, however, is open to serious objection on account of the friction due to the tendency to separate coming on the collars of the radial axis.

Experiments made on two steamers, fitted with Mr. Parry's arrangement, one a propeller of 700 tons, the "North Carolina," the other a tow-boat of small size, the "Cushing," showed the Committee that the gain by the use of Parry's arrangement over the plain collars, or in other words, the substitution of a rolling for a sliding surface, was from 6 to 8 per cent, when the sliding surfaces were kept constantly oiled. This result was naturally to be expected. As regards the durability of the apparatus, the reports from various boats having it in use are somewhat conflicting; but it appears generally established that the double cones when properly made and attended to are not liable to lose their shape, and that their operation is satisfactory. As regards turn-tables, the reports are of the same character.

The Committee are decidedly of opinion that the invention of Mr. Parry, forms an improvement to turn-tables, by diminishing the friction of revolution; and believe it to be one of the best known methods of supporting superincumbent weight revolving slowly.

In the case of propeller shafting where revolution is very rapid and continuous, they believe it to be a great improvement over the use of rubbing surfaces or plain collars; and although they are not prepared, from want of due experience in the durability of the apparatus, to say that it might supersede those well established methods of receiving thrust, they consider its advantages so marked as to warrant its use in conjunction with those methods, so that the gain resulting from diminished friction should be realized so long as the apparatus remains in working order.

It is proper to say that by the mode of construction adopted by Mr. Parry, the replacing of rollers when worn is easy, and can be effected without loss; while their cost is trifling, and hence the ex-

pense due to wear cannot be an item of much importance to sea-going steamers.

The Committee, therefore, hope that the invention may be generally introduced for the purposes designed, believing it to be an improvement over other methods in use.

By order of the Committee,
WM. HAMILTON, *Actuary*.
Philadelphia, Jan. 10th, 1856.

Orange and Alexandria Railroad.

The principal Northern and Southern Railroad business of this country so far has followed one great series of lines, extending from Portland, Maine, to Montgomery, Alabama, ultimately to proceed to New Orleans, Texas, and the most westerly sections of the Union. Starting from the North-east it reaches Washington and there divides, one part taking a southerly course to Richmond, Wilmington, Charleston, &c., and the other a southwesterly towards Lynchburg, whence it will follow the Virginia and Tennessee, the East Tennessee and Virginia, the East Tennessee and Georgia, the Memphis and Charleston, the Alabama and Tennessee, the New Orleans and Jackson and other roads, to the extreme South-west. Between New York and Chattanooga, where it divides, this great route is remarkably direct, the course never deviating more than a few miles from an air line. One of the most important links in this great chain is the Orange and Alexandria road, now completed to Gordonsville, 88 miles, and in progress thence to Lynchburg, where it will unite with the Virginia and Tennessee, which is rapidly approaching completion.

The charter of this company was granted in the Legislative session of 1848-9. Road to extend from the city of Alexandria to Gordonsville in Orange county. City of Alexandria permitted to subscribe to the stock. Six Directors, three being appointed by Board of Public Works. Shares, \$50 each. Authorized capital, \$937,500. This was subsequently increased, \$100,000 for building the Warrenton Branch, and \$420,000 for completing the main line. Of the last, \$350,000 were made six per cent. preferred stock. In all these cases, the State took a three-fifths share. In 1852-3, when the Lynchburg extension was chartered, another increase of capital amounting to \$1,500,000, was authorized; but of this the State has not so far taken any part, a bill to that effect having been defeated by a small majority in the last Legislature. In the original grant of aid, the work was divided into Eastern, Middle, and Western sections, so much of the State appropriation being applicable to each, only when subscriptions from other sources reached a certain figure. This regulation retarded operations on the Western division for nearly two years, on account of the difficulty of obtaining local subscriptions to any amount.

On that part of the road completed about two-thirds are straight line, while the shortest curves have radii of not less than 1,000 feet. The steepest grades are 52.8 feet per mile. The road passes out of the city of Alexandria by a short tunnel. Owing to the frequent crossing of ridges of hills with streams between them, much excavation and bridging have been rendered necessary, more particularly on the Eastern Division and Lynchburg extension. The principal rivers crossed are the Rappahannock and Rapidan.

The road is well constructed, and laid with a U rail weighing 51 lbs. per yard.

The grades will be somewhat heavier and the proportion of curvature also increased, on the Lynchburg extension.

A branch line leaves the main road, at a point 41 miles from Alexandria, proceeding to Warrenton, $8\frac{3}{4}$ miles.

At Manassas, 27 miles from Alexandria, the road connects with the Manassas Gap line. This work extends thence to Strasburg, 61 miles, and was at first operated by the O. & A. R. R. Co. At Gordonsville, it connects with the Virginia Central road. Between that place and Charlottesville, 21 miles, the latter will be laid with a double track for the purpose of accommodating the business of both roads. The construction of an independent line for this distance will consequently be rendered unnecessary.

The company were organized in May, 1849, on a subscription from sources other than the State of \$325,000. Geo. H. Smoot was chosen their first President, and T. C. Atkinson, Chief Engineer. The surveys were duly executed during the ensuing summer; and 60 miles of the road placed under contract in January and April, 1850,—both to be completed by the beginning of 1852. The failure of the contractors postponed the date of opening some months. In October, 1851, the first 27 miles were opened, and 24 miles additional in September following. In November of the same year, it was finished to Culpeper C. H., 62 miles. This was the limit of progress, for some time, owing to the cause above stated. In the Fall of 1851, the Western division was placed under contract, and the line opened to Gordonsville, 88 miles, in March, 1854.

The Warrenton Branch was commenced in 1852, and finished in December, 1853.

In February, 1853, a preliminary survey of the Lynchburg extension was made. Active operations, however, were not commenced till the beginning of 1854. The length of this will be $59\frac{1}{2}$ miles, making a total of 168 miles. It is expected to have the extension finished to Lynchburg by the early part of 1858.

In May, 1851, the company made an issue of \$400,000 first mortgage six per cent. bonds. The whole of these have since been disposed of. Last year they prepared another issue of \$1,200,000, secured by a second mortgage on the line to Gordonsville, and a first mortgage on the Lynchburg extension. These fall due in 1875. Only a small amount of these have yet been disposed of, owing to the financial pressure of the past two years. The outlay on construction this year will be limited to \$240,000, unless additional means are secured. The Board have resources to this amount on hand. At date of last report, there had been expended over \$257,000 south of Charlottesville. The total receipts from commencement were \$2,754,047; total expenditures, \$2,692,432.

A contract has been made for the use of a steamboat on the Potomac, to ply between Washington and Alexandria.

The principal officers for the present year are—John S. Barbour jr., President; Jas. H. Reid, Secretary and Treasurer; T. C. Atkinson, Chief Engineer; and H. W. Vandegift, General Superintendent. Mr. Barbour succeeded Mr. Smoot as President in 1851.

The great Southern mail is now carried over this line. The rate of remuneration is \$250 per mile.

The annexed statement shows the gross receipts, working expenses, and net profits of the company, since the road went into operation. The various years terminate with the 30th September:

Year.	Gross Receipts.	Expenses.	Net Earnings.
1852.....	\$46,705	.....	.....
1853.....	112,022	\$57,665	\$54,357
1854.....	171,188	81,436	89,752
1855.....	211,505	100,142	111,363

A scrip dividend of five per cent. was declared for 1853-4. The dividend on preferred stock only will probably be declared for some time to come, it being the intention to use the net earnings for construction, unless the bonds can be satisfactorily disposed of.

GENERAL ACCOUNT.

Construction account.....	\$1,976,995
Stock subscriptions due.....	85,097
General charges, including buildings, interest, discount, salaries, &c., &c..	472,169
Lynchburg extension.....	257,017
Cash and available funds.....	12,769

\$2,754,047

Stock subscribed by State.....	\$604,500
Do. from other sources.....	443,000
Preferred stock.....	350,000
1st mortgage bonds.....	400,000
Loans on short time and bills payable...	65,640
Revenue.....	440,759
Lynchburg extension.....	232,915
Miscellaneous account.....	154,888
Checks outstanding.....	2,445

\$2,754,047

Milwaukee and Mississippi Railroad.

The annual election for the choice of Directors of this road, held recently, resulted in the selection of the following gentlemen:

John Catlin, E. B. Wolcott, A. E. Ray, Joseph Goodrich, Hans Crocker, Brooks Dunwiddie, E. D. Holton, Geo. H. Walker, A. Finch, Jr., S. C. Hall, Nelson Dewey, F. J. Tibbits, S. H. Alden, E. D. Clinton, H. L. Dousman, Anson Eldred, E. L. Dimmock.

At the meeting of the Board, the following were the selection of officers:

President—John Catlin. Vice President—Geo. H. Walker. Secretary—Wm. Taintor. Treasurer—Anson Eldred. Chief Engineer and Superintendent—E. H. Brodhead.

It is stated that the road will be completed to the Mississippi within the current year.

New Haven and New London Railroad.

The report of this company read to the stockholders at their annual meeting on the 16th inst., states the gross earnings for the year to have been.....\$88,007.89
Working expenses.....57,688.91

Net.....\$30,318.98

A project is on foot to connect their road with the Stonington line, in order to secure part of the through business between New York and Boston, now amounting to over \$2,000,000 annually.

Memphis and Little Rock Railroad.

At a recent election of Directors and officers of this Company, the following gentlemen were elected: J. M. Williamson, President; James Elder, D. B. Turner, W. F. Hardin, H. L. Gulon.

The gentlemen chosen are among our most substantial and energetic citizens, and their election is a guaranty that the enterprise will be pressed forward with zeal and efficiency.—*Memphis Bul.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.....	149	1,538,100	2,973,700	6,019,929	470,647	6	67		Brunswick and Florida, Ga.	30	800,000	300,000	550,000	In progr.			
Androscog. & Kennebec.....	56	642,343	1,473,080	2,245,020	190,605	90,797	15		South Western.....	92	1,097,498	465,500	1,624,920	253,306	141,168	8	
Androscoggin.....	20	91,192	232,198	343,317	29,896	12,807	10		Tennessee and Alabama.....	80	248,486		679,906	175,340			
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,600	259,330	124,038	10		Tennessee and Mississ.....	188	170,931		175,340	In progr.			
Portl., Saco, & Portland.....	51	1,567,000	119,237	1,486,327	233,234	120,834	88		Memphis and Charleston.....	288	2,103,177	958,276	3,563,362	176,484	102,016		
Boston, Concord, & Montreal.....	93	1,808,093	1,059,512	2,771,310	380,221	184,565	2		Mobile and Ohio.....	153	2,568,565	1,802,921	4,536,412	199,932	109,236		
Cheshire.....	58	2,085,925	899,318	3,179,687	329,744	158,632	84		Miss. Central.....	188	642,534		628,303	In progr.			
Concord.....	26	1,485,000	none	1,412,576	370,629	188,299	2 1/2		N. O., Opelousas & G.W.....	55	2,930,425	671,645	2,657,565	In progr.			
Northern, N. H.....	82	2,768,400	none	3,016,638	162,671	65,173	none		Vicksburg, Shreveport & Tex.....	111	1,171,750		1,077,895	In progr.			
Conn't & Passumps. Riv.....	61	1,048,145	787,608	1,780,062	394,971	none	none		East Tennessee and Ga.....	111	1,000,000	1,500,000	2,500,000	In progr.			
Rutland & Burlington.....	120	2,233,376	2,662,396	6,378,428	480,754	140,377	6		East Tennessee and Va.....	16	625,425	938,593	1,033,781	In progr.			
Vermont Central.....	27	1,830,000	3,550,236	5,463,366	820,119	214,798	none		Nash. and Chattanooga.....	151	2,319,330	1,497,081	3,843,694	314,090	112,177	none	
Boston and Lowell.....	83	4,076,974	150,000	4,179,535	854,426	339,060	6 3/4		Oovington & Lexington.....	93			264,973			18	
Boston and Maine.....	74	2,240,000	158,671	2,463,818	59,917	8,740	none		Lexington and Frankfort.....	29	431,091	159,299	635,363	90,890	34,864		
Boston and N.Y. City.....	55	3,160,000	359,132	3,677,154	558,671	219,699	6 1/4		Lexington & Big Sandy.....		540,117	61,525	570,463	In progr.			
Boston and Providence.....	68	4,600,000	655,428	5,465,499	1,008,004	404,461	6 1/2		Louisville and Danville.....	65	698,236	669,061	1,689,566	244,014	96,902	6	
Boston and Worcester.....	47	681,600	280,598	997,252	119,221	55,527	3 1/2		Atlantic & Gt. Western.....	254	866,939	77,294	613,231	In progr.			
Cape Cod.....	52	1,691,110	273,241	1,802,244	286,563	103,787	5 1/2		Bellefontaine and Ind.....	118	1,881,855	2,025,925	2,862,652	298,993	140,828	none	40
Connecticut River.....	60	2,583,400	2,947,737	4,621,016	647,281	305,998	45		Clev. Col., and Cin.	141	4,473,721	374,127	4,646,133	1,162,601	557,905	9	99 1/2
Eastern, Mass.....	167	3,540,000	158,700	3,765,998	681,163	225,071	7 1/2		Clev. Zanesv. and Cin.	87			1,185,826	In progr.			
Fitchburg.....	14	600,000	16,000	654,608	191,857	65,877	8 1/2		Cleveland and Toledo.....	200	2,676,425	2,689,301	5,124,629	736,272	396,986	10	78
Nashua and Lowell.....	21	500,000	none	533,963	198,491	66,533	6 1/2		Clev. and Mahoning.....	103			628,533	In progr.			
N. Bedford and Taunton.....	87	3,015,100	202,650	3,362,949	653,499	295,738	6		Clev. and Pittsburg.....	133	2,686,770	2,516,162	4,818,153	450,215	255,868		65
Old Colony and Fall River.....	77	2,232,541	1,625,635	3,209,727	284,726	87,313	9 1/2		Cin., Hamilton & Dayton.....	60	2,100,000	1,464,364	2,961,978	483,620			65
Vermont and Mass.....	155	5,150,000	5,066,420	10,495,905	1,809,673	633,013	7	90 1/2	Cin., Wilm. & Zanesv.....	131	1,120,450	1,181,265	2,326,459	In progr.			80
Western, Mass.....	46	1,411,000	205,565	1,551,271	204,780	75,760	2		Columbus and Xenia.....	55	1,484,550	149,000	1,481,733	356,366	187,518	10	80 1/2
Worcester and Central.....	43	1,610,020	338,461	1,806,666	311,430	138,057	7 1/2		Dayton, Xen. & Belpre.....	63	437,838	422,658	860,496	In progr.			
Providence and Worcester.....	72	2,859,000	989,000	3,813,932	730,012	362,799	10	120	Dayton and Michigan.....	140	1,076,602	393,011	1,185,826	In progr.			
Hartford and N. Haven.....	125	1,845,610	2,090,124	4,060,869	268,685	119,611	none		Dayton and Western.....	35	310,000	500,000	753,769			18	
Hart'd, Prov. and Fishkill.....	101	2,006,000	474,177	2,429,066	330,792	18,361	none		Eaton and Hamilton.....	42	454,690	904,489	1,155,135	171,929	65,000	24	
Housatonic.....	67	1,031,800	573,995	1,577,167	238,266	none	4		Little Miami.....	65	2,963,921	1,171,785	3,648,172	681,662	336,708	93	
Nantucket.....	62	2,992,450	2,264,656	4,906,784	986,025	341,607	none	25	Mad River and L. Erie.....	205	2,451,650	2,672,932	4,446,661			16	
N. York and N. Haven.....	60	738,258	735,165	1,450,318	103,986	217	none		Central Ohio.....	138	1,620,927	3,485,076	4,283,443	Recently opened.		none	12
N. Haven and N. London.....	66	809,200	1,075,673	1,694,383	124,044	68,331	none		Ohio and Penn.....	187	2,451,700	3,216,000	5,670,700	1,111,626	662,117	9	
N. London, W. & Palmer.....	68	2,122,300	783,489	2,697,153	304,236	88,458	2 1/2	35	Pittsburg, Mansf. & Cin.....	50			343,882	In progr.			
Norwich and Worcester.....	32	439,005	1,625,008	1,840,695	117,716	9,904	none		Sand'y, Mansf. & Newk.....	127	1,350,000	2,206,367	3,562,367	329,958	164,470	none	
Albany Northern.....	35	643,330	371,859	974,323	In progr.				Scioto & Hooking Valley.....	135	403,976	609,060	888,858	In progr.			
Black River and Utica.....	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none		Spring Mt. Vernon & P.....	113	1,000,000	950,000		In progr.			
Buffalo, Conn. and N. Y.....	32	798,439	2,587,849	3,401,868	288,992	31,896	none		Tol., Washash & St. Louis.....	242	2,500,000	4,530,000		In progr.			
Buffalo and N. Y. City.....	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10		Cin., Log. and Chicago.....	255	4,196,679	1,006,125	2,080,433	In progr.			7 1/2
Buffalo and St. Line.....	47	434,111	922,393	1,275,796	174,089	69,506	none		Evanston & Crawfordsv.....	109	706,945	1,177,556	1,844,541	127,400	64,552		
Canadaigua and Elmira.....	98	1,315,000	2,279,854	3,495,832	135,433	48,649	none		Ind. and Cincinnati.....	88	1,213,723	1,442,859	2,178,461	366,012	193,142	7	58
Canadaigua & Niagara F's.....	35	687,000	506,899	1,187,562	181,087	603,946	none	34 1/2	Indiana Central.....	66	611,400	1,261,179	1,907,911	350,176	134,375		48 1/2
Cayuga & Susquehanna.....	144	3,758,466	2,560,362	12,737,898	1,812,087	603,946	none		Ind., Clev. & Pittsburg.....	83	834,157	1,101,971	1,971,544	In progr.		none	20
Hudson River.....	95	1,876,148	668,949	2,555,986	301,793	116,162	none	30	Jeffersonville.....	60	1,014,252	694,000		206,544	94,318		
New York Central.....	584	24,154,860	14,462,742	25,523,913	6,663,831	3,182,126	8	92	Madison and Indianapolis.....	87	1,647,500	1,599,881	3,237,381			none	
New York and Erie.....	144	10,023,958	25,126,669	33,439,431	5,488,993	2,627,118	none	66 1/2	New Albany and Salem.....	288	2,535,121	5,281,848	6,043,189	645,827	371,402	none	10
New York and Harlem.....	133	5,717,100	4,069,769	9,758,203	1,636,577	234,126	none	19 1/2	Peru and Indianapolis.....	73		583,314		150,000	90,000	none	17
Northern, N. Y.....	118	1,633,022	4,406,874	6,470,714	620,153	185,754	none	2	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,512	189,702	10	96
Oswego and Syracuse.....	35	399,000	216,681	723,683	126,540	59,982	3 1/2		Chicago and Rock Is'd.....	182	3,141,500	2,887,156	6,214,152	In progr.			96
Potsdam and Watertown.....	29	407,200	294,159	749,683	In progr.				Chicago and St. Louis.....	220			1,077,312				
Rensselaer & Saratoga.....	25	610,000	140,000	896,423	241,149	82,600	7		Chic. St. Paul & F'd do Lac.....	178	2,300,000	1,325,000	3,625,000	In progr.			
Saratoga and Whitehall.....	48	500,000	395,000		71,909	21,059	none		Galena and Chicago.....	298	4,334,800	1,189,304	5,666,263	1,506,710	942,231	17	113
Saratoga & Binghamton.....	50	768,369	1,178,804	2,272,777	159,484	22,503	none		Illinois Central.....	707	1,419,440	18,001,426	17,098,099	1,532,118			97 1/2
Troy and Boston.....	27	437,830	737,079	1,109,822	156,393	55,184	none		Peoria and Oquawka.....	93	669,889	818,544	1,388,342	In progr.			
Watertown and Rome.....	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	70	Ohio & Miss. (Wat. Div.).....	147	1,780,295	3,292,403	4,370,586	Recently opened.			
Belvidere Delaware.....	64	1,000,000	1,619,000	2,619,000	161,355	75,534	none		Terre Haute and Alton.....	173	2,281,420	1,256,000	3,637,424	In progr.			
Garden and Amboy.....	94	3,000,000	11,407,200	8,636,523	2,017,127	961,941	12		Detroit and Milwaukee.....	185	838,000	1,128,964	1,966,969	In progr.			
Garden and Atlantic.....	60	360,320	1,522,131	1,729,642	122,417	50,080	none		Mich. Central.....	282	6,021,916	6,142,023	10,300,147	2,215,283	879,656		94 1/2
New Jersey.....	30	3,482,850	690,000	4,310,011	861,614	500,747	10	121 1/2	Mich. South'n & N. Ind.....	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96 1/2
New Jersey Central.....	63	2,000,000	2,296,176	4,683,149	393,728	171,603	none		Green Bay, Mil. & Ch.....	155	764,078	442,726	1,193,765	In progr.			
Morris and Essex.....	53	1,167,805	378,000	1,636,550	225,893	102,474	6		Milwaukee and Miss.....	106	1,826,428	2,647,889	3,678,757	691,543	417,443	17	85
Allegheny Valley.....	44	1,637,897	342,564	1,988,317	Recently opened.				Milwaukee & Water'n.....	72	554,861	132,000	614,238	In progr.			
Cataw. W. & Erie.....	33	1,700,000	1,940,000	3,640,000	219,253	52,450	none		Milwaukee and Horicon.....	15	554,200		354,109	In progr.			
Cumberland Valley.....	66	1,099,500	12,211	1,191,833	146,381	66,994	none		Milwaukee & La Crosse.....	51	1,361,932	632,131	1,883,963	In progr.			
Del. Lack. & Western.....	109	3,511,622	3,884,702	6,022,667	528,911	259,263	6		Racine and Miss.....	47	921,906	380,715	1,299,321	In progr.			
Erie and North East.....	20	600,000	150,000	750,000	89,636	53,335	10										

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible.	7	April, October.	"	1866	98	
Bellefontaine and Indiana	500,000	Do. convertible.	7	Jan'y, July	"	1866	92½	
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1868	92½	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Div'sa	"	1861-64	77	
Do. do.	800,000	2d do. inconvertible.	7	March, Sept.	"	1865	75	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible.	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882.	7	Jan'y, July	"	1868	82½	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.	"	1862	87½	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.	"	1861	92½	
Cleveland and Pittsburgh	800,000	Do. convertible.	7	Feb'y, August.	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	
Cleveland and Toledo	525,000	Do. inconvertible.	7	Feb'y, August.	"	1863	86½	
Chicago and Mississippi	800,000	Do. conv. till 1857.	7	April, October.	"	1862-72	60	
Do. do.	1,200,000	Do. inconvertible.	7	April, October.	"	1862-72	85	
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	73	
Do. do.	1,000,000	2d mortgage, convertible.	7	March, Sept.	"	1863	64	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	90	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	80	
Gaucha and Chicago	2,000,000	Do. inconvertible.	7	Feb'y, August.	"	1863	96	
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	69	
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	86	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	10 April, 10 Oct.	"	1863	93	
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1878		
Indiana Central	600,000	Do. convertible.	7	May, Novemb.	"	1868	75	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	
Indiana & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857.	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	\$3,400,000	1st mortgage, conv. till 1862.	7	Feb'y, August.	"	1865	76½	
Little Miami	1,500,000	Do. inconv.	6½	2 May, 2 Nov.	"	1863	79½	
Michigan Central	1,000,000	No mortgage, convertible.	8	April, October.	Boat.	1860	100	
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96	
Do. do.	550,000	Do. 2d do. 1858	8	April, October.	"	1863	96	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90	
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1864-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible.	8	Jan'y, July	"	1873	94	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	
Do. do.	2,000,000	Income, convertible.	7	April, October.	"	1872	79	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860.	6	Jan'y, July	Phila.	1880	96½	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August.	N.Y.	1875	83	
Soloto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1865		
Steubenville and Indiana	1,500,000	Do. convertible.	7	Jan'y, July	"	1865	78	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	78	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	77	

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82½	82½
Do. do.	1,125,500	Do.	6	Jan'y, July	Balt.	1875	87½	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	96	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107	109
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96½	96½
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	91½	92½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	91	91½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	83½	83½
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85½	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	99½	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	90	90½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	70½	71
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1876	88	88½
Do. (Free Land)	3,000,000	Mortgage 345,000 acrs. priv. 7 abars	7	March, Sept.	"	1860	91½	92½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	85½	86½
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60		
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	N.Y.	1873		97½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	92½	
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	85	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	90	90½
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec	"	1864	102½	103
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	101½	106
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	104½	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	84½	85½

CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.	CITY SECURITIES.	Int't payable.	Off'd p. ct.	Ask'd p. ct.
New York, 7 per ct. coup. 1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	89	80
Do. 5 do. 1858-60	May,	95	97½	New Orleans, 6 per ct. cp. R.R. X	Do.	75	78
Do. 5 do. 1870-75	August, and	95	97½	N. Orleans, 6 per ct. cp. municip.	Jan'y, July		83
Do. 5 do. 1880	November.	96		Philadelphia, 6 per ct. 1876-98	Jan'y, July	91½	92
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	98		Pittsburgh, 6 per ct. coup.	X	76	77
Aleghany, 6 per ct. coup.	Jan'y, July	66		Quincy, 8 per ct. coup. 1868 X	Jan'y, July	92½	
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	84	85
Boston, 6 per ct. coup.	April, October.	97	100	Rochester, 6 per cent. coup.	X	95	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	79	80
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.	100½	101½	Do. do. Municipal.	X	79½	80½
Cincinnati, 6 per ct. coup.	X	89½	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	80	81½
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	90½	S.F. Cisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	78½	80
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August.	100	100½	Do. 10 p. ct. cp. 1871 X	Do. do.	97	99
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	106	Do. 10 do. cp. N.Y. X	Jan'y, July	104	
Jersey City, 6 per ct. cp. W.W. 1877 X	Jan'y, July	94	96	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	60	62
Louisville, 6 per ct. cp. 1880-83 X	Divers	70	80	Wheeling, 6 per ct. coup.	X	67½	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do.	X	April, October	97½

Cincinnati Stock Sales,

By KIRK & CHEEVER.
For the week ending April 8th, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2nd Mort. 7 per ct.	65½
Ohio & Mississippi, 2nd Mort. 7 per ct.	48
Marietta & Cincinnati, 7 per cent. 1st Mort.	69
Indianapolis & Cin., 2nd Mort. 7 per ct.	80
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	85
Cin., Wil. & Zanes. 2d Mort. 7 per ct.	57
Covington & Lexington, 10 per ct. Income	60
stocks.	
Cin., Wil. and Zanesv., 15—Cin., Ham. and Dayton, 68—	
Col. & Xenia, 86½—Cincinnati, & Chic., 7—Central Ohio, 12—	
Covington and Lexington, 16—Dayton and Western, 18—	
Eaton and Hamilton, 24—Fort Wayne and Southern, none.	
Indiana Central, 48—Indianapolis and Cincinnati, 68—Little	
Miami, 92—Mad River & Lake Erie, 16—Marietta & Cin.,	
16—Ohio and Mississippi, 7½—Hillsboro' and Cincinnati, 16.	
Peru and Indianapolis, 18.	

By HEWSON & HOLMES.

For the week ending April 9th, 1856.

BONDS.	Per ct.
\$2,000 Columbus & Xenia, 7 per ct. Dividend.	90
4,000 Cin., Wil. & Zanesv., 7 per ct. Income.	40 (int.)
8,000 Covington and Lexington, 6 per ct. 1st Mort.	70
2,000 Little Miami, 6 per ct., 1st Mort.	82
5,000 Ohio & Miss. 7 per ct. 2nd Mort.	50
3,500 Cov. & Lex., 6 per ct. Income.	35
6,000 Mad River and Lake Erie, 7 per ct. 3rd Mort.	50
1,000 Cin., Wil. and Zanesv. 7 per ct. 2nd Mort.	60
308 50 Ind. & Cin. 7 per cent Dividend.	70
110 Cin. Hamilton and Dayton, Divid. Scrip.	100
STOCKS.	
308 Shares Ohio & Mississippi.	7½
29 " " "	8
100 " Cin., Harrison and Ind'nap.	8
92 " Indianapolis and Cincinnati.	58
30 " " "	60
143 " Cin., Wil. and Zanesv.	20
25 " Columbus & Xenia.	85½
36 " Little Miami.	92½
50 " Cincinnati and Chicago.	7½
200 " " "	7
20 " Clevel. Col. and Cin.	102
20 " Indianapolis and Bellefontaine.	25
40 " " "	30

Marie & Kaniz' Money Circular for the
European Steamer of the 16th Inst.

[TRANSLATED EXTRACT.]

New York, Monday, April 15th, 1856.

Since our advices of 7th inst., the stock market has remained very inactive, without marked change on our previous quotations. During the first days of the week the tendency was downward, but it afterward improved, attention being chiefly turned to Western railroad shares. But to-day the market is again lower. The receipts of the leading railroads have been larger since the opening of the month, and must, no doubt, continue so for the coming season. Money is in better demand. On call, 7 per cent.; first-class paper, 7½; names less current, 8 to 10. Exchanges firm; sterling active at 109½ to 109½, and Paris at 5.17½.

MARIE & KANIZ.

De Coppet & Co.'s Circular.

[TRANSLATED EXTRACT.]

New York, April 15th, 1856.

During the past week our stock market has remained very quiet. For two days after our advices of the 7th inst., there was a general depression, but the market recovered, and now most of the quotations in our railroad stock list show an advance, compared to those of last week, with some activity in one or two of them, and also in some of the State stocks. The large figures of importations, as seen in our subjoined statement, and the gradual increase of the discount lines of our Banks, notwithstanding a decrease of specie, has attracted some attention and caused the momentary depression above mentioned. The downward tendency of the market was of short duration, for money, although in active demand, is easily procured, and the large payments to be made in specie by the Sub-Treasury on the first day of next June, allay any serious fears concerning the metallic reserves of our Banks. At the close of the day there was a decline on a number of the railroad shares, with more activity. The absence of European demand for investment contributes in a great measure to the present want of animation. The opening of the Lake Erie, Wabash and Toledo railroad, 167 miles from Toledo to Logansport, being now in operation, has created some specu-

lation in the shares of the Cleveland and Toledo road. Money is in good demand at 7 per cent. for loans on call. Business paper is offered from 7 to 10 per cent., according to length and class. Exchanges somewhat firmer. London, 109½ to 109¼. Paris, 5.17 to 5.18½. DE COPPET & CO.

American Railroad Journal.

Saturday, April 19, 1856.

Some of our correspondents wish us to suggest to Mr. Lyons the propriety of bringing out a more convenient edition of his tables."

Although the tables generally furnished, are 16x24 inches, there are some bound in smaller form. They are posted upon cloth and folded in to tucks between covers; the paper being cut and separated at the folds to prevent marring the table. Every Engineer if he please may do this for himself.

Newspaper Change.

We have been informed that Mr. ZERAH COLBURN has sold his interest in "Colburn's Railroad Advocate," and has left this city for Wisconsin, with a view of embarking in the lumbering business, in that State.

Chicago and Rock Island Railroad.

It will be recollected that about a year ago, the Chicago and Rock Island R. R. Company took a lease of the Bureau Valley railroad at an annual rent of \$125,000. Parties interested as contractors in the Rock Island, were also interested as contractors in the Bureau Valley railroad. Their position gave them a controlling influence in both companies, and enabled them to saddle upon the Rock Island, at about \$40,000 per mile, a road worth, probably, not over \$15,000 per mile; and to realize upon the above estimate something over \$1,000,000, as the net profit of the transaction.

We commented upon the transaction at the time in what we thought a becoming manner. This drew from the principal actor in the business, several letters—characteristic of the author, and admirable specimens of ground and lofty tumbling. We offered him our columns, but this was not what he wanted. His object was to get us to retract. No proper vindication of the act was attempted, as none was possible. The whole affair was a dexterous and successful operation, all enacted under an official garb.

Lapse of time since the lease was made is disclosing the real character of the transaction and the loss inflicted upon the Rock Island Company. The cost of the road at the time of the consolidation was stated to be \$5,268,655. The consolidation added to this sum, \$1,785,700, which is equal to the principal on which the interest, or rent, is paid; or 33 per cent. to the cost of the whole line. To make the operation a good one for the Rock Island Company, the earnings should increase in like ratio. In addition to the increase from the greater cost and length of road, should be the ordinary increase of earnings, which on all the new roads in Illinois and Wisconsin will average from 33 to 50 per cent. Let us see what has been the increase on the Rock Island road for the second year over the first, and since the Bureau Valley R. R. became a part of it. The latter was opened throughout, July 10th, 1854. The Bureau Valley lease took effect Feb'y 1st, 1855. Below we give the gross earnings for the first 6 months

after the completion of the Rock Island road, and before the lease was executed, compared with the earnings of the whole line for a corresponding period for 1855-6. The length of the Rock Island road is 181 miles; of the Bureau Valley, 47 miles.

Months.	1854.	1855.
August.....	\$97,641	\$103,140
September.....	132,790	141,790
October.....	176,221	180,063
November.....	144,349	130,026
December.....	81,841	95,915
	1855.	1856.
January.....	53,220	74,065
	\$685,662	\$727,003
		685,662

Increase for 6 months.....\$41,341
—or 6 per cent.

The capital account of the consolidated line is, probably \$550,000 larger than what it was in February, 1855; equal to a total of \$7,500,300. Had the Bureau Valley road been worth what it cost, the increase of earnings for the past six months over the corresponding period for 1854 should have been at least fifty per cent., instead of six. The company estimated the receipts for 1855 at \$1,600,000, while they have only reached \$1,326,000.

The above statement shows how our railroads are attacked and plundered. As in England, so in this country, the great danger comes from within. Men of wealth and influence get control of these works with no other object than to make money out of them. What is worse, they enjoy an impunity very much in proportion to their success in their nefarious schemes. So long as they are enriched they are good fellows.—It is when they fail that they are execrated.

There is another feature in this transaction to which we would invite attention. The report of the company merely announced the fact of the lease. Not a word was said showing the condition of the Bureau Valley railroad at the time it was annexed to the old line.—Is there a single stockholder, not profiting by the lease, that has the least information whatever as to the cost, or state of this road when taken by the Rock Island Co.? Not one. We have good reason for believing it to be by no means a finished work. Did not an act which added by a fair calculation, nearly \$1,800,000, or one third to the capital of the company, deserve something more than a mere passing allusion? The report is eloquent and elaborate upon trifles and in commendations, but is dumb upon what is most important to be known. Should not the reasons for entering into the lease, the actual cost of the road, its condition at the time it came to the Rock Island Co. have been fully set forth? Especially should not every act by which the directors take advantage of their positions to put money into their own purses? There was good cause for silence which is the very reason why it should not have been suffered.

For the year 1855 we cannot learn that any report has been published by the company. We know no reason why it was omitted. But after the report for 1854, and the result which the past year has shown, we should think the getting up of a report would be rather an irksome task. But disagreeable as it must be, there is no reason why the stockholders should not have the usual annual statement. Since 1854 two dividends have

been paid, each of which should have been accompanied by a statement or circular showing the condition of the company at the time. But the earnings of the road since the lease, and the last report, are so unsatisfactory, that we can hardly wonder at the silence that has been maintained.

On the Importance of Keeping Good Faith by Railroad Companies.

The more we reflect upon it, the more culpable appears to us the recent default of the Cleveland, Columbus and Cincinnati Railroad Company, in the matter of the Columbus and Piqua road. The whole railroad fabric of the United States is the result of, and rests upon no other basis than confidence in the integrity and capacity of those entrusted with its management. The legal muniments thrown around a security are valuable rather for the support they afford to the moral sense, inasmuch as they leave no pretext nor excuse for unfair dealing. So long as these are wanting, the pressure of the public sentiment makes men act honestly. But if there is a lack of integrity, or the most scrupulous promptitude in meeting obligations, the most carefully secured rights are worth but little. What can the holder of a single bond do? He is almost as powerless as if he were in the bottom of the sea. The thousand bonds may go into nearly as many hands. Among such a multitude, concert or co-operation to a common end is well nigh impossible. The road falls into the hands of the officers of the Courts, probably incompetent to its proper management, and sustaining no honorary or equitable relations to the parties furnishing means to build it. They soon come to regard their own interests only; and the property they have charge of is allowed to run to waste, or is eaten up by improvidence and excessive charges.

The money to build our railroads, consequently, has been supplied under the idea that the safety of an investment in all cases depends rather on the good faith of those to whom it was loaned, than on the legal rights secured to the lenders. No matter how promising the enterprise, or how clear the rights of the bondholders, no one would even think of taking a bond at any price, did he suppose the agreement it carries would not be scrupulously complied with. The caution displayed is the result of an experience which has proved over and over again, that rights are worth comparatively little where legal enforcement has to be resorted to.

The value of bonds is regarded as depending in all cases upon the good faith of those issuing them. There is another reason why this is so.—There is probably not one buyer in ten that knows anything about the validity of his security. He takes for granted that a respectable company, represented by reputable men, would not attempt to sell an invalid one. The very offering of such a bond, and taking the money therefor, creates the moral responsibility, about which there can be no mistake. Of the degree and value of the legal responsibility in any given case, hardly any person can form a correct notion. The former should in all cases become the rule of conduct, as it was the basis upon which the legal obligation was understood to be erected.

The maintenance of good faith is not only the highest duty of railroad companies, but is absolutely essential to their very existence. Unless it

can be fully relied upon, no one will trust them with a penny. The extremely low prices of railroad securities at the present time are owing to a few solitary instances of bad faith that have come to light, affecting all securities pretty much alike. There are but few companies against which any imputation exists—not one in twenty, nor perhaps in fifty. We are not now speaking of losses, of unproductive roads; because among such a vast number as there are in the United States, some such cases must be expected. They do not surprise the public, nor are they calculated to shake confidence in sound projects. But if our railroad managers are not to be trusted, then no matter how productive may be our works. If implicit reliance cannot be placed upon their integrity, the public will not touch either good or bad.

Notwithstanding the extremely low prices of all kinds of securities, there never was a period in the history of our country in which capital was so abundant as at this very moment. Did confidence exist, there is a sufficient amount of money lying idle to take up every valuable security pressing upon the market, and to carry every undoubted seven per cent. to a handsome premium—securities that are now selling at seventy-five cents on the dollar. There is no form of investment so convenient as a good railroad bond. There are numberless arguments in its favor. The vast numbers that have been sold show the manner in which they have been regarded. The difficulty attending their sale at the present time, and their extremely low prices, show how severe a shock public confidence has received. The only way in which this confidence can be restored, and our public works made to move forward, is an implicit adherence to the moral obligations which lie at the basis of all contracts. This, we think, has been violated in the case referred to. We hope to see immediately corrected the great mistake that has been committed. A double good will result. It will be seen that our public men are amenable to the moral sense of the community, while the discussion to which this matter has given rise will serve as a warning against any similar acts by railroad companies, and against the purchase of such kinds of bonds.

Savannah River Railroad.

The city of Augusta has decided by a vote of 412 to 377 (35 majority) to subscribe \$500,000 to the stock of the Savannah River R. R. Co.

A Railroad Complaint Book.

The New Jersey Railroad and Transportation Company has opened a complaint book at its office in Jersey City, which book is accessible at all times for the entry of all cases of complaint or dissatisfaction against officers or employees of the road. The company pledges itself to thoroughly investigate charges and redress grievances.

Important Railway Arrangement.

The Pittsburgh Gazette of a late date says it is informed that, in accordance with the general purposes expressed at the late meeting of the Ohio and Pennsylvania road, arrangements have been perfected, within a few days past, between the Pennsylvania, Ohio and Pennsylvania, the Fort Wayne and Chicago, and also with the Springfield, Mount Vernon, and Pittsburgh roads, by which the two last mentioned roads will be speedily completed. These are important connections, both

for the Pennsylvania and the Ohio and Pennsylvania roads.

Illinois Central Railroad Report.

According to the company's report, their receipts for 1855 were—

Freight	\$630,934.91
Passengers	693,048.93
Rent of road to other companies	105,068.82
Mails and expresses	46,243.29
Rents and other sources	56,822.86

\$1,532,118.81

The principal items of expense were—

Repairs of road	\$261,429.79
" engines	67,685.28
" cars	70,789.74
" buildings	8,328.22
Wages of engineers and firemen	67,612.01
" conductors and brakemen	49,483.80
Fuel, and preparing same	167,681.13
Tallow, oil, and waste	27,800.36
Station labor and expenses	119,188.28
Losses and damages	17,848.87
Salaries and office expenses	29,962.79
Stationery, printing, and advertising	13,107.40
Operating expenses to other roads	
against rent	52,534.41
Miscellaneous	17,003.75

\$969,895.83

To which must be added—

Am't paid for charter taxes	\$29,751.59
Exchange	4,518.69

Total

\$1,004,166.11

Leaving as net profits

\$527,952.70

The circumstances in which the company carried on operations for the past year were singularly unpropitious. The country was sparsely populated, the crops of 1854 unusually unproductive, and the Mississippi and Ohio rivers remarkably favorable to navigation, while nearly all the connecting lines of railroad were in an unfinished condition. The prospects of the present year are very different. The harvest has been abundant, enterprising men are rapidly settling the country along the line, saw mills are being put up, particularly on the southern part of the road, villages and towns are springing up every few miles, and older places keep rapidly increasing. The Great Western, the Terre Haute and Alton, the Ohio and Mississippi, and the Southern branch of the Galena and Chicago road, have either already been completed or shortly will be. Latterly, the coal traffic has assumed a considerable degree of importance. The local demand for this article for villages on the prairie is already great; over 20,000 tons having been transported over the road from La Salle and Du Quoin. Recent researches indicate the existence of other valuable coal deposits near the centre of the State, both on the main line and the Chicago Branch. There is a well founded expectation that the gross earnings for 1856 will reach \$2,500,000, one-half of which will be net profit. The sales of land last year amounted to 528,863 acres, realizing \$5,598,577. This includes all the lands for which the company were subjected to pre-emption payments—106,591 acres, at \$2.50 per acre. There are still unsold 2,066,136 acres, daily becoming more valuable. The General Government have already disposed of all the 3,000,000 acres laying within 15 miles of the road. In the counties along the line the population has increased over 250,000 since 1850, while that of the State has advanced fully half a million. Illi-

nois, at this same rate, will contain 2,000,000 of inhabitants in 1860. The Board feel confident that from the real estate alone the entire cost of construction and equipment will be fully met.

Mr. John H. Done, formerly connected with the Baltimore and Ohio road, has been appointed Superintendent. The Land Department is under charge of Mr. John Wilson, of Washington. Hon. E. Lane, of Ohio, now resides at Chicago, devoting his time and attention to the company's interests. These three gentlemen manage the principal part of their affairs in Illinois. The Board intend to refrain in future from incurring any obligations to other companies, no matter how apparently advantageous such might be.

The report states that at present there are 627 miles of road in operation, while the remaining 77 miles of the Chicago Branch are now ready for the rails, which are expected to be all laid by August ensuing. There are 63 miles of side track. Over 70,000 tons of iron have been laid, weighing 65 lbs. per yard. There are 1,223 bridge structures, all but 260 of which have been built of stone, and are of a permanent character. Total cost of these, \$1,378,236. The station buildings and engine houses are very complete. The total cost of these has been \$1,131,818. Of the road, 188 miles are ballasted, and 333 miles fenced. A line of telegraph, of which the Company are to have the free use, has been erected from Chicago to Dunleith by the Illinois Telegraph Co. At Chicago, the expenditures have reached one million dollars. This includes the break-water, securing the right to run their locomotives to the business part of the city, and 22 acres of ground enclosed, with a basin having 1,080 feet water-front close by on which are large freight and grain depots. Space for a second basin, with corresponding depots, has been secured. The one already put up will contain 600,000 bushels, and can elevate and transfer to vessels 75,000 bushels a day. From this point a double track has been laid for 14 miles; and a connection opened over Chicago river with the Chicago and Burlington and the Chicago and Galena roads. During the past year, \$52,434 net were received from other roads as rent for these improvements. It is expected that this will exceed \$100,000 in 1856, and \$150,000 in 1857—or seven per cent. on an outlay of \$2,000,000.

Of the \$17,000,000 construction bonds, \$758,000 are unsold. This issue is secured by 2,000,000 acres of land, and by the road on which \$20,374,446 have been expended. The payment of interest is secured by 250,000 acres of land, and by assessments on stock. The \$3,000,000 Free Land bonds are secured by 345,000 acres of land, of which 76,776 acres are already under contract at an average of \$11.54 per acre. The stock is held by 515 shareholders, and \$20 per share have been assessed. During the year 21 engines and 227 cars have been added to the stock, making an aggregate of 83 engines and 1452 cars, costing \$2,234,777.

To aid the construction of the Mineral Point Railroad, 32 miles long, the Illinois Central and the Galena and Chicago companies guaranteed a net annual income of eight per cent. on \$700,000. This liability to be met, if necessary, by a deduction of 30 per cent. on the rates of transportation over both roads. In January, an agreement was made with the Ohio and Mississippi Railroad Co.,

by which the latter engaged to put down a third rail, adapted to the narrow gauge, between St. Louis and Sandoval. The terms of this agreement stipulated a loan by the Central to the Ohio and Mississippi Company of \$200,000 for two years, secured by \$300,000 bonds. The contract has since been rescinded—one-half the sum advanced has been adjusted, and the remainder will be covered by the security.

The "Joliet Cut-Off" has been leased by the Michigan Central and Illinois Central Companies at an annual rent of \$89,000—each paying one-half. The trains of the Chicago and St. Louis road pass over this line, affording a valuable revenue to the Company.

These are all the engagements entered into with other companies.

A good feeling towards the undertaking is said to exist all through the State.

The liquidation of the bonds will commence next year. The Company have already in their possession over \$5,000,000 in notes which are applicable to the above object as they mature.

By the last report of the Mobile and Ohio Co., it appears that 170 miles of that road are in operation, and 252 miles more are ready for track laying, leaving only 70 miles out of 492 to be graded.—All but 24 miles of this road are now under contract, to be finished this year, when a connection can be made by steamboats between these two great lines. Such an event will add greatly to the revenues of the Illinois Central.

The Chief Engineer, Col. R. B. Mason, gives the following recapitulation of the number and kind of mechanical structures on the line:

Five cast iron culverts; 404 arch culverts, one span, stone and brick; 31 arch culverts, two spans, stone and brick; five arch culverts, three spans, stone and brick; 308 box culverts, stone; 159 open culverts, stone; 16 bridges, 15 to 50 feet span, stone abutments; 256 pieces trestle work; four pieces pile bridging; 27 Howe's truss bridges, 8,841 lineal feet, with three turntable draws, in length 584 feet; 12 road and farm bridges over the railroad; six road and farm bridges under the railroad; making in all 1,233 structures of a permanent character, with the exception of 260.

There have been erected, at the various intermediate stations on the line, aside from those specially noticed in this report, passenger and freight station houses, water stations, wood sheds, &c., all of a neat and substantial character, well finished, painted, and conveniently adapted to the desired use, and of a character to compare favorably with those on the best Eastern roads. The number of such buildings, including those already specially mentioned, is as follows:

Passenger station houses.....	42
Wood sheds.....	38
Brick engine houses.....	5
Stone ".....	2
Wood ".....	7
Water stations.....	52
Freight houses.....	55
Dwelling houses.....	35
Large brick machine shops.....	2
" smith ".....	2
" car houses.....	2
Stone machine shop.....	1
Stone smith shop.....	1
	244

There have been constructed by the company, along the line of the road, 333 miles of fence of substantial and durable character, at a cost of about \$246,435.75. All the portions of the line, for which gravel for ballasting was accessible within any reasonable distance, have been thoroughly ballasted, for which purpose gravel has been trans-

ported by trains on the road, in some cases, for a distance of 40 miles. The expenditure for ballasting has been \$159,540.90, and the whole length of road bed thus protected is 188 miles. There are some portions of the line on which it is impossible to procure gravel for this purpose, except by transporting it such a distance and at such a cost as to render it entirely inexpedient to adopt it.—In such cases, the road bed has been made up with peculiar care, of the best materials afforded in the vicinity, with thorough side drainage, and our experience, thus far, has demonstrated that thus prepared, and promptly and carefully attended to, it has been kept in as good condition as other portions of the line, without increasing the number of men per mile, employed in road repairs, beyond the average of other well managed roads, while the annoyance from dust and the wear of machinery from friction, are very materially reduced. The only railroads in operation within the State of Illinois, in the spring of 1851, were the Galena and Chicago Union railroad, 42 miles; Aurora railroad, 11 miles; Morgan and Sangamon, now Great Western, 45 miles. Total, 98 miles. The Michigan Central and Michigan Southern roads were both open to points within about 60 miles of Chicago. There are now in operation in the State:

Illinois Central railroad.....	627 miles.
Seventeen other roads.....	1459 "

Total.....	2086 "
Increase in five years.....	1988 "

The following is a statement of the receipts and expenditures of this road, with its financial condition, as they were on the 1st of March, 1856.

Receipts.

The Capital Stock of the Company is represented by 170,000 Shares, of which 129,256 Shares have been issued, and upon which has been assessed \$20 per Share. 127,566 Shares, \$20 paid.....\$2,551,320.00
1,128 Shares, \$15 paid..... 16,920.00
562 do. \$5 do..... 2,810.00

Less.....	\$2,571,050.00
Appropriated to Interest Fund in March and December, 1851.....	300,000.00
	\$2,271,050.00

Construct'n Bonds, \$16,247,000 have been issued, yielding (including premiums on Sterling Bonds,) to the Company, exclusive of commissions.....\$14,841,198.13
Less, Optional Stock, redeemed Jan'y 1, 1856..... 158,310.00
14,682,888.13

Free Land Bonds, \$3,000,000 a 70 per ct.....	\$2,100,000.00
Less, Commissions on this loan negotiated abroad.....	20,000.00
	2,079,876.61
Bills payable.....	2,245,450.09
Loans on Construction Bonds.....	\$293,583.67
Sundry accounts.....	19,279.16
	312,862.83
Sundry receipts.....	94,924.74
	\$21,687,442.90

Expenditures.

Charter Expenses.....	\$59,687.92
Company Expenses, Advertising, Office Expenses, Commissions, &c..	259,116.52
Salaries.....	187,717.63
Engineering.....	428,466.56
Railroad Iron, 70,625 tons, including freight, duties, insurance and transportation to Illinois.....	4,104,178.03
Construction, Grading.....	\$5,319,959.32
Superstructure.....	886,585.41
Ties.....	657,949.39
Bridging.....	509,087.30

Chairs and Spikes....	807,798.27
Trans. of Materials....	192,374.02
Masonry.....	1,378,236.42
Protection to Lake Shore.....	368,166.92
	9,620,157.05
Miscellaneous Expenses.....	25,026.90
Station Houses and Water Works, Engine, Freight, Station House, and Water Stations.....	\$1,131,818.86
Chicago Station Buildings.....	172,665.37
One-half Chicago Passenger Station.....	52,492.03
Telegraph line.....	40,849.37
Norta-st. Crossing....	24,882.50
Fencing.....	246,435.75
	1,669,143.88

Equipment, Machinery and Tools.....	\$125,510.93
Repair of Equipment.....	142,157.75
Patent Rights.....	7,316.00
Cars, Passenger.....	157,057.56
Freight.....	972,559.15
Coal.....	52,628.99
Gravel.....	18,839.78
Land.....	1,447.29
Engines.....	747,616.10
Station and Office Furniture.....	7,542.27
Coke Ovens.....	2,101.50
	2,234,777.32

Right of Way, Lands, Land Expenses, Solicitors' Fees, &c.....	551,093.51
Interest, Payments of interest prior to 1st January, 1855.....	794,267.98

Sundry Coupons, due April, 1854.....	\$6,154.44
Rent of Joliet Cut-off..	22,000.00
Interest Dividends on Stock, and interest on General Account.....	315,603.67
Interest on Free Land Bonds for 1855.....	97,055.00
	440,813.11

Expenditures.....	\$20,374,446.41
Receipts.....	21,687,442.90
Difference.....	\$1,312,996.49

Difference.

Balance in Treasurer's hands, Cash.	\$381,453.04
Balance in hands of Heywood & Co., London Bankers.....	120,123.16
Balance at Chicago Office.....	141,758.02
Bills Receivable.....	440,869.04
Accounts Receivable, secured by collaterals.....	156,592.51
Due from Sundry Accounts.....	45,284.26
Balance in hands of Chief Engineer.	26,916.16
	\$1,312,996.49

INTEREST FUND.

Balance as per Statement, Jan. 1, '55..	\$189,765.46
Cash received for Lands subject to pre-emption.....	24,965.59
Cash received advanced interest and per cent. payment on Interest Fund Lands.....	153,892.87
Cash received on Town Lots.....	10,182.17
Balance of interest received on Sales, less Expenditures of Land Dept..	45,398.85
Net Earnings of the Road for 6 mos. in 1854.....	149,744.16
Gross Earnings of the Road for 1855.....	\$1,532,118.81
Less Expenditures and Charter Tax... 1,004,166.00	527,952.70
	\$1,101,901.80
Less amt't paid balance of Interest Coupons on Construction Bonds, due in 1854, and amount paid Interest Coupons, due in 1855.....	1,099,723.86
Balance.....	\$2,177.94

WAYS AND MEANS.

Assets, as shown in "Difference,"...	\$1,312,996.49
851,000 Construction Bonds, at 87½%	744,625.00
Installment on Stock due	14,070.00
Due from P. O. Dept. service in 1855.	26,000.00
Real Estate in and near Chicago...	130,000.00
Currency in transitu	30,000.00
7,744 shares Stock owned by Company, at 97½%	127,776.00

Materials on hand as per Superintendent's Report	\$2,385,467.49
Wood, 55,261 cords, at \$127,634.70	
Iron and other Materials. 101,118.41	228,748.11
	\$2,614,215.60

ADDITIONAL LIABILITIES.

Coupons unpaid	\$14,157.50
Interest Dividend unpaid	6,055.74
861 shares Optional Stock unpaid	25,830.00
	\$46,043.24

The following gentlemen compose the Board of Directors:

His Excellency Joel E. Matteson, Governor of Illinois, *ex-officio*.

John A. Sanford and Leroy M. Wiley, of New-York, and Franklin Haven, of Boston—until March, 1857.

J. N. A. Griswold and Thomas E. Walker, of New York, and James F. Joy, of Chicago—until March, 1858.

Jonathan Sturgis, Joseph W. Alsop, and Fredk. C. Gebhard, of New York—until March, 1859.

Wm. H. Osborne and Abram S. Hewitt, of New York, and Ebenezer Lane, of Chicago—until March, 1860.

Wm. H. Osborne is President; J. N. Perkins, Treasurer; John B. Calhoun, Assistant Treasurer at Chicago. Wm. K. Ackerman, Secretary; John H. Douglass and David Stuart, of Chicago, Solicitors; Roswell B. Mason, Engineer in Chief; J. H. Done, General Superintendent; and John Wilson, Land Commissioner. The annual meeting was held on the 19th ult., at Chicago.

North Missouri Railroad.

The following gentlemen were chosen Directors for the ensuing year, at the election held on the 10th inst. Col. Fallon and some other members of the old Board declined a re-election:

Thos. T. January; I. H. Sturgeon; Wm. S. Allen; John Hartnett; John J. Anderson; T. B. Hudson; R. M. Renick; A. Krekel; G. B. Allen; Andrew Harper; John D. Coalter; James S. Rollins, of Boone County; N. B. Coats, of Randolph County.

Portland, Saco and Portsmouth Railroad.

All the bonds of the Portland, Saco and Portsmouth Railroad Company, provided for by the disposal of the balance of the unissued stock held by the corporation, have been promptly paid. This leaves the road free from debt with the exception of what may arise from the running and keeping the road in good order and condition, which the Boston and Maine and Eastern Railroads contract to do, as well as to pay six per cent. to the stockholders.

The road is leased to the Boston and Maine and Eastern Railroad Companies, and forms the continuation of their two roads in the state of Maine to Portland. At the time this lease was made there were outstanding bonds of the company, which were not due until within the past year. As the lessees contract to run the road, and to keep it at all times in good condition, we understand that hereafter no one will be authorized to sign any note or incur any debt for the company, so that its stock, now amounting to \$1,600,000, may be

considered strictly a trust fund, paying six per cent. per annum, guaranteed by the Boston and Maine and the Eastern Railroad Companies.

Employees on British Railways.

The Board of Trade, in a late Return to the House of Commons, give the numbers of employees on the several railways in Great Britain, in August last, as follows:

Name of Roads.	No. of persons employed on railways opened.		Length of line opened.		Number of Stations.
	Miles.	Chains.			
Bristol and Exeter	1,480	123	70	29	
Chester and Holyhead	616	105	42	27	
Eastern Counties	6,409	575	73½	166	
East Lancashire	1,637	79	79½	56	
Great Northern	4,939	313	53½	87	
Great Western	7,425	450	58½	119	
Hull and Holderness	64	17	40	10	
Lancashire and Yorkshire	4,322	293	37	126	
Lancaster and Carlisle	562	90	47	23	
London and North-western	12,777	636	69½	345	
London and South-western	2,842	264	16	72	
London, Brighton, & South Coast	3,009	164	38	60	
Man. Shef. & Lincolnshire	2,662	169	25½	68	
Midland	6,603	551	39	234	
Newcastle and Carlisle	699	78	21	30	
North-eastern	7,602	704	39	262	
North Staffordshire	1,145	123	00½	45	
Oxford, Worcester, & Wolver	1,090	93	57	29	
Shrewsbury and Hereford	406	50	46	15	
South Devon	606	56	74	16	
South-eastern	3,841	258	14½	75	
South Staffordshire	827	25	30	12	
South Wales	186	156	15	36	
Stockton and Darlington	1,760	99	70	27	
Taff Vale	956	42	54	15	
Vale of Neath	224	25	8	8	
Aberdeen	500	73	45	24	
(Persons employed in locomotive department included in Scottish Central.)					
Caledonian	3,270	196	64	61	
Deeside	63	16	16	9	
Dundee and Arbroath	179	17	27½	9	
Edinburgh and Glasgow	1,410	92	01½	25	
Edinburgh and Dundee	958	72	05½	34	
Glasgow and South-western	1,298	184	23	45	
North British	1,637	147	74	45	
Scottish Central	839	50	17	15	
(Including some of the men of the Aberdeen Railroad, and Scottish Midland.)					
Belfast and Ballymena	295	37	74	12	
Dublin & Belfast Junction	286	55	48	10	
Great Southern & Western	1,616	203	68	30	
Midland Great Western	748	126	36	22	

Herapath's Journal furnishes the following additional particulars, viz:

The number of persons employed on all the railways opened, in June, 1855, in the United Kingdom, was 97,952, of which 80,877 were on English and Welsh lines, 11,403 on Scotch lines, and 5,672 on Irish lines.

The number of miles of railway opened in the United Kingdom at the same time was 8,116, of which 6,167 was in England and Wales, 1,051 in Scotland, and 897 in Ireland.

The number of stations on the lines at work was 2,798 in the United Kingdom, of which 2,246 was in England and Wales, 347 in Scotland, and 205 in Ireland.

On the railways in the United Kingdom not then opened, 879 miles, 38,546 persons were employed.

Altogether, our railways, opened and in course of construction, employed at the recent date specified, the pretty little army of 136,498 persons, which is just about the same number as was in like employment at the corresponding period in the former years.

The Gauge Question.

The annexed extract is taken from the late report of D. C. McCALLUM. It will be found of interest to railroad men not only with regard to the above subject, but the interchange of cars between connecting lines. At various dates, efforts have been made to induce the Erie company to abandon the wide for the narrow gauge. We presume that agitation has got its quietus for the time.

"It may not be improper in this place to allude to arguments that were prominently used in opposition to the introduction of the broad gauge, the fallacy of which I think the experience of this road has fully proved.

Whilst admitting that a gauge of six feet would enable the introduction of engines of much greater capacity than could be obtained by the adoption of a gauge of four feet eight and a half inches, it was claimed that the latter would admit the use of engines of a capacity sufficient to haul as many cars as were considered profitable to connect in a single train, as much greater strength would be required in the drawheads and couplings in order to make the additional power available. It has been found by experience that there is no difficulty in giving all the strength required, and that a load equal to the most powerful engine upon the road, rarely produces the result apprehended.

It was also said that *uniformity of gauges* was necessary to the economical transportation of freight, and that a departure from uniformity hitherto preserved would involve additional expenditure in loading and unloading freight, between all connecting roads having different gauges, as they would from this cause be precluded from interchanging cars; the disparity limiting their use to the peculiar road to which each was adapted.

Plausible as this argument may at first sight appear, it is, nevertheless, in point of fact, not true as to the economical effects claimed; as the cost of transferring freight from the cars of one road to that of another with which it connects, is less than that of hauling the "empty return cars" back—rendered necessary in cases where the freight is sent east—the preponderance of trade being largely in that direction. It may be said, the "dead weight" hauled would be the same whether the load was conveyed in cars belonging to this or some other road; but such is not the case, as the cars belonging to this road may be used in transporting local freights on their return, between intermediate stations, so as to be partially loaded at least; whilst in the other case, the cars must be promptly returned to their owners for use.

This system of interchange of cars, so far as short roads are concerned, is undoubtedly beneficial; but if applied in connection with long roads, the benefits will be found to be derived at the expense of the latter, as in the settlements between the two, the payments for "mileage" for the use of cars will invariably be in favor of the short lines. The long roads by this system are frequently compelled to pay the hire of rolling stock of inferior construction, (their own, perhaps, in the mean time standing idle) and also to expend large sums to keep such cars in repairs; as they are not unfrequently sent from one road to another in such a dilapidated condition as to involve the necessity of switching them out of the train before reaching their destination, making it often necessary to re-ship goods at points where it is not only inconvenient but expensive to do so. This has been the experience of this road, and our accounts show that it has cost this company nearly double the amount per mile run for the repairs of cars belonging to other lines, that has been expended on their own. These objections have been found so serious in their character, that it has been deemed neces-

sary to almost entirely discontinue the system of interchange, although the lateral roads connecting with these were constructed, of the same width of gauge, with that particular object in view.

Whatever advantages may be claimed for the system, in its application to short roads forming the same line, or to lateral roads connecting with main trunks I have no doubt it can be clearly shown that companies owning the latter have nothing to gain, but much to lose by such an arrangement; and I confidently believe that the experience of railroad managers generally, will bear me out in the remark, that a road 500 miles in length, with a gauge that does not correspond with that of any independent line with which it connects, enjoys in this particular, an enviable position.

An accurate account of the cost of loading and unloading has been kept at the Dunkirk station, from which it appears that the expense is about seven cents a ton, certainly a much less sum than the cost of hauling the extra dead weight, repairs of cars, and wear and tear of machinery, involved by the interchange of cars.

Williamsport and Elmira Railroad.

The Philadelphia Ledger, of April 1st, says:—"The coupons on the Second Mortgage Bonds of the Williamsport and Elmira Railroad Company, due to-day, will be paid at their office. This Company have recently been reorganized, and some of our most efficient men of business, after careful investigation, have taken a large interest in its securities and an active part in the management. A loan has been negotiated for the purpose of paying off the floating debts of the Company, and to fully equip the road, and thus enable the Company to give despatch to the large quantity of coal, iron, lumber, &c., which have been offered for transportation, and which, heretofore, they have been unable to accommodate. This line of road, forming, as it does, a part of a great line from the North to the South, is of an importance to our city, which we believe is not yet fully appreciated. A new outlet from Shamokin coal fields to the great markets of Western New-York has thus been opened by the completion of the Sunbury and Erie Railroad, from Sunbury to Milton; and we are informed that the demand for coal, with the large local and through business, which is insured, will soon equal the capacity of a road with a single track."

The following is a list of the officers: Thos. Kimber, Jr., President; W. C. Longstreth, Treasurer; Directors—S. V. Merrick, Israel Morris, Albert Worrell, John Tucker, Francis N. Buck, Caleb Jones, A. S. Devin.

Pacific (Mo.) Railroad.

At the late annual meeting of the stockholders of this company the following gentlemen were elected to serve as Directors for the ensuing year:

Jas. H. Lucas, Jas. E. Yeatmen, Hudson E. Bridge, Geo. R. Smith, of Pettis county, John How, Philip S. Lanham, Wm. M. McPherson, Chas. K. Dickson, H. I. Bodley, John G. Priest, Benj. W. Grover, William Gilpin and W. S. Cuddy. At a subsequent meeting of the Directors, James H. Lucas, Esq., was chosen President, and Wm. M. McPherson, Esq., Vice President. The St. Louis Republican says: "These are excellent selections. Mr. Lucas, as the country knows, is one of our richest and most enterprising men—the largest stockholder in the Company, and anxiously solicitous for the completion of this road, and particularly the South-Western branch of it, in which he sees an immense trade to be drawn to this city from Arkansas and the civilized nations of Indians on that border. Mr. McPherson, for a year past, has been one of the most active and useful members of the Board. No labor was so great that he did not take it upon himself to perform it, sometimes at great personal sacrifice, but always successfully. He is perfectly familiar with all the business of the Company, and whenever his personal exertions, and good judgment and energy are required, they will always be exerted to the advantage of the Company. The Board is fortun-

nate in having made these selections, particularly with reference to future operations.

Before the adjournment, Samuel Copp, Jr., was elected Secretary and Treasurer, and the 16th was appointed for the election of Directors to fill the vacancies in the Board."

Pensacola and Montgomery Railroad.

The Pensacola Gazette says that it expects the Pensacola and Montgomery (Ala.) Railroad will be complete within two years, and six trains a day steaming between the two places.

Railroad Earnings.

The following statement shows the earnings of the various roads named for March. It will be remembered that much of that month was of the severest character, as well as January and February:

READING R. R.		
Received from coal....	\$207,098.42	\$295,766.50
Merchandise.....	30,176.19	32,697.51
Travel, &c.,.....	24,182.07	24,201.25

Transportation, Road-way, Dumpage.....		
Renewal f'nd, all charges	150,184.99	265,260.55

Net profit for the month.....	\$111,274.69	\$187,394.75
Net profit for the previous three months..	147,398.27	273,729.45

Total net profits for four months.....	\$258,672.96	\$481,124.20
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NORWICH & WORCESTER R. R.		
March, 1856.....	\$28,458.87	
March, 1855.....	23,466.49	

Increase.....	\$4,992.38	
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MACON & WESTERN R. R.		
Earnings for March, 1856.....	\$33,390.63	
March, 1855.....	28,466.38	

Increase.....	4,924.25	
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The business of the first three months of 1856 has been \$89,333, against \$84,715 for the same period in 1854.

CHICAGO & ROCK ISLAND R. R.		
Passengers.....	\$57,575.30	
Freight.....	37,772.15	
Mails.....	1,800.00	

Total.....	\$97,147.45	
March, 1855.....	93,037.94	

Increase.....	\$4,109.51	
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For the four months ending 31st March, the receipts have been \$337,146, showing an increase of \$48,429 over the corresponding period in 1854.—The bridge across the Mississippi is to be opened this day.

INDIANAPOLIS & CINCINNATI R. R.		
Passengers.....	\$20,190.80	
Freight.....	23,138.29	
Mail.....	752.08	
Express.....	573.12	

Total.....	\$44,654.35	
Earnings for March, 1855.....	33,275.12	

Increase.....	\$11,379.23	
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BALTIMORE AND OHIO R. R.		
Receipts on Main Stem.....	\$366,575	
Washington Branch.....	39,244	

Total.....	\$405,820	
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The increase on the main stem over the corresponding month of last year is \$32,114; Washington branch, \$3,257; total increase over March, 1855, \$35,365. The total earnings for the six months ending March 31st have been \$2,073,515, an advance of \$116,245 over the same period in 1854-5.

NEW YORK & ERIE R. R.

March, 1856.....	\$455,256.07
March, 1855.....	507,090.26

Decrease..... \$51,834.19
For the six months ending March 31st, the total earnings are \$2,949,517, against \$2,762,529 the previous year. Increase, \$186,988.

PHILADELPHIA AND COLUMBIA R. R.

Comparative statement of tolls collected on the Columbia and Philadelphia Railroad for the month of March, 1855 and 1856, and for the first four months of the fiscal years 1855 and 1856:

March, 1856.....	\$75,719.83
Same month last year.....	74,506.20

Increase.....	\$1,213.68
From Dec. 1, 1855, to March 1, 1856..	275,352.47
Same time last year.....	234,870.96

Increase.....	\$40,481.41
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MICHIGAN CENTRAL RAILROAD.

Passengers.....	\$94,554.98
Freight.....	89,876.60
Miscellaneous.....	7,273.74

Total.....	\$191,705.27
March, 1855.....	161,054.01

Increase.....	\$30,651.26
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OHIO AND PENNSYLVANIA RAILROAD.

Passengers.....	\$58,870
Freight, &c.....	46,471

Total.....	\$105,341
March, 1855.....	93,479

Increase.....	\$11,862
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PACIFIC RAILROAD.

Freight.....	\$12,450.08
Passengers.....	16,275.85

Total.....	\$28,725.93
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This is an increase of \$16,500 over the corresponding month of the previous year, when the road was only open and run to Washington, Mo., 54 miles.

COVINGTON AND LEXINGTON RAILROAD.

Passengers.....	\$11,371.41
Mails.....	813.83
Freight.....	15,082.40

Total.....	\$27,247.64
Receipts for March, 1855.....	20,000.00

Increase.....	\$7,247.64
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MILWAUKEE & MISSISSIPPI RAILROAD.

Earnings for March, 1856.....	\$31,800
" " " 1855.....	30,456

Increase.....	\$1,344
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Railroad Iron.

1,300 TONS New York & Erie pattern, 57 lbs. weight, ready for immediate delivery. For sale by THEODORE DEHON, 10 Wall st., near Broadway. 3115
New York, April 16th, 1856.

Notice to Contractors.

OFFICE OF THE LONG DOCK COMPANY. }
Jersey City, April 15, 1856. }
SEALED PROPOSALS will be received at this office until the 6th day of May, proximo, at 10 o'clock A.M., for grading two miles of railroad; including a double track TUNNEL, about 4,000 feet long
The Tunnel is located in Hudson City, about one mile from the Hudson river, and through the Ridge of Trap Rock known as "Bergen Hill."
The whole work to be completed on or before the first day of November, 1857.
Specifications, Plans, Profiles, Sections, &c., of this work may be seen at this office, or at the office of the NEW YORK AND ERIE RAILROAD COMPANY, Erie Place, West Street, City of New York.
3116 HOMER RAMSDALL,
President L. D. Co.

SALE OF THE MAYSVILLE & LEXINGTON R. R.,

with all its Property and Franchises, Locomotives, Cars, &c.

JAMES PUNNETT and others, plaintiffs, against **THE MAYSVILLE & LEXINGTON RAILROAD COMPANY** and others, defendants.—By virtue of the Judgment of the Fayette Circuit Court, rendered in the above case, I will sell, at public auction, on **Wednesday, the 23rd day of April, 1856**, at the Public Square, in the City of Lexington, State of Kentucky—

THE MAYSVILLE & LEXINGTON RAILROAD;

both that part of the road which is completed and the part unfinished; embracing the road bed, and superstructure where the same is laid down, the right of way, and all lots of land in and adjacent to the road track, with all the buildings, stations, car-houses, and improvements belonging to said railroad, together with the franchises of the Maysville and Lexington Railroad Company; all of which will be sold together, upon credits of six, twelve, eighteen, and twenty-four months, in equal instalments.

At the same time and place, I will also sell all the Lots of Land belonging to said Company, and not adjacent to the railroad track—consisting of a lot of land in the City of Lexington, a tract of land in Fleming County, and town lots in Paris and Millersburg, on credit of six and twelve months, in equal instalments.

And at the same time and place, I will sell all the Locomotives, Freight and Passenger Cars, Cross-Ties, &c.—consisting in part of two locomotives and tenders of twenty-four tons each, three passenger cars for sixty passengers each, one entirely new and all in good order; seven box freight cars, eleven platform cars, eleven tops for platform cars, five gravel cars, and a top for another; fifteen pairs of car wheels, a hand car, a lot of bridge and car iron; 9,500 cross-ties near Maysville, 1,350 of which are of locust and the remainder of oak; about 6,000 cross-ties along the line of the railroad between Lexington and Millersburg. The new passenger car, two freight cars, and the tops for platform cars, are in Maysville, all the other rolling stock is in Lexington, and the whole is of 4 feet 8½ inches gauge. All to be sold on a credit of six months.

The purchasers will be required to execute bonds for the purchase money, having the force of Judgments, with good security, to be approved by me, of one of the following kinds, to wit:—1. Personal security. 2. First Mortgage Bonds of the Maysville and Lexington Railroad Company. 3. Mortgages in real estate in counties near this railroad or the Covington Railroad. 4. State and United States Bonds. 5. A First Mortgage on a productive railroad.

The property will be exhibited to all persons desirous of purchasing, by the undersigned, who will be found in Lexington, Ky., or by **A. M. JANUARY**, at Maysville. Letters of enquiry, addressed to me, will be attended to.

BEEN MILTON,
Receiver and Commiss'r,
LEXINGTON, Kentucky

2m8



NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1856.

Extension of Trunk Line to Nelson's, Shubenacadie.

TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until SATURDAY, the 10th day of May next, at 12 o'clock, noon, for the Construction and Finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, on the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Rails, Chairs, Spikes and Slide Keys. The work to be completed by the 30th day of June, 1857.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock a.m.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

6c14

JOSEPH HOWE, Chairman.

New York and Erie R. R.

On and after **Monday, Dec. 31st, 1855**, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

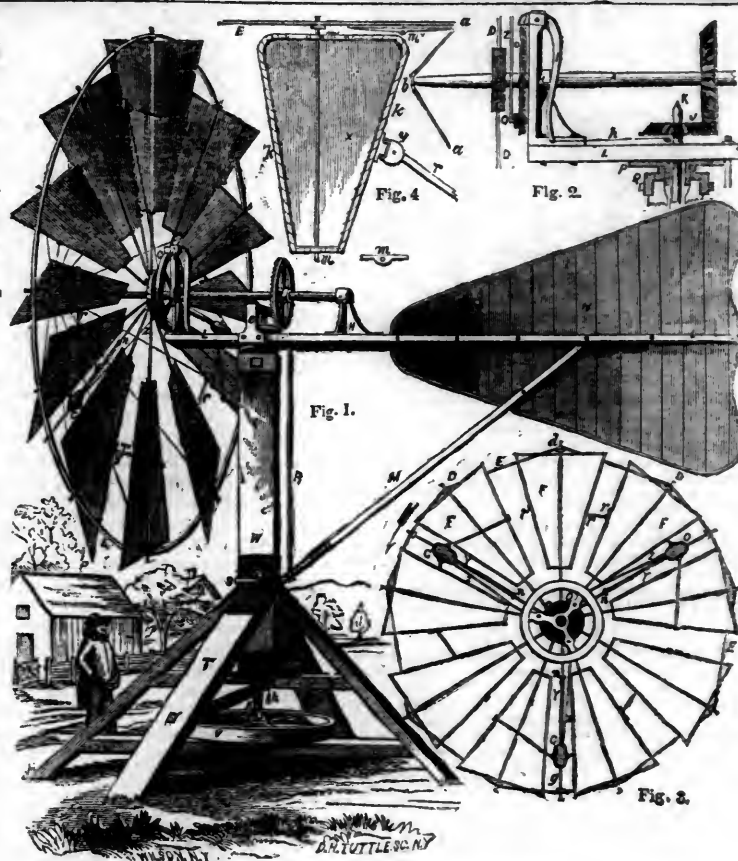
These Express Trains connect at Elmira with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

1st.

D. C. McCALLUM, General Supt.

THIS MILL IS ADAPTED TO RAISING WATER AND SAWING WOOD AT RAILROAD STATIONS.—It is entirely self-regulating; the tension of the springs Y, keeps the sails F, turned or set to receive the power (wind) and the centrifugal force (of the weights G) whenever the velocity becomes too great, turns off the power, by turning the sails out of the wind. Unlike steam or horse power, it requires no attendance, eats no oats, burns no fuel, sets fire to no buildings, blows no smoke, and is so constructed that it will run on a wind of 10 miles an hour. Sufficient tank capacity should be supplied to provide for calms. Sizes of mills vary from 6 feet diameter to 16 feet, and prices from \$60 to \$800. A mill giving an average of about 5½ horse power, 14 feet diameter, will cost \$230. All requisite information will be furnished on application to this office, where a model may also be seen. These mills are about being put up on the Boston & Worcester and Mobile & Ohio railroads where their operation may also be witnessed. Address or call on

N. DAVIDSON, General Agent, No. 9 Spruce st., New York.



**FRANK G. JOHNSON'S
PATENT SELF-REGULATING WINDMILL,**
Brooklyn, N. Y.

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK. (ONE DOOR SOUTH OF BEAVER STREET.) RAILROAD AGENTS AND COMMISSION MERCHANTS, PURCHASE AND SELL ON COMMISSION FOR RAILROAD COMPANIES.

RAILROAD IRON.—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

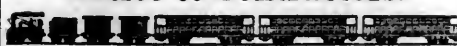
All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

Notice to Contractors.



M. C. AND L. R. R. OFFICE.
Clarksville, Tenn.

THE MEMPHIS, CLARKSVILLE, & LOUISVILLE RAILROAD CO. invite sealed proposals for grading sections 1 to 30. Work generally heavy. Bridges—Cumberland, 500 feet long; Red River, 400 feet long. Materials—Earth, Rock, Loose Rock, and Hardpan. Means of the Company—Cash; Tennessee State Bonds; City and County Bonds. Time of completion—December 1st, 1857. Time of letting—April 24th, 1856. Plans, profiles, and specifications may be seen at the office.

G. B. FLEECE,
3c14 Engineer in charge.

W. B. MUNFORD,
Pres't M. C. & L. R. R.

SCOTCH IRON.

PIG IRON, Bars, Boiler Plates, Sheets, Hoops, Railroad Bars, Tyres, &c.

CALEDONIAN PATENT LAP-WELDED TUBES
PATENT CAST IRON PIPES—made from best Scotch pig iron—cast vertically and drill easily.

6m13

WILLIAM ROY, Agent,
74 Broadway, NEW YORK.

Railroad Iron.

1,000 TONS 57 lbs. weight on hand and for sale by **THEODORE DEHON,**
10 Wall st., near Broadway, N. Y.
March 13th, 1856. 4111

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

3tr

A. WILKINS.

Philadelphia, Wilmington & Baltimore Railroad.

**UNITED STATES MAIL ROUTE TO THE
SOUTH AND WEST.**



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 60
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	2 00
do do Richmond.....	5 00

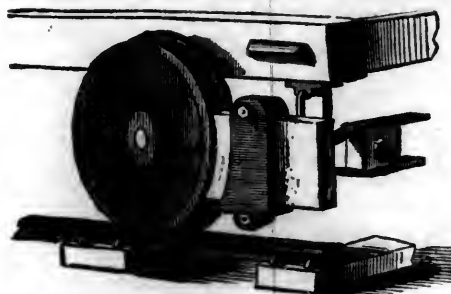
FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Supt.

PAIGE'S ADJUSTABLE CAR BRAKE BLOCKS!



BY this improvement the brake heads or shoes are separate, removable, and adjustable blocks of hard wood scantling, clamped by a face plate or cap to suitable sockets on the ends of the brake beams. The end of the grain of the wood is presented to the wheel, and as the shoes wear, they can be set up to any required amount by loosening the face plate of the socket. The ordinary brake heads now in use must be replaced by new ones when they become a trifle worn. The present improvement obviates the necessity of this renewal, also that of shoeing the brakes with leather or iron. By using the end of the grain of the wood, a large amount of friction is had without danger of fire.

The NEW YORK ADJUSTABLE BRAKE COMPANY

are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

Please address C. DINSMORE, Agent.
DINSMORE'S RAILWAY GUIDE OFFICE, 9 Spruce st., N.Y.

NOTICE TO Contractors and Capthalists.

San Francisco and Sacramento Railroad.

SEALED PROPOSALS will be received by the undersigned in New York City from April 10th, until May 10th, 1856, for the construction and equipment entire of the SAN FRANCISCO AND SACRAMENTO RAILROAD, California, from the City of Sacramento to the City of Benicia, a distance of 58 miles.

The railroad is upon the main trunk line from San Francisco to the interior, over which passes three-fourths of the entire inland trade and travel to California, saving 30 miles in distance over the present route, reducing the time from 8½ to 3½ hours, and passing through the fertile lands of Solano and Yolo Counties, the richest agricultural counties in the State. It connects at Sacramento with the Sacramento Valley Railroad now built and running, and is the key to San Francisco for all lines running from Northern and Eastern California.

Maps, profiles, and specifications can be seen and every information obtained upon application to the undersigned Room No. 7, Metropolitan Bank Building, cor. Broadway and Pine st., New York.

THEODORE D. JUDAH,

Chief Engr and Commissioner, S. F. & S. R. R.
New York, April 7th, 1856. 1m15

York and Cumberland R. R.



NOTICE.

To the York and Cumberland Railroad Company, and all whom it may concern.

BY virtue of the Deed of Conveyance to me, executed by said Company, and of the Trust powers therein named, which deed bears date the Sixth day of February, A. D. 1851; and by the concurrence of several of said bondholders, as well as in my own behalf, as grantee and bondholder, this is to give notice to said Company, pursuant to the terms of said deed, and to all whom it may concern, that for breaches of the conditions and covenants in said deed contained, by said Co., to and with the undersigned as contractor, and to and with the bondholders, described in said deed, I did, on the Thirty-first day of March last, past, and for the purposes of the deed and trust aforesaid, take full and complete possession of the premises and property therein described, both "personal and real, rights of way and corporate franchise, with all its privileges and immunities, as the same

exist by virtue of the said Company's act of incorporation and the laws of the State, together with all the buildings upon said premises," excepting only the Depot and lot of land whereon the same stands, situated in the City of Portland, but meaning to include all iron rails, road-bed, track, and other structures of said Corporation, that has been acquired by said Corporation, "be the same more or less, and throughout the whole line of said road, and including all cars, engines and furniture, that have been purchased by said Company;" and that I shall dispose and sell the same for the purposes aforesaid, by public vendue, on WEDNESDAY, the Thirtieth day of April current, at the Depot of said Company, in the City of Portland, at Ten of the clock in the forenoon, to the highest bidder, for cash, payable at the close of the sale, and on execution of the deed of sale, and to the full extent of the powers derived to or by me, under and by virtue of said deed, and not otherwise. Said deed is recorded in the Registry of Cumberland County, book 226, page 467; and in the Registry of York County, book 216, page 472; and in the records of the town of Westbrook, Vol. 3, page 20, and in the records of Gorham, book 1, pp. 144, 145, 146, and in the records of Portland, Vol. 7, page 145—to which several records reference is made for more precise information, as also to the several printed annual reports of the acting Directors and Treasurer of said Company, in August of the years 1851, 1852, 1853, 1854 and 1855. For all other desirable information which the Treasurer of said Company can furnish from his books, application can be made to S. W. EATON, Treasurer, who will cheerfully facilitate inquiry respecting the premises. J. G. MYERS.

Portland, April 3d, 1856. 3c15

Notice to Contractors.



OFFICE OF RACINE AND MISSISSIPPI R. R. CO.
Racine, Wis., March 15th, 1856.

PROPOSALS will be received at this office until the 10th day of April next, at 12 o'clock a. m., for the Grading, Masonry and Bridging of the second division of the Racine and Mississippi Railroad, being from Beloit to Savanna on the Mississippi river, a distance of about sixty-eight miles. The whole work to be completed during the present year and in time for laying the track previous to January 15th, 1857. This work lies wholly through the northern counties of Illinois west of Rock river. The country is densely populated and unsurpassed in point of health and abundance of supplies.

Proposals will also be received at same time for the construction of the Bridge across Rock River at Rockton.

Plans, profiles, and specifications, together with all necessary information can be obtained on application at this office on and after the 25th instant.

HENRY S. DURAND, President.

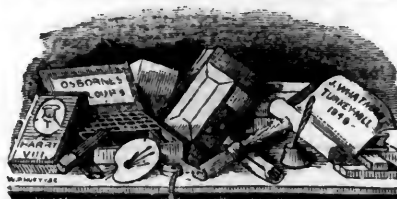
For general information parties can refer to the Company's Agents in New York, Messrs. CLARK & JESUP, No. 70 Beaver st.

The time for receiving proposals as above is hereby extended until the 20th day of April.

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May 14, 1856.

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LONDON, Oct. 1855. 6m46

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5. " 15 " 1 1/2 to 1.	17. " 25 " 1 1/2 to 1
6. " 15 " 1 1/2 to 1.	18. " 26 " 1 1/2 to 1
7. " 15 " 1 1/2 to 1.	19. " 28 " 1 1/2 to 1
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10. " 18 " 1 1/2 to 1.	22. " 30 " 1 1/2 to 1
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The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and fencing.

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Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of, that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands is carried

either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

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It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State, also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

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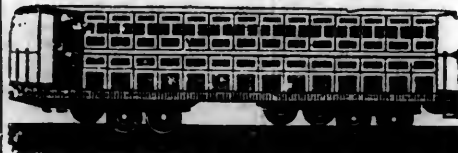
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, April 26, 1856.

Statistics of the Geography and Production of Iron.

From a paper recently read before the New-York Geographical Society, by ABRAM HEWITT, Esq., we take the following. The figures given show the vast advance made in the use of this most important element of modern civilization, and prove most conclusively that the day is not far distant when we shall be in a condition not only to supply the home demand, but to compete in the markets of the world in the production of this staple. The writer takes a hasty glance at the early history of the article; tracing the introduction of cast iron into Europe to the crusaders returning from the East, on which he observes:

The knowledge thus acquired was soon put to use throughout Europe; but it surprises the inquirer to find that in the year 1740, only 116 years ago, the total production of iron in England amounted to not more than 17,350 tons, made by fifty-nine furnaces, giving an annual production of 294 tons to each furnace. At that time I am satisfied that the total production of Europe did not exceed 100,000 tons, of which 60,000 tons were made in Sweden and Russia, and one-half of this was imported into England. The annual consumption of iron in England was, therefore, 15 pounds per head of population, and in Europe did not exceed 2 pounds per head. The destruction of wood, caused by this insignificant product, was so rapid, that the business of making iron was likely to be

extinguished, when, as is the universal rule, the evil which was dreaded gave birth to a remedy which imparted new life to the production, and has enabled it to reach its present gigantic proportions. This remedy was the substitute of pit, or mineral coal, for charcoal. To Dud Dudley, an Englishman, is due the merit of this discovery, or at least of its practical application; and to him, more than any other man, belongs the title of the "Father of the Iron Trade." But his discovery made little progress for the period of 100 years. In 1750 it came into general use; and in 1760 the first blowing cylinders were erected by Smeaton, at the Carron Iron Works. A single furnace was there made to yield 1,000 tons per annum, or three times as much as the average of charcoal furnaces.

The total production of Great Britain, in 1788, had reached 68,800 tons, making an increase of 50,950 tons in 48 years, i. e., 300 per cent. At this time Watts' great invention of the steam engine was introduced; and emancipating the iron works from dependence on sites where there was waterpower, produced so great an increase in the business, that in 1796 the production had reached 125,079 tons, and in 1806, only 10 years later, it had increased to 258,206 tons, each furnace making an average of 1,546 tons per annum, but the average of the best constructed was 2,615 tons per annum, or nine times as great as the charcoal furnaces only 60 years before. At this date, only 50 years ago, I am satisfied that the annual make of the whole world did not exceed 500,000 tons, one-half of the present annual production of the United States. The annual consumption of iron per head in Great Britain had reached 40 pounds, showing conclusively a wonderful progress in the arts of civilization—the consumption having nearly trebled in less than 60 years.

These were the results of the inventions of Dud Dudley and of Watts. But in 1783 and 1784, Henry Cort, also an Englishman, inaugurated a new era in the iron business, by his invention of the process of puddling (i. e., of converting cast-iron into wrought iron in reverberatory furnaces), and of reducing the rough masses thus obtained into finished bars, by grooved rollers. The history of this great benefactor of his race is an instructive one. Born to a competence, well educated in the science of his day, attracted to the iron business by an enthusiasm which no obstacles could daunt, he devised two improvements, so essential, that it is not too much to say that the iron business could not exist without them—that iron ships could not be built—because the wealth of the universe would not be adequate to the production of iron on a scale now rendered essential by the wants of civilized life. He expended \$250,000 in putting his invention into practice; he proved its merits; he built works for himself

and others, which were eminently successful; he had licensed a production which would inevitably have produced to him one of the largest fortunes which human ingenuity has ever achieved. When his associate, a deputy paymaster in the navy, was proved to be a defaulter to the extent of £27,000, the patents were seized by the British Government; but instead of being prosecuted, were kept tied up with the usual red tape, in the office of some Government official, "without the slightest benefit either to the State or the patentee," so that the fruits of a life of honest labor were lost, and Cort was reduced to beggary—a monument of the sad results, on the one hand, of a breach of official trust, and on the other, of official routine and delay. William Pitt finally accorded to him a pension of £200 per annum, which he lived to enjoy for six years, dying broken-hearted, and the British iron trade generously raised £1,000 for the relief of his widow.

After noticing the reduction in the price of iron, due to the unrequited service of Cort, the writer proceeds—

Since the time of Cort, with the exception of the introduction of the hot blast, in 1829, and for the use of anthracite coal in 1837, of which I shall have occasion hereafter to speak, no material improvement has been made in the modes of making iron, and in 1806 all the processes were in use which now prevail in the best constructed works. The growth of the business was thenceforth very rapid, limited only by the consumption of product.

In 1818, the product of G't

Britain was estimated at 300,000 tons.

1820,	"	400,000	"	(Mushet.)
1823,	"	452,066	"	(Official.)
1825,	"	581,367	"	

At which date the yield of each furnace averaged 2,223 tons, being an increase of 45 per cent. in 10 years, chiefly due to improved machinery, larger furnaces, and better blasts.

In 1830, the annual make was 678,417 tons.—The use of the hot blast now enabled raw coal to be substituted for coke, by which the consumption of coal was largely reduced, i. e., from 8 tons 1½ cwt. to 2 tons 13¼ cwt. for making one ton of pig iron in Scotland, to whose ores and coals it was found to be chiefly applicable. As the present make of Scotland is now over 800,000 tons, the annual saving in coal is nearly five millions of tons, or about the quantity mined on the Atlantic slope of the United States. It is worthy of note that Neilson was compelled to enforce his patent by legal process against the combined strength of the trade; and it was only after years of vexatious delay that his patent was affirmed on appeal to the House of Lords, and that he received the reward of his great discovery. It is recorded that the

Bairds, the princely proprietors of the Gartsherrie Works, and who, from being day-laborers in a coal mine, have achieved their present position as the makers of over 100,000 tons of pig iron per annum, and as the richest manufacturers in the world, settled Neilson's damages for infringement, by a check on the Bank of England for £150,000 sterling. So marked was the effect of this discovery, that

	Tons.
In 1836, the make am't'd to.	1,000,000
1839, " "	1,248,781
1840, " "	1,396,400
1845, " "	1,512,500
(Official.) 1847, " "	1,999,608
1852, " "	2,701,000
(Truran.) 1854, " "	3,585,906

Made by 599 furnaces, giving an average to each of 6,000 tons, being over 2½ times the yield of each furnace in 1825. This incredible product was achieved by the direct labor of 238,000 men, and 2,120 steam-engines of an aggregate power of 242,000 horses, and the value of the gross product was \$125,000,000. If you will pause to consider the infinite variety of uses to which this iron has been applied, for it was all consumed at least six months ago, you may perhaps be able to form some idea of the millions of human beings whose labor it has absorbed, and to whom it has given bread, especially when I tell you, (I quote the *British Quarterly*), "that a bar of iron, valued at \$5, worked into horse shoes, is worth \$10.50; needles, \$55; pen-knife blades, \$3.285; shirt buttons, \$29.480; balance springs of watches, \$250,000;" all of which increase in value is given by the application of human labor.

To make this product, and reduce rather more than half of it to bars, there were dug from the bowels of the earth and consumed—

	Tons.
Of iron ore.....	12,346,000
Limestone.....	2,450,000
Coal.....	20,146,000

Tons.....\$44,942,000

A sum total before which the imagination stands appalled.

I am inclined to believe that the production for 1855 did not materially exceed the figures for 1854. I shall now endeavor to ascertain what that am't is, by succinctly stating the make of other European countries, as nearly as I can ascertain the same.

Date.	Tons.
England.....1855.....	3,585,906
France.....1845—438,900 tons, estim'd.	650,000
Belgium.....1855.....	255,000
Russia.....1849-'51—191,492, estim'd.	300,000
Sweden.....1850-'52—124,169, " "	157,000
Norway.....1855.....	22,500
Austria.....1847—165,776.....	200,000
Prussia.....	400,000
Balance of Germany.....	200,000
Elba and Italy.....	72,000
Spain.....	27,000
Denmark, and balance of Europe.....	20,000
United States.....	1,000,000
	6,889,906

The present annual production of the world does not, therefore, exceed 7,000,000 tons, of which Great Britain produces rather more than one-half.

Assuming the population of the world to be 900,000,000, the production, and of course the consumption is at the rate of about 17 pounds per head.

In 1740, when we have the most reliable data, the consumption of iron did not amount to one pound per head. But the great fact to which I wish to call your attention, in order to deduce the practical results at which this paper aims, is the distribution of the present consumption among the nations of the world. In order to determine this point, I have made very careful calculations, which show the following result:

Nations.	Production per head per lb.	Consumption per head per lb.
England.....	287	144
United States.....	84	117
France.....	40	60
Sweden and Norway..	92	30
Belgium.....	136	70
Austria.....	12½	15
Russia.....	10	15
Switzerland.....	—	22
Prussia.....	50	50
Germany, Zoll Verein.	50	50
Spain.....	4½	5

Turkey, and the uncivilized portions of the world, too little to be calculated.

A careful examination of this table will demonstrate conclusively that the consumption of iron is a social barometer by which to estimate the relative height of civilization among nations; for considering in what practical civilization consists, (I exclude æsthetic civilization from this species of estimate) measuring by the actual comforts and conveniences with which social life is surrounded, what philosophic traveler, or student, will not classify the nations of the world precisely as the table arranges them: England first, United States second, Belgium third, France fourth, Germany fifth, Switzerland and Sweden about on a par, Austria next, then Russia, Spain, and Turkey, and the great outlying regions of barbarism?

On the increase in iron production, Mr. Hewitt estimates that the annual production and demand will yet amount to 100,000,000 tons. Taking the present consumption of Great Britain, if the whole human race consumed at the same rate, about 60,000,000 tons would be called for, or nearly seven times the present product. In the last 115 years the annual consumption per head has increased seventeen fold. If the next century should show the same result, the consumption would be 300 lbs. per head, or 140,000,000 tons in all. This makes no allowance for the increase in population likely to take place. Should this go on as it has for some time, the demand will reach fully 200,000,000 tons a year—a figure of which we can hardly begin to form a conception.

From 1740 to 1855, the production of iron increased seventy fold. If the same rate of increase should prevail for 115 years to come, the annual make would reach 490,000,000 of tons, and it is to be observed that the ratio of increase has been an increasing one for each period of ten years since 1740, and not a decreasing one. Commencing with 1806, it required till 1824, a period of 18 years, to double the production in Great Britain. By 1836 it was again doubled, requiring a period of only 12 years. In 1847 it was again doubled, requiring 11 years. In 1855, a period of eight years, it had risen from 2,000,000 to 3,500,000, at which rate it would double in ten years.

Now, if the production of the world were to double only once in twenty years, the make, in 1875, would be.....14,000,000
1895, ".....28,000,000
1915, ".....48,000,000
1935, ".....96,000,000
1955, ".....192,000,000

Figures, again, so enormous as to defy any man of common sense to stand before you and say that they will be realized. And yet, if any one had ventured the prediction in England in 1740, when the make was 17,350 tons, not so much as the yield of the establishment with which I am connected, that in 115 years the make would reach 3½ millions of tons, he would have been regarded as a lunatic, and told that all the men, and all the wealth, and all the mineral resources of Great Britain were not adequate to one-fourth of such an incredible production. Allow me to apply a further test to this matter. In Great Britain there is one mile of railroad to about eight square miles of surface. In Connecticut the ratio is

about one to six. In the State of New York the ratio is about one to twenty. The habitable world would not be over supplied with the conveniences for travel and transport if one mile of railroad were built for each ten square miles of surface. Now, according to the best authorities, there are 20,000,000 of square miles of habitable surface on the globe, which will ultimately require 2,000,000 miles of railroad. To lay and operate this quantity will require 600,000,000 tons of iron, the annual wear and operation of which will demand at least 60,000,000 tons per annum. The consumption for railroads now absorbs about one-third of the make of iron; and it is apparent that while the use of iron for purposes for which it has been long applied is daily growing, each year brings forward new applications which seem to indicate that there is no practical limit to its use.

View the subject, then, as we may, whether by the history of the production of iron for the last 100 years, or by considering the consumption per head and the progress of civilization, applying only the law which we find at work, and which no social Joshua has power to arrest, we are brought to the conclusion that, great as is the present production of iron, it is but in its infancy, and that the very smallest amount which will answer the purposes of the civilized world 100 years hence, will be 100,000,000 tons per annum. How and where, geographically considered, is this enormous quantity, or the half of it, or the quarter of it, to be made?

In order to solve this problem, it is necessary to consider what are the elementary conditions essential to a large production of iron. These are:

1st. An adequate supply of the requisite raw materials; ore, limestone, and mineral coal; for charcoal can only be used as we have seen, to an insignificant extent.

2nd. These raw materials must be geographically so situated as to be brought cheaply together, for the value of raw material does not more consist in what it is, than in where it is—a fact too much overlooked in the mining projects of the day.

3d. There must be cheap means of transport to market.

4th. There must be sufficient density of population to insure labor at a moderate cost.

5th. There must be adequate capital to build and carry on the works.

6th. There must be skill to manage them in the most economical manner.

7th. There must be indomitable energy and strict integrity in the management; that is to say, the iron business can only exist on a large scale where the people are essentially industrious, intelligent, energetic and honest.

Mr. Hewitt refers to the favorable combinations, natural and otherwise, which have enabled Great Britain to attain her present pre-eminence in this respect. Coal and ore and limestone are generally interstratified throughout the island. Easy and rapid means of transport exist. The people have qualities of mind and body fitting them for the business. Long experience has developed the requisite knowledge and skill in perfection. Other nations may possess equal natural and moral resources; but in none of these do all the artificial conditions necessary for this business exist in such a degree. These advantages, however, he considers, have their natural limit,—a limit to which Great Britain is at present fast approaching. If so, whence is the demand likely to be supplied? There is but one country which can do this; and that is the United States.

In the first place, the Anglo-Saxon race,—which, by the way, has an extraordinary faculty of incorporating all other races, and still retaining its characteristic features,—alone combines the moral elements essential for the business. The French have great acuteness and unrivaled taste; the Germans have steadiness of purpose and fru-

gality; but for downright courage and steadfast perseverance, steady economy and patient industry, mechanical ingenuity and ever improving skill, strict integrity, and a high sense of accountability, all combined in one people, you must go to the Anglo-Saxon race in the old world, or its offshoot in the new.

In regard to the natural elements, I am ready to admit that abundance of iron ore exists in all parts of the world, scattered by the bountiful hand of a gracious Providence, as if to indicate that in case of necessity no nation should be without the means of independence for the essential element of progress, if such independence becomes desirable. In the United States this is particularly the case. But abundance of iron ore does not suffice for the cheap production of iron. Mineral coal must be also abundant and easily accessible. In order to indicate the relative position of the leading nations of the globe in this respect, I have copied a diagram from Taylor's great work on coal, showing the available areas of mineral coal in each country—by which it appears that the United States stand first upon the list; that out of 184,073 square miles of coal area on the earth, our country has 133,182, or nearly three-fourths the whole amount, and sixteen times as much as Great Britain and Ireland together. It is to be observed, moreover, that this coal exists in nearly every State in the Union, or where it does not exist, it is readily accessible to the main deposits of iron ore in the non-bearing coal States. At the most important localities for the purpose of making iron, immense bodies of coal exist above water-level, whereas in England it has to be mined and raised from the depths of the earth. Measuring by the coal areas, and iron ore being equally abundant, it is the true standard, the United States can produce fifty millions of tons per annum with as little drain on its natural resources as Great Britain can produce 3½ millions; and in this connection it is essential that a most important fact be noted. I have stated that to produce 3½ millions of tons in Great Britain required the consumption of 45 millions of tons of raw materials, or about 13 tons to each ton of iron. In the United States, from the greater richness of the ores, and the more general use of anthracite coal, the same result could have been achieved with less than half the quantity of raw materials, thus economizing labor to an enormous extent. In point of fact, the materials for making a ton of iron can be laid down in the United States at the furnace, with less expenditure of human labor, than in any part of the known world, with the possible exception of Scotland.

In regard to our present and prospective means of communication, I need not attempt to enlighten a Geographical Society how far we surpass all other countries in our great rivers and greater lakes, in our 4,800 miles of canals, and our 23,000 miles of rail.

It was not until 1840 that the first furnace was successfully started and worked with anthracite coal, which in England was regarded as entirely inapplicable until 1837, when Mr. Crane first demonstrated that it could be used.

The application of this fuel, which has given life to the American iron industry, and enabled it to bear up against the embarrassments which at times have threatened its existence, originated, as most great discoveries do, in a difficulty which was supposed to be insurmountable. The works of Mr. Crane were located at the lower edge of the Welsh bituminous coal-fields, and at the verge of the anthracite deposits. Having exhausted his available deposits of bituminous coal, he had to choose between abandoning his operations and the use of anthracite. For a long time his efforts to use this fuel were abortive; when, sitting in his room late one night, it occurred to him that when a stream of cold air was blown upon a lump of red hot anthracite, a black spot appeared, and the combustion was extinguished. The same coal placed in a grate, with a blower on it, causing a draft of cold air, would burn with intense heat.—It suddenly flashed upon him that this phenomenon was due to the heating of the air as it pressed

through the ignited mass of coal. In his joy at this discovery, he summoned from his bed his assistant, David Thomas, Esq., the present manager of extensive anthracite furnaces in this country, and announcing his solution of the problem, proceeded at once to test it, by placing a coil of iron pipe in a mass of flaming bituminous coal, and forcing through the pipe, with a common bellows a current of cold air, was delighted to find that as it issued highly heated from the other end of the pipe, it no longer destroyed the combustion of the anthracite, but on the contrary promoted it in a marvellous degree. From this day the economical use of anthracite for making iron was achieved; and yet, four years before, a resident of New York, remembered by many of you, Frederic W. Geisenheimer, had patented this identical process; but no use had been made of it, because the disastrous results of all attempts to establish the manufacture of iron on our soil on a large scale had discouraged the most sanguine. But after Crane's success, new efforts were made; and it is to be recorded to the honor of Nicholas Biddle, that he was among the first to contribute his money and his influence to the successful prosecution of this business. To another of our New York citizens, Edwin Post, Esq., who brought great intelligence, capital, and indomitable perseverance to the task, is due the honor of having first smelted successfully our rich magnetic ores with anthracite coal, at Stanhope, N. J., as he has since succeeded in reducing the Franklinite, heretofore believed to be entirely refractory.

From the time of the application of anthracite coal, the historian will date the birth of the American iron business. Its great density and purity fit it peculiarly to our rich ores, so that while in England, with three years the start of us, the product of anthracite iron had reached only 140,000 tons in 1855, in this country it amounted to at least 360,000 tons; showing that, where an approach to an equality of the elementary conditions can be realized, there is lacking in this country neither energy nor skill to take advantage of the opportunity to achieve a successful result.

Having thus traced the progress of the trade in this country, it remains for me to investigate the geographical elements of our present make of iron, and show in what parts of this great country are, and will be, the seats of its production.

Humboldt, in his *Cosmos*, has treated at length upon the influence of mountains, and their necessary concomitants, rivers, on civilization and the arts of life. The geographical location of the iron industry is dependent upon their influence. Our rich ores have their origin in the volcanic changes which produced the mountain ranges; and the corresponding valleys, with the river drainage, determine the spots where the ores shall be reduced and the metal transported to market. The Hudson and Delaware, Schuylkill and Potomac rivers, drain the valleys formed by the great range of the Blue Mountains; while the Susquehanna, the Ohio and the Mississippi drain the valleys formed on either side by the great Appalachian group. Still further West, the Missouri and its tributaries drain the eastern slope of the Rocky Mountains. In all these mighty valleys coal exists in boundless profusion, or is accessible to them by artificial avenues. The Hudson takes its source amid mountains filled with such incredible deposits of iron ore, that it is beyond the power of science or of numbers to compute the quantity. Lower down, its more recent formations are rich in secondary ores, especially in the valley of the Housatonic, which is part of what may be called the Hudson area. Anthracite coal has been made accessible to this region by means of the Delaware and Hudson Canal. The result is, that a large iron industry has, within a few years, sprung up on the banks of this noble river, which is destined to assume great magnitude. In 1855, the production in New York, in the Housatonic valley, and on the lower Hudson, between Troy and New York, must have exceeded 100,000 tons. New furnaces are building, and the resources for production are only limited by the quantity of coal, which can be procured at moderate rates. This

city must ultimately become the focus of an iron industry that will rival Birmingham.

The Delaware, with its main branch, the Lehigh, reaches into the coal region. The secondary ores abound along its shores while the Morris Canal has made the great primitive ore resources of New Jersey easily accessible. Hence the earliest successful efforts to make iron with anthracite coal on a large scale occurred in this region, and from the cheapness of the raw materials, it must be the leading seat of the iron trade on the Atlantic slope. New York is the natural outlet for this region, and our far-seeing capitalists have already made provision for it by the construction of direct lines of canal and railway. The product of this region in 1855, was about 140,000 tons, including, as I always do, the make of wrought iron direct from the ore.

The valley of the Schuylkill has direct communication with the coal-fields, but has to rely chiefly on secondary ores, which are doubtless abundant. Its production may be set down at 100,000 tons.

The valley of the Susquehanna has boundless resources in ore and coal, which, in 1855, yielded a product of at least 200,000 tons.

The valley of the Potomac, with equal access to coal and ore, produced about 60,000 tons.

Virginia and the remaining Southern States, with resources equally great, have made but little use of their advantages, and have produced not more than 40,000 tons.

The valley of the Ohio and its tributaries, and the valleys of the Mississippi and Missouri and their tributaries, have resources in the way of raw material, cheap food, facilities for transportation, and a local demand, which place them far above any region on the habitual globe. In 1855, Western Pennsylvania, Ohio, Tennessee, Kentucky and Missouri, produced at least 275,000 and probably 300,000 tons. A century hence, when the world will require its 100,000,000 tons of iron, more than one-half of it will be produced in our great West. The traveller who passes down its great rivers at night, will be lighted on his way by the answering fires of 10,000 furnaces, so that the "ineffectual moon shall pale" before the mighty glow of human industry. The product will bind that mighty valley, with its hundred millions of freemen, to the rest of the Union with iron bands not so durable, but typical of the fraternal patriotism of this great country, blessed by bountiful Providence with every good and perfect gift.

The hasty enumeration of what has been done in 1855, showing a natural production of not less than a million of tons, of the value, when ready for market, as pig, bar or plates, of at least \$50,000,000, proves that our own iron industry has reached the same development as that of Great Britain in 1836. If our resources are as well managed for twenty years to come, we shall stand where she does now—that is, we shall make 3,500,000 of tons; and wild as some of the results at which I have arrived may seem, I do not hesitate to declare the opinion, that by 1876, we shall reach that mark.

Mr. Hewitt concludes with some practical deductions drawn from the discussion of the subject: That the United States have greater natural resources for the production of this commodity than any other community, while the artificial obstacles are fast being removed: That the only remaining difficulties, the high cost of capital and labor, will be overcome by the progress of the country, and the fact that Great Britain will soon be tasked to her utmost capacity: That the National Government should not adopt any measures so as to discriminate against this great branch of industry: That the growth of the iron business in this country has far exceeded that in Great Britain, our only competitor: That science will probably enable us at an early day to dispense with some of the intermediate processes now necessary for producing wrought iron, and thus achieve an

equality in point of cost with Great Britain, even before the equality in cost of labor and capital is reached.

Chicago, Burlington and Quincy Railroad.

We have received a copy of this company's report for 1855. The estimate of earnings for that period was \$600,000. The actual earnings have exceeded that amount by \$122,580, as shown by the annexed statement:

Passengers.....	\$199,419.43
Freight.....	517,361.36
Mails.....	5,800.00

Total	\$722,580.79
Working expenses.....	342,759.20

Net profits.....	\$379,821.59
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The number of passengers carried was 150,736, of whom 67,025 were through. The freight transported amounted to 299,159 tons, (2,000 lbs.) including 4,623,127 bushels of grain. Considering that the road is short, and only newly opened, the receipts are considered very satisfactory.

The floating debt, in March last, was \$360,727, and has since been increased about \$250,000, making a total of \$610,000. This is \$120,000 more than was anticipated; but the large business offering required greater accommodations than had been judged necessary. There have been placed upon the road since March last year, 12 first class locomotives, 8 passenger, and 157 other cars. The equipment now consists of 27 locomotives, 20 first class passenger cars, 3 second class, 2 baggage, 65 platform, and 282 horse cars. The floating debt has been reduced to \$356,577, to meet which the company had on hand, at date of report in cash and on deposit, \$277,200, and in bills receivable and other securities, \$99,019, beside the debt due from the Peoria and Oquawka railroad company. The stock, at same time, was \$1,475,300; and the funded debt, \$1,240,000. During the year there were paid for construction and equipment \$455,649, beside \$23,700 invested in the purchase of bonds. The capital stock has been increased 2,673 shares by stock dividends, and the payment in stock of discount on bonds sold at par, of which there have been disposed \$300,000, negotiated at from 15 to 25 per cent. discount. Such losses need no longer to be suffered.

In March, last year, the Peoria and Oquawka road was completed from Galesburg to Burlington, and has since been operated under lease by this and the Central Military Tract railroad companies. In order to get this part of the road opened at an early day, the present company engaged to advance \$170,000 on proper securities. This is to be repaid within two years from the present. On the leased road, the gross earnings were \$85,286; and the working expenses, including rent, \$80,570. The rent is \$45,000 per annum, and two-thirds of the earnings above working expenses, including rent. One-half of this rent goes toward repayment of the above advances made. The net revenue realized by this company for the above line is \$12,050.

Two dividends, one of five per cent. in stock, and the other of ten in stock, and five in cash, have been made during the year. The Board of Directors considered that they would be able to pay the debt as it matured, and divide a reasonable cash dividend.

The road is laid with compound rail, 72 lbs. per yard, and is generally well ballasted; furnishing it is believed, the smoothest and best track in the Western country. It has not yet been fully ascertained whether this pattern or the T rail will wear longer. Much more depends on the quality of the iron than the kind of rail used. The depots are substantial buildings and well furnished.—There are seven miles in all of sidings. Except for repairing shops, the construction account may be considered as closed. These will be erected at Aurora, about 40 miles from Chicago, on the company's own lands. The cost of maintaining them at this point, will be much less than at Chicago.

One remarkable feature of the freight business is, that the quantity each way is almost exactly the same, having varied for the whole year not more than enough to load 40 cars. This saves the expense of hauling empty cars, a very important item of expense on some roads.

The Northern Cross road, from Galesburg to Quincy on the Mississippi, has recently been completed. This work may be regarded as an extension of the Chicago and Burlington line, terminating about 90 miles below the latter place, and traversing a section of country second to none in the West for the fertility of soil and the abundance of its productions. At date of previous report, this undertaking was about two thirds completed, but the Co. were greatly in want of funds. After long deliberation the Board considered it expedient to assist them, in connection with the Cent. Mil. Tract Company, both parties agreeing to purchase, each half year, commencing with 1857, \$25,000 of their eight per cent. bonds, so long as they could be purchased at par, and that this should be done from year to year, so long as they could be so purchased. The agreement dates from January 1st, 1855.

"The Northern Cross Company, on its part, covenants and agrees to provide a sinking fund for the redemption of the bonds, amounting to \$30,000 a year. They also agree to put upon the Central Military Tract and Chicago, Burlington, and Quincy railroads, rolling stock to the amount of \$110,000 in value, upon the terms specified in the contracts, to enable them to do the increased business brought upon the line, by reason of the opening of the Northern Cross road. That Company also covenants to indemnify and save harmless the Central Military Tract Company and Chicago, Burlington and Quincy Railroad Company from any loss by reason of the purchase of said bonds, and after the first year, to furnish the money therefor itself. Important contracts were also made for the transaction of business, the object of which is to secure the business of the line against competing roads. The whole arrangement is one which the Board had and still have no doubt it was greatly for the interest of this Company, to enter into. The risk is probably nothing, and at the utmost is only the difference between the price, at which the bonds may be bought, and their market value, and even that risk, if the Company (Northern Cross) is able to pay its operating expenses and interest, is saved by its covenant of indemnity. But we anticipate no so limited resources in the future for that Company. The country through which it runs, its entire security from competition for its local trade, and the large through traffic, which must necessarily pass over it, will doubtless place it, in a short time, among the valuable investments of the country. It was and still is the judgment of the Board of both the Military Tract and the Chicago, Burlington, and Quincy Companies, that by these arrangements they have added very greatly to the value of their roads."

GENERAL ACCOUNT.

Capital Stock.....	\$1,475,300
Fractional Stock.....	1,142
First Mortgage Bonds.....	640,000
Second do. do.....	600,000
Fifth and Final Dividend.....	12
Dividend July 1, 1854.....	60
Do. June 30, 1855.....	940
Bills Payable.....	270,695
Agents and Connecting Roads—Balance their Accounts.....	10,872
Income Account.....	213,981
Central Military Tract Railroad Co....	75,009

	\$3,288,014
Construction Account.....	\$2,206,811
Equipment Account.....	554,618
Lands and Coal Lands.....	4,450
Des Moines County Bonds.....	3,000
Peoria and Oquawka Railroad County Bonds.....	25,000
Do. Advances for Construction.....	145,915
Bills and Accounts Receivable.....	71,019
Deposits in Boston and New York....	214,243
Balance in the Treasury.....	62,956
	\$3,288,014

Cleveland and Pittsburg Railroad.

The eighth report of this company, read to the stockholders at their annual meeting, on the 8th of January last, shows the business for the year ending November 30th, 1855, to have been—

Passengers.....	\$204,041 34
Freight.....	350,799 09
Mails, express, &c.....	27,037 46

Total.....	\$581,877 89
Operating expenses, repairs, and casualties.....	272,359 14

Net earnings.....	\$309,518 75
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Of the gross receipts, \$59,935 20 were received from the Tuscarawas Branch. The aggregate earnings are, \$100,960 34 in excess of those of 1854. For the six months ending 30th November, they were \$367,352 85, or \$217,361 48 net. Length of main stem (Cleveland to Wellsville), 101 miles; and of the Tuscarawas extension (Bayard to New Philadelphia), 32 miles; making a total length completed of 133 miles; and costing as follows:

Right of way, depot grounds, buildings, discount, interest, engineering, &c.....	\$4,011,333
Grain warehouse, lake improvement, lands, repair shops, &c.....	174,368
Equipment—engines, cars, &c.....	533,991
Expenditure on Wheeling extension, 61¼ miles.....	817,774

Total expenditure.....	\$5,537,466
The company owned, on 30th November last, in County bonds, balances for agents and other companies, bills receivable, cash, materials on hand, and real estate not needed,—assets worth.....	443,295

Making total cost of road, equipment and assets.....	\$5,980,762
Against which their liabilities were—	
Capital in Main Line and Tusc. Exten..	\$2,113,574
Wheeling and Beaver Extensions.....	767,210

Total capital.....	\$2,880,784
Seven per cent. bonds, including dividend bonds of January, 1856.....	2,750,313
Bills and accounts payable.....	293,679
Balance of net earnings.....	55,986

Total.....	\$5,980,762
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During the present year, there have been paid of the bonded debt \$153,400; also on account of

new engines and cars, \$43,516. There is still due as stock subscriptions, the sum of \$41,765.

The increased business of 1855, already noticed, arose entirely from freight, and chiefly from the transportation of coal, and the manufactures of Wheeling and Pittsburgh. The coal traffic alone has advanced from 44,000 tons, in 1854, to 75,000 last year—an increase of 70 per cent. The report says:

The superior quality of the coal immediately on the line of the road, the new markets opening for it in Canada and at the ports on Lakes Erie, Ontario, and Michigan, the consumption by steamers, gas companies, and for domestic and manufacturing purposes, justify the prediction heretofore made, that this branch of business will present a steady and large increase in quantity, and at rates highly remunerative to the company. As the freight traffic of railroad companies is now regarded, both in this country and in Europe, as the most reliable source of income, and as the use of coal is rapidly and largely increasing, the statements of Drs. Stevens and Newberry, contained in the last Annual Report, are here repeated. These gentlemen, both economic geologists of high reputation and character, made, during the year 1854, independent explorations of the mineral resources of the country traversed by the road. In a communication to the President of the Company, Dr. Stevens says:

"The Tuscarawas hills hold twelve and twenty feet of good coal, some of unsurpassed excellency; and one bed is cannel coal, equal to the cannel of Virginia: while its beds of ore cannot be surpassed in richness of metal or thickness of strata in the United States. Its ores can supply the whole Western world with iron of the very best quality. * * * There cannot be found, either in Pennsylvania or Ohio, so rich deposits of these minerals, so contiguous to the great inland navigation of the country, as along the line of your road, in the regions above-mentioned."

To the same effect, Dr. Newberry, in a letter to the President, bearing date December 26th, 1854, represents:

"Tuscarawas County, as you are aware, aside from its agricultural productiveness, which is almost unequalled, is one of the richest mineral districts in the State. Coal, iron, and lime-stone are found here in the greatest profusion, and of excellent quality, of which the best will find its natural outlet over your road. Indeed, from the point where the Tuscarawas Extension cuts the line of the County, to Ulrichsville, it traverses a region where these minerals are so concentrated and associated, that it is certain that an immense amount, both of manufactured and raw material, must be thence exported. Seven distinct beds of coal are found in the hills lying one above another, and interstratified with beds of iron ore of unequalled thickness and purity. Four, and in some places five of these beds are of workable thickness, and one at least furnishing coal of quality fully equal to any yet introduced into the Cleveland market. The ore beds surpass any thing of the kind in this State, and indeed in any other State, in connection with the coal. Nor do I believe there can be found on the Continent, such a concentration of the materials and facilities for the manufacture of iron as exist on the Tuscarawas Extension railroad. The mineral wealth of this district early attracted attention, and you will find it noticed at length in the Report of the Geological Board for 1838. Since the opening of the Extension Road, capitalists have been drawn in here; the best locations have been purchased; mines are being opened, and in a few days you will receive the first installment of the tribute which will flow in an unending and constantly increasing stream into the treasury of the Cleveland and Pittsburgh road from this source."

The Pittsburgh freight has advanced from 7,943 tons, in 1852, to 28,937 tons, in 1855. The rapid settlement of the Western countries will furnish a

continually increasing demand for these commodities. In order to facilitate this branch of business, arrangements have been made by other parties to establish a line of steamers from Cleveland to the principal cities on the upper Lakes. Every attention will be given to the development of local business. For more than 100 miles, the road passes through a rich and thickly settled section of country, offering the highest inducements for the establishment of various kinds of manufacturing industry.

On the Pittsburgh and Wheeling extensions work has advanced as rapidly as was thought advisable, having in view their completion during the ensuing summer. The work to be done, exclusive of the superstructure is estimated at \$257,000, all of which is under contract. The rails are also purchased. The Chief Engineer estimates an annual increase of \$500,000 to way and through business, on the completion of the river line. Towards its construction the net earnings have been applied, leaving a dividend to be declared in stock and bonds. The stockholders have shown their approval of this policy. The navigation of the Ohio is so uncertain between Pittsburgh and Wheeling, that this line is rendered of the utmost importance. Its opening will secure a large business with the following sections:

1. Between the Ohio River and Lake Erie, where they are but 100 miles apart by the road of this company.
2. Between Pittsburg, Steubenville, Columbus, and Indianapolis, by the Steubenville and Indiana and Central Ohio railroads.
3. Between Pittsburgh, Wheeling, and Cincinnati, thence to Louisville and St. Louis, by the Central Ohio, Cincinnati, Wilmington, and Zanesville, and Ohio and Mississippi railroads.
4. Between Lake Erie, at Cleveland, and Wheeling, Baltimore, Washington, and southward. All these connecting railroads are now in full operation.
5. Between Pittsburg, Wheeling and Cincinnati, by the Cincinnati and Marietta railroad, in the course of construction.

The interests of these several companies are identified with ours, as the River Division of this road will connect their lines with Philadelphia and New York by the shortest, cheapest, and most attractive route.

The population of the country through which these roads pass, the present business relations with the eastern cities, and the increase which every new facility adds thereto, will satisfy all who will examine the map of the Cleveland and Pittsburg railroad and its connections, that this is the most important link to be supplied in the great chain of railroads between St. Louis and New York.

The connection of Baltimore and Wheeling with the Lakes, by means of this road, is justly regarded as among the important benefits to be derived, as it will open new business relations that cannot fail to be advantageous.

New routes are in process of construction, to various points on the Mississippi river, and farther west, which, when completed, will share in the large and increasing business between the East and West, and whether it takes the direction of Cincinnati, Indianapolis, or Cleveland, our road will be benefitted thereby.

During the past year the Directors have given much attention to the subject of fuel, and have arrived at the conclusion to use the coal to be obtained on the line of the road in the freighting business, and they regard the abundant supply, superior quality and low price, as a great advantage and certain to reduce the cost of transportation. By the use of coal for our engines we obtain the cheapest fuel, always to be procured and ready for immediate use, and thereby avoid the

necessity of investments in wood, the expense of handling, loss by theft and fire, and the serious cost of trains for its distribution on the line of the road.

The Chief Engineer's report shows that the total expenditures on the Beaver extensions to date, have been \$58,265, which added to \$142,278 previously expended, makes a total of \$200,543; and leaving a balance of \$130,377 yet to be applied, for graduation, masonry, and bridging. On the Wheeling extension, a total expenditure of \$300,381 has been made, leaving yet to be expended the sum of \$126,740. The superstructure for both is put at \$525,980. Total estimated expenditure, \$1,283,972. The line from Beaver to Kirkwood is expected to be ready for the iron by June.

The number of miles run, during the year, was 329,883, of which 124,367 were made by passenger, 179,286 by freight, and 26,230 by wood and gravel trains.

The equipment at present consists of 24 locomotives, 20 passenger, 7 baggage and mail, 363 freight, and 142 other cars. Considerable additions have lately been made to rolling stock, and a number of engines have recently been ordered.

Memphis and Charleston Railroad.

Col. F. C. Arms, for many years the Superintendent of the Georgia road, has accepted the appointment of General Superintendent and Engineer of the Memphis and Charleston Railroad, and has been in our city for several days past, preparing to enter upon his new and responsible duties. He comes among us with a high character as a practical railroad man, and we doubt not, in the position which he has assumed, he will gain new laurels for himself, as well as the company for whose benefit his services have been secured. There are now finished 217 miles of this road, and it is confidentially expected that the whole road (287 miles) will be completed within twelve months from this time.—*Memphis Eagle*.

Henderson and Nashville Railroad.

We copy from the Evansville Journal, the following extract from a letter of Gov. Powell, President of the above road, in which he says:

"The prospects of the Henderson and Nashville road, I think are much better than they have ever heretofore been. We recommenced our work four months ago, and since that time we have been constantly at work. The grading of the first thirty miles of our road, commencing at this place, is progressing rapidly to completion—we expect to have the first thirty miles ready for the iron by the early part of the coming fall, and we believe our means will be sufficient to enable us to purchase the rails for the first thirty miles without using the credit of our road.

"The grubbing and clearing of the larger portion of our road to the Tennessee line has been done. We are now doing all our work on the first thirty miles, and will give our entire energies to that part of the road until it is completed. It is now about one hundred and forty miles from this place to Nashville. Our company build the road from this place to the Tennessee line, and the Edgefield company build the road from Nashville to the Kentucky line, a distance of about forty-three miles.

"I understand the Tennessee end of the road will be let during the present month, and that they have ample means to complete it without delay.—The first thirty miles of our road commencing at this place, and the Edgefield road being completed, more than half our road will be finished. This being done, there can be no doubt but the balance of the road will be constructed in a short time. I have no doubt but that the first thirty miles of our road and the Edgefield road, will be speedily completed."

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	67	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscooggin	55	642,343	1,473,080	2,245,020	190,605	12,807	none	15	South Western	92	1,097,496	465,500	1,624,920	253,306	141,168	8	
Androscooggin	20	91,192	232,193	343,317	29,396	12,807	none	91 1/2	Tennessee and Alabama	30	246,486		679,906	In progr.			
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600		170,981		10	Tennessee and Mississ.		170,981		175,340	In progr.			
Portl., Saco, & Portm'th	51	1,367,000	119,237	1,486,237	259,330	124,038	6	88	Memphis and Charleston	288	2,103,177	958,275	3,061,452	178,484	102,016		
Boston, Ounc. & M'treal	93	1,808,093	1,059,512	2,771,310	233,224	120,834		2	Mobile and Ohio	153	2,668,556	1,802,921	4,536,412	199,932	109,236		
Cheshire	53	2,085,925	899,313	3,179,687	390,221	143,665	2	82	Miss. Central	188	642,534	none	628,303	In progr.			
Concord	35	1,485,000	none	1,412,576	329,744	158,632	8	82	N.O., Opelousas & G.W.	55	2,930,425	671,845	2,657,565	In progr.			
Northern, N.H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	41 1/2	Vicksburg, Shreveport & Tex.		111,750	none	107,895	In progr.			
Com't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	102,887	55,173	none		East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Rutland & Burlington	120	2,233,376	2,602,396	5,378,428	394,971	214,792	none		East Tennessee and Va.	16	625,426	838,593	1,033,781	In progr.			
Vermont Central	117	5,000,000	3,560,236	8,463,366	820,119	214,792	none		Naah. and Chattanooga	151	2,319,330	1,497,081	3,843,694	316,090	112,177	none	
Boston and Lowell	27	1,830,000	325,635	2,188,595	489,754	140,377	6	68	Covington & Lexington	98	1,302,804	2,235,950	3,738,753	264,973	138,604	18	
Boston and Malden	83	4,076,974	150,000	4,179,535	854,426	339,060	6	92 1/2	Lexington and Frankfort	29	431,091	199,299	635,393	90,930	34,864		
Boston and N.Y. Central	74	2,240,300	1,518,671	3,463,181	69,917	8,740	none	5	Lexington & Big Sandy				428,057	In progr.			
Boston and Providence	55	5,160,000	399,132	3,677,154	558,671	219,689	none	65	Lexington and Danville		540,117	61,525	770,463	In progr.			
Boston and Worcester	48	4,500,000	655,428	4,865,491	1,008,004	404,461	6 1/2	88	Louisville and Frankfort	65	698,236	669,061	1,589,660	244,014	96,902	0	
Cape Cod	67	681,690	280,598	997,252	119,221	55,527	3	29 1/2	Atlantic & Gt. Western	254	866,929	77,294	613,231	In progr.			
Connecticut River	52	1,591,110	273,241	1,802,244	256,533	103,787	5 1/2	45	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,862,652	268,293	140,823	none	45
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	647,281	305,968	4	48	Clev., Col. and Cin.	141	4,473,721	374,127	5,456,343	1,162,601	557,905	9	99 1/2
Fitchburg	67	3,540,000	153,700	3,765,998	681,163	225,071	7	73 1/2	Clev., Zanesv. and Cin.	87							16
Nashua and Lowell	14	600,000	16,000	654,603	191,887	55,877	8	86	Cleveland and Toledo	200	2,675,425	2,689,301	5,124,629	736,272	396,986	10	83 1/2
N. Bedford and Taunton	21	500,000	none	533,953	198,491	66,533	6 1/2		Clev. and Mahoning	103			628,633	In progr.			
Old Colony and Fall River	77	3,015,100	292,650	3,362,949	653,499	259,738	6	85 1/2	Clev. and Pittsburg	133	2,686,770	2,518,162	4,818,153	450,216	255,868	60 1/2	
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	258,426	87,313	none	9 1/2	Cin., Hamlet & Dayton	90	2,100,000	1,464,364	2,961,978	483,620		65	
Western, Mass.	156	5,160,000	5,966,420	10,495,905	1,638,673	633,013	7	89 1/2	Cin., Wilm. & Zanesv.	131	1,120,450	1,181,266	2,326,450	In progr.			20
Worcester and Nashua	48	1,141,000	205,565	1,351,271	294,780	75,760	2	42	Columbus and Xenia	55	1,484,560	149,000	1,481,733	356,361	187,518	10	85
Providence and Worcester	43	1,510,020	338,461	1,806,696	311,430	138,057		73	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.			
Hartford and N. Haven	72	2,359,000	939,000	3,313,932	730,012	352,799	10	120	Dayton and Michigan	140	1,076,092	393,011	1,185,826	In progr.			
Hart'd, Prov. and Fishkill	122	1,845,610	2,090,124	4,060,869	258,685	119,011	none		Dayton and Western	35	310,000	500,000	733,769				18
Housatonic	110	2,000,000	474,177	2,429,066	330,792	18,351	none		Easton and Hamilton	42	454,690	994,489	1,155,135	171,020	65,000		24
Naugatuck	57	1,031,800	753,995	1,577,167	328,266	none	4		Little Miami	65	963,921	1,271,785	3,048,172	681,562	326,708	none	90
N.Y. and N. Haven	62	2,992,450	2,264,656	4,906,784	936,025	341,667	none	25	Mad River and L. Erie	206	2,451,650	2,572,932	4,446,661				16
N. Haven and N. London	60	738,258	735,165	1,450,818	88,007	30,318	none		Central Ohio	138	1,520,927	3,485,076	4,283,443	Recently opened.	none	12	
N. London, W. & Palmer	66	500,200	1073,673	1,594,383	124,044	66,331	none		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	
Norwich and Worcester	32	1,222,300	873,479	2,597,183	304,236	88,458	2 1/2	35	Pittsburg, Mayv. & Cin.	50			343,882	In progr.			
Albany Northern	32	439,005	1,825,098	1,840,695	117,716	9,904			Sand'y, Manaf. & Newk.	127	1,350,000	2,206,367	3,562,557	328,958	164,479	none	
Black River and Utica	35	643,330	311,859	974,323	In progr.				Scioto & Hocking Valley	135	403,975	500,000	888,858	In progr.			
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none		Spring, Mt. Vernon & P.	113	1,000,000	950,000		In progr.			
Buffalo and N. Y. City	92	798,439	2,587,819	3,401,868	288,302	31,896	none		Tol. Wash. & St. Louis	242	2,500,000	4,500,000		In progr.			
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10		Cin., Log. and Chicago	255	4,196,679	1,006,125	2,080,433				5 1/2
Canadaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,506			Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,562		
Canadaigua & Niagara F's	91	1,315,000	2,279,584	3,495,832		48,649	none		Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60
Cayuga & Susquebanna	35	687,000	506,689	1,187,562	135,433	48,649	none	34 1/2	Indians Central	66	611,400	1,261,179	1,907,911	350,176	134,375	none	48 1/2
Hudson River	144	3,768,466	9,250,362	12,737,598	1,812,087	608,946	none	30	Ind., Clev. & Pittsburg	83	884,157	1,011,971	1,671,544			none	20
Long Island	95	1,875,148	668,949	2,555,966	301,793	116,462	none		Jeffersonville	66	1,014,262	694,000		206,544	94,318	none	
New York Central	534	24,164,860	14,462,742	25,623,913	6,553,581	3,162,126	8	92	Madison and Indianapolis	87	1,647,500	1,589,881	3,237,381			none	
New York and Erie	404	10,023,958	25,126,669	33,439,431	8,458,993	2,027,118	none	56 1/2	New Albany and Salem	288	2,535,121	6,281,948	6,643,180	645,827	371,402	none	10
New York and Harlem	133	5,717,100	4,069,769	7,858,203	1,655,577	234,126	none	19 1/2	Peru and Indianapolis	73		588,314		150,000	90,000	none	17
Northern, N. Y.	118	1,633,022	4,060,874	5,470,714	520,153	138,754	none	1 1/2	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	96
Oswego and Syracuse	35	399,000	216,681	723,083	126,540	59,982	3 1/2		Chicago and Rock Is'd	182	3,141,500	2,387,155	5,214,162			92 1/2	
Potomac and Watertown	29	407,200	294,189	749,683	In progr.				Chicago and St. Louis	220				1,077,312			
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7		Chic. St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.			
Saratoga and Whitehall	48	500,000	395,600		71,909	21,089	none		Galena and Chicago	298	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	114
Saratoga & Bingham'n.	80	768,369	1,578,804	2,272,777	159,484	22,503	none		Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952		98
Troy and Boston	27	487,830	377,079	1,109,822	156,383	55,184			Peoria and Okawaka	93	569,880	818,454	1,388,342	In progr.			
Watertown and Rome	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	70	Ohio & Miss. (Wat. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.			
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,355	75,834	none		Terre Haute and Alton	173	2,251,420	1,256,000	3,537,424	In progr.			
Camden and Amboy	94	3,000,000	11,407,200	8,636,523	2,017,127	901,941	12		Detroit and Milwaukee	185	838,000	1,128,994	1,966,969				
Camden and Atlantic	60	369,320	1,522,131	1,729,642	122,417	50,080	none		Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,658		95 1/2
New Jersey	30	8,482,850	690,000	4,310,011	861,514	500,747	10	122	Mich. South'n & N. Ind.	475	6,928,900	6,319,221	11,645,208	2,410,000	875,000	10	98 1/2
New Jersey Central	63	2,600,000	2,266,178	3,683,149	398,728	171,603			Green Bay, Mil. & Ch.	155	764,075	442,726	1,193,765	In progr.			
Morris and Essex	53	1,167,995	375,000	1,636,550	226,893	102,474	6		Milwaukee and Miss.	106	1,826,428	2,677,889	3,578,757	691,845	417,443	17	83
Albany Valley	44	1,637,367	342,664	1,985,317	Recently opened.				Milwaukee & Watert'n	72	354,861	1,232,000	1,544,238	In progr.			
Catskill, Wil. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	52,450			Milwaukee and Horicon	16	554,200		354,109	In progr.			
Cumtland Valley	56	1,099,500	12,211	1,101,833	144,381	66,994			Milwaukee & La Crosse	61	1,351,832	532,131	1,883,963	In progr.			
Del. Lack. & Western	100	3,051,622	3,884,702	6,022,667	528,911	259,263	6		Racine and Miss.	47	921,908	580,715	1,289,321	In progr.			

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$638,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do, convertible	7	April, October	"	1866	98	
Bellefontaine and Indiana	600,000	Do, convertible	7	Jan'y, July	"	1866	92 1/2	
Do, do	200,000	Real estate, convertible	7	Jan'y, July	"	1858	92 1/2	
Do, do	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	92 1/2	
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	
Do, do	800,000	2d do, convertible	7	March, Sept.	"	1865	75	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do, do	465,000	2d do, do	7	May, Novemb.	"	1880	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	82 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do, convertible	7	May, Novemb.	"	1862	87 1/2	
Cleveland, Painesville, and Ashtabula	567,000	Do, inconvertible	7	Feb'y, August	"	1861	90	
Cleveland and Pittsburgh	800,000	Do, convertible	7	Feb'y, August	"	1860	93	
Do, do	1,200,000	Do, on Branches	7	March, Sept.	"	1873	73	77 1/2
Cleveland and Toledo	525,000	Do, convertible	7	Feb'y, August	"	1863	86 1/2	
Chicago and Mississippi	800,000	Do, conv. till 1857	7	April, October	"	1862-72	60	80
Do, do	1,200,000	Do, inconvertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do, do	6	April, October	"	1862	72	76
Do, do	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do	7	April, October	"	1875	90	90 1/2
P. & W. Wayne and Chicago	1,250,000	Do, conv. till 1863	7	Jan'y, July	"	1873	80	
Gaucha and Chicago	2,000,000	Do, inconvertible	7	Feb'y, August	"	1863	95	97 1/2
Do, do	2,000,000	2d mortgage, do	7	May, Novemb.	"	1875	89	90
Great Western (Illinois)	1,000,000	1st mortgage, do	10	April, October	"	1868	88	90
Green Bay, Milwaukee, and Chicago	400,000	Do, convertible	8	10 April, 10 Oct.	"	1868	93	95
Jeffersonville	300,000	Do, 2d sec. inconv.	7	April, October	"	1873	75	
Laduna Central	600,000	Do, convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do, do	7	Jan'y, July	"	1860-61	80	85
Indianapolis & Cin'ti (for Lawb. & U.M.)	500,000	Do, conv. till 1857	7	March, Sept.	"	1866	90	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	78	77
Little Miami	1,500,000	Do, inconv.	6	2 May, 2 Nov.	"	1883	79 1/2	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	100
Do, do	600,000	Do, do	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96	97
Do, do	650,000	Do, 2d do	8	April, October	"	1863	96	
Do, do	1,250,000	Do, 3d do	8	June, Decemb.	"	1877	89	91
New Albany and Salem	500,000	Do, 1st section	10	April, October	"	1868-62	85	
Do, do	2,325,000	Do, oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	94	97
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	97
Ohio and Indiana	1,000,000	Do, do	7	Feb'y, August	"	1867	95	97
Ohio and Pennsylvania	1,750,000	Do, do	7	Jan'y, July	"	1865-66	95	97 1/2
Do, do	2,000,000	Income, convertible	7	April, October	"	1872	81	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96 1/2	97 1/2
Racine and Mississippi	800,000	Do, conv. sink'g'f'd	8	Feb'y, August	N.Y.	1875	83	85
Scioto and Hocking Valley	800,000	Do, 1st sec. conv.	7	May, Novemb.	"	1861	85	
Steubenville and Indiana	1,500,000	Do, convertible	7	Jan'y, July	"	1865	78	
Terre Haute and Indianapolis	600,000	Do, do	7	March, Sept.	"	1866	98	100
Terre Haute and Alto	1,000,000	Do, do	7	Feb'y, August	"	1862-77	78	79
Do, do	2,000,000	2d do, do	8	Feb'y, August	"	1870	77	78

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	83 1/2
Do, do	1,128,500	Do	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95	95 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	107	109
Do, do	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95 1/2	96
Do, do	6,000,000	3d mortgage	7	March, Sept.	"	1888	92	92 1/2
Do, do	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	91
Do, do	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83	83 1/2
Do, do	3,500,000	Convertible	7	Jan'y, July	"	1862	86	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	100 1/2
Do, do	2,000,000	2d do, do	7	16 June, 16 Dec	"	1860	89 1/2	90
Do, do	3,000,000	3d do, convertible	7	May, Novemb.	"	1870	71	71 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	98	98 1/2
Do, (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	91 1/2	92 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	
New York and Harlem	1,800,000	Do, do	7	May, Novemb.	"	1861-72	86	88
New York and New Haven	750,000	No mortgage, do	7	June, Decemb.	"	1859-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do	6	Jan'y, July	"	1873	95	97 1/2
Northern Indiana	1,000,000	Do, do	7	Feb'y, August	"	1861	92 1/2	
Do, Goshen Branch	1,500,000	Do, do	7	Feb'y, August	"	1868	85 1/2	86
New York Central	8,287,000	No mortgage, do	6	May, Novemb.	"	1853	59 1/2	89 1/2
Do, do	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	102 1/2	103
Panama, 1st issue	900,000	Convertible till 1853	7	Jan'y, July	"	1866	101	105
Do, 2d do	1,478,000	Do, till 1853	7	Jan'y, July	"	1866	104	105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	93 1/2	94 1/2
Do, do 1844, '48, '49	1,300,000	Do, convertible	6	Jan'y, July	"	1860	84 1/2	84 1/2
Do, do 1849	3,469,000	Do, inconvertible	6	April, October	"	1870	84 1/2	84 1/2

CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Asked p. ct.	CITY SECURITIES.	Int'l payable.	Off'd p. ct.	Asked p. ct.
New York, 7 per ct. ....1857	{ Feb'y, May, August, and November.	100	102	Milwaukee, 7 per ct. coup. X	Divers	89	89 1/2
Do. 5 do. ....1858-70		95	97 1/2	New Orleans, 6 per ct. cp. R.R. X	Do.	75	80
Do. 5 do. ....1870-75		95	97 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	83	
Do. 5 do. ....1890		98	98	Philadelphia, 6 per ct. ....1876-98	Jan'y, July	91 1/2	92
Albany, 6 per ct. coup. ....1871-81 X	Feb'y, August.	98	98	Pittsburgh, 6 per ct. coup. X	Divers	76	77
Alleghany, 6 per ct. coup.	Jan'y, July	66	66	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July	92 1/2	
Baltimore, 6 per ct. ....1879-90	Quarterly	97	98	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	81	85
Boston, 5 per ct. coup. ....X	April, October	97	100	Rochester, 6 per cent. coup. X	Divers	95	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	79	79 1/2
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.	100 1/2	101 1/2	Do. do. Municipal. X	Do.	79 1/2	80 1/2
Cincinnati, 6 per ct. coup. X	Divers	89 1/2	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	80	81 1/2
Chicago, 6 per ct. coup. ....1873-77 X	Jan'y, July	90	90 1/2	S. Francisco, 7 p. ct. cp. 1865, pay. N.Y. X	May, Novemb.	78 1/2	80
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	101	102 1/2	Do. 10 p. ct. cp. ....1871 X	Do. do.	96	97
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 10 do. pay. N.Y. X	Jan'y, July	104	105
Dubuque, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	94	96	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	60	62
Louisville, 6 per ct. cp. ....1880-83 X	Divers	70	80	Wheeling, 6 per ct. coup. X	Divers	67 1/2	
Memphis, 6 per ct. coup. ....1882 X	Jan'y, July	65	70	Zanesville, 7 do. X	April, October	97 1/2	

Cincinnati Stock Sales,
By HEWSON & HOLMES.
For the week ending April 16th, 1880.

BONDS.		Offered.	Asked.
\$3,000 Cov'g & Lex., 7 per ct. 2nd Mortgage	66		
1,000 Cin. Western, 8 per ct. Real Estate	40		
7,000 Mason Co., Ky., 6 per cent.	70		
12,000 Marietta & Cin., 7 per ct. Income	40		
4,000 Hillsboro' & Cin., 7 per cent. 1st Mortg.	50		
2,000 Indiana Central, 10 per ct. Income	92 1/2		
1,000 Little Miami, 6 per ct., 1st Mortg.	82		
5,000 Bellefont. and Indiana, 7 per ct. 1st mort.	80		
1,500 Cov. and Lex., 10 per ct. Income, 60 days	60		
710 Little Miami, Dividend Scrip, June issue	92		
392 Little Miami, Divid. Scrip Dec'ber issue	81 1/2		
STOCKS.		Offered.	Asked.
52 Shares Ohio & Mississippi	7 1/2		
40 " " "	8		
100 " Cin. Wilm. and Zaneav.	15		
71 " Cincinnati, Hamilton, & Dayton	65		
250 " Cincinnati and Chicago, 30 days	5 1/2		
50 " " cash	5 1/2		
86 " Columbus & Xenia, cash	85		
20 " Bellefontaine & Indiana	45		
285 " Indianapolis and Cincinnati	60		
200 " Cin. Harrison and Indianapolis	8		
33 " Mad River and Lake Erie	15		
100 " Little Miami, 60 days	94		
34 " " "	92		
93 " Eaton & Hamilton	23		

Extract from the Circular of Robt. Benson
& Co., per Cambria.

LONDON, March 28, 1856.

We have very little news of importance to communicate by this mail. During the last few days, money has been in active demand, in consequence of the preparations being made to meet the payment of the next instalment upon the new loan, due to-morrow. And in some cases high rates have again been paid for short periods, even on Government securities. This temporary demand for money, and the delay in any notification of peace being concluded, have made our stock market rather inactive. Confidence in the future, however, continues unabated, and prices on the whole have been well supported. In our last circular, we quoted consols at 92 1/2 a 92 3/4 for money. The fluctuations have been very slight during the week, and the prices to-day are 92 1/2 a 92 3/4 for money, and 92 3/4 a 92 7/8 for the account.

We have not heard of any important transactions in American securities. There has been more enquiry for State stocks than Railroad bonds. We quote Maryland sterling bonds at 88a90; Pennsylvania 5 per cent. stock 76a78, and the bonds 81a83; Kentucky 6 per cent. bonds 89a91; Virginia 6 per cents, 86a88; and the sterling 5 per cent. bonds, 84a86. In Railroad bonds the business has been very limited. Illinois Central 6 per cent. bonds have been sold at 77 1/2, and are offered at 78. The shares have been sold at 3 per ct. discount. We may quote the price of the Freedland bonds at 82a83; and the Construction bonds at 79a80. New York Central 7 per cent. bonds have been sold at 94 1/2. Pennsylvania 1st mort.'s at 82 1/2; and Erie 3d mort. bonds at 84 1/4.

BENSON'S CIRCULAR PER AFRICA.

London, April 4th, 1856.

The long expected signing of the Treaty of Peace, to be ratified within a month, took place at Paris on the 30th ult. On the following day our stock market manifested considerable animation, without, however, much advance in the price of Government securities. In our last circular we quoted consols at 92 1/2 a 92 3/4 for money, and 92 1/2 a 92 3/4 for the account. To-day we quote them at 92 1/2 a 93, and 93a93 1/2, after having been during the week about an eighth per cent. higher.]

Although the Bank of France have reduced their rates of discount, no change has yet been made by the Bank of England. Some relaxation is however expected, and money, although still commanding high rates, is more readily obtainable for discount and on the Stock Exchange.

There has not been much animation in the market for American securities. United States Bonds of 1868 have been sold at 104 1/4. We have not heard of any important transactions in State stocks. Prices, however, remain without change. Maryland sterling has been sold at 82 1/4. The transactions in Railroad bonds have been more extensive. Michigan Central 8 per cent. bonds have changed hands at 98. New York and Erie 3d

mort. at 84½ and 84½; the sinking fund bonds at 82 and 82½. Pennsylvania 1st mort. at 89 and 90; 2d mort. sterling bonds at 89, ex-dividend. New York Central 7 per cent. bonds at 94½. Illinois Central Construction bonds at 79½; Freeland's at 83½; and the shares of this Company at 3 and 3½ discount.

ROBT. BENSON & CO.

Marie & Kanz' Money Circular for the European Steamer of the 23th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, April 21st, 1856.

Our last advices were dated the 15th inst. On the 17th the *Baltic* arrived, announcing that peace had been signed on the 31st ult., consols leaving off at 98½ on the 2d. Notwithstanding the importance of the news, it had been so fully anticipated that our stock market experienced but a momentary and insignificant improvement—without increased activity. Since then, the tendency has been rather downward. Opinions are far from being settled in relation to the prospects of our money market, and the increased demand experienced during the week has enabled the parties operating for a fall to repress any upward movement in the face of the peace news, and in many cases to keep prices below those quoted in our last circular. This increased demand is occasioned by the heavy payments maturing this month, as well as by a disposition among the Banks to restrict, if not reduce, the present high figure of their loans and discounts. For the last three days, however, we have had more ease in money affairs. The movements of the Bank of England will now be followed with a peculiar interest, and as soon as there will be indices of an approaching reduction of its rate, our stocks will doubtless improve rapidly. Money was in good demand during the beginning of the week—easier at the close. On call, 7 per cent.; first class paper, 7a8; names less current, 8a10. Exchanges on London and Paris very firm, with an upward tendency. Principal sales at 109½a¾ for sterling, and at 5.17½ for francs.—Continental exchanges without alteration, and not much doing

MARIE & KANZ.

Annual Report of the British Iron Trade.

Our last circular bore date 28th of March, 1855, the first anniversary of the declaration of war, and a period of considerable uncertainty and depression. Another year has elapsed, and we are glad to say, the present observations on the position and prospects of the iron trade appear under circumstances of far happier augury, viz: when a confident impression prevails that we are on the eve of the re-establishment of peace in Europe, which we hope may be attended with much prosperity to this important branch of industry. In glancing at the course of business, during the two years of active warfare from which we are emerging, the most prominent and noteworthy fact connected with the iron trade seems to be that prices have not given way to such an extent as many persons anticipated. The lowest point that rails have touched since the war broke out was £6 5s. per ton, and Scotch pigs, 58s. 6d. per ton. The inherent vitality and soundness of the trade have thus been evinced in a high degree under the severest circumstances of financial pressure; for although the material of war has undoubtedly constituted a heavy item in the demand on our blast furnaces and foundries, on the other hand the consumption of manufactured iron has suffered, because many magnificent railway enterprises, in which immense capital was embarked, have been arrested or crushed by the all-absorbing interests and influences of the late struggle. America, our best customer, has also sympathized largely in the money crisis on this side, and her orders for English iron to build railways have consequently been issued only on an extremely limited scale. It must not be forgotten, too, that the ports of Northern Europe have been closed for two years against the shipments of this article. At home, the pressure of taxation has led to the postponement of the

execution of many public works that were in active progress in 1853, and which would have absorbed in their construction iron to a considerable extent. On the whole, it is patent that the war has cast a dark shadow across commercial enterprise in general, whatever political and moral ends may have been attained by its prosecution. Annexed will be found our usual table of exports of iron for the past year, which, as compared with the two preceding years, shows the following results, all descriptions being reduced to pig:

	Tons.
1853.....	1,814,231
1854.....	1,735,136
1855.....	1,619,205

Thus the diminution amounts to about 200,000 tons per annum in the shipment of British iron to foreign ports during 1855, as compared with those of 1853, an inconsiderable falling off from a make of iron estimated now at 3,500,000 tons per annum for the United Kingdom. The stocks on hand throughout the country are very inconsiderable; those of pigs in Scotland are estimated to amount to 140,000 tons, and perhaps there are about 20,000 tons in pigs in the North of England; with which exceptions, all the iron made has either gone abroad or been consumed at home—i. e., broadly and roughly, about half the iron produced is now exported, and the remainder used in this country. Any revival or extension of the demand in any quarter of the world would, therefore, come upon very insignificant stocks in Great Britain, and consequently act as an immediate stimulus to the market. As much attention is now directed to the growing strength of the iron trade, in connection with the discovery of the Cleveland stone on the Yorkshire coast, we have prepared a reliable statement of the whole of the blast furnaces and rolling mills north of the Humber. The total annual output of pig iron in the northern district is now equivalent to 446,680 tons, out of which it converts about 138,320 tons into malleable iron, and ships the remainder for forge and foundry purposes, coastwise and foreign. The expansion of production in that quarter, while very considerable, has in certain published statements been nevertheless overated. But few new furnaces have been erected the last year. Turning from the past to the future, the grand question is, into what new phase are we about to pass?—will peace bring a pathy or activity to the iron trade? We incline to think that its good effects, though perhaps not immediate, are notwithstanding certain; and that we shall only have to wait for an easier money market to give renewed impetus to the demand throughout the world, for that metal that has evermore constituted the "right arm of civilization."

Railroad Iron.—The wants of India continue to manifest themselves on a large scale, and 80,000 tons have been negotiated this week; the price we believe to be about £9 in London, or nearly the same as a similar quantity was contracted for last December. The bulk will be manufactured in the North of England, and the rest in South Wales.—France is likely, as soon as the pressure of war has passed away, to be a buyer to even greater extent than during its existence; and she has taken no insignificant quantity of rails from us these two years last past. Russia will probably be in the market for rails on a large scale shortly after peace is declared, in order to complete her lines southward, for the war has revealed how impossible it is for her to successfully repel invasion without increased facilities for the transfer of troops and stores. Other large continental orders are spoken of as likely to come forward. The market is firm, and the last mail from the States brings us orders for rails and sheets.—*From the Circular of Messrs. G. B. Toms & Co., of London.*

Extension of the Binghamton Railroad.

Among the laws enacted by the present Legislature, was one authorizing the sale of a piece of ground belonging to the State, near Fort Ontario, in the city of Oswego. This act was petitioned for by those interested in the Binghamton R. R. Co.; and the object was to secure a suitable site

for a depot ground, store houses, &c., whenever an extension of the road to Oswego shall have been effected, and such erections rendered necessary. We understand the location is exactly suited to this purpose.

It is understood that the movement to extend the road to Oswego will now be pressed with energy. It has been satisfactorily ascertained that the road would have an abundant supply of freight at all seasons of the year. The accumulations of freight at Oswego are rapidly increasing; and full reliance can be placed on this business as a permanent source of revenue. The revenue from local business and travel would also exceed that of the old road.

To all classes of people on this side of the river this enterprise appeals with strong claims. The road would not only be a great accommodation to them, but add more to the value of every man's farm within five miles, from five to fifteen dollars an acre, without being a detriment to any individual. Hence, the people along the route should respond with heartiness and liberality in the way of subscription to the stock. We look forward with confidence to the speedy consummation of this important work.—*Syracuse Standard.*

American Railroad Journal.

Saturday, April, 26 1856.

Railroad Mismanagement and Remedy.

An universal grumbling at the bad management and misfortunes of Railroads is the fashion of the times. Almost everybody is dissatisfied, yet the dissatisfaction expressed generally and in itself, exerts only a feeble tendency toward the correction of the evil complained of. The reason is, that there is on the public mind no well defined principle or standard, according to which the affairs of railroad companies should proceed.—The remedy for a given evil, therefore, cannot be applied, simply because the appropriate one is not understood. Grumbling and bad management go on apace till both become chronic features—one of the public mind, the other of Railroads.

Now the germ of all improvement is *knowledge*. Given a certain state of facts, and they will challenge some kind of an opinion on the part of the public. Time will prove the value of such opinions, confirming what are correct, and leading to the abandonment of such as are erroneous. A sufficient number of deductions of this kind, in time establish a *law* applicable to all similar cases. Standards of good management in every department of railroad affairs would grow up to which the public sentiment would compel all interested with these works to conform. Is there, by a general rule in the management of our railroads, any such kind of deduction carried in which each step is progress? By no means. There must be some *progress* wherever there is *activity*, but it is often hardly appreciable. What progress has been made in the management of our railroads for the past few years? Some, no doubt, but by no means general and complete as it should be. Some companies show a marked improvement, while others have retrograded in an equal degree. We can point to a wide section of country, the pioneer in the construction of railroads, and the quarter to which, above all others, we have been accustomed to look for the best standard of management, and we find the value of railroad property steadily declining, with no power, apparently of arresting the fall. It is not that their earnings are not ample—for several of the roads in the receipt of the largest

earnings, are apparently in the most hopeless condition, so far as the tone of their management is concerned. This is a singular state of things, but is one that can be easily accounted for. The managers of the Massachusetts railroads do not pretend to any accurate knowledge of the cost of the several departments of service. In such a case there can be no relation established between receipts and profits. Nor is there any foundation upon which to base anything like reform. The only inference that the managers of the roads of this State appear to be able to draw from their experience is, that insufficient net receipts to meet the demands upon the companies is proof that the rates of charge are too low, and that the only remedy is to increase them.

Now, the public have it in their power to reform the management of railroad companies to a degree that will make productive most of our roads, by insisting that in all cases full and lucid reports shall be frequently made. The reports of well managed companies would serve as standards to which all other companies would be obliged to conform. If one company gave to the public an exact picture of their internal management and by what process the cost of any branch of service was reduced to the minimum figure, all other companies, were the public properly alive to their interests, would have to make a similar exhibition. The publicity thus enforced in all cases would naturally beget a taste to make a good show, which in the long run could be made only on good ground. The strongest possible motive to reforms and improvements, and faithful management, would be addressed to the managers of all our roads. Added to this would be a generous emulation—a healthy desire to excel, which would be productive of the happiest results. At present, such sentiments as these, which lie at the very foundation of excellence, may be said to be entire strangers to the managers of most of our railroads.

Now, instead of the grumbling we constantly hear, let the public insist upon knowing what the managers of our railroad companies are about.—Take a notable instance immediately before us—the Hudson River Railroad. Here is a work that has been in operation for several years—a road, the cost of which has exceeded twice the estimates, and which, instead of being productive, has not yet earned the interest on its funded debt. There can be no doubt that the failure in this case to meet expectation has been to a considerable extent due to bad management. Here is a calamity in our very midst, yet not a soul outside the management can give us any other reason than a general one why it has happened. We doubt whether the managers themselves are any wiser. The company have no history but a very confused one. Past experience has developed no precedents as guides for the future. Had any such been developed, their value is lost for the want of a record of them. The company have yet never published anything deserving the name of a report. The operations on the road to-day are probably but little wiser than when the road was opened. No attempts have been made by the company to reduce their operations to a science. For this reason, no real progress has been made. Matters could not have gone on for years in this manner, had the stock and bondholders in this road been properly alive to their interests. They should have insisted

in the outset on having a full view of the internal management of the company. If the exhibition had been an unsatisfactory one, a better standard of management would have been demanded, till one had been reached fully up to the best existing ideals. A far different condition of the affairs of the company would have been the result.

We do not single out this company as any more culpable than many others, but as a striking illustration, close at hand, of an evil we are seeking to remedy. All that is wanted to effect the needed reforms, is to let daylight into the affairs and management of our railroads. This is not allowed in one case in ten. In most companies there is a diplomatic department where secrecy is considered indispensable, a department generally in full activity, the results of which are seen in unconcionable or unfortunate contracts, in leases of other lines, in guarantees of other people's indebtedness, etc., etc. In nine cases out of ten these diplomatic arrangements are most unfortunate, and would never have been entered into were the public allowed to know what our railroad managers are about.

We have just touched upon a subject which we shall enlarge upon at another time.

Milwaukee and Watertown Railroad.

The Milwaukee *Sentinel* says that a section of this road, extending to Columbus, Columbia Co., has been put under contract. It is expected to have the road completed to Lowell, ten miles west of Watertown, by the 1st of July next. An additional subscription of \$125,000 in city bonds, has been obtained from Milwaukee, besides \$62,000 in cash, and \$25,000 in town bonds from other sources. The President, W. B. Hibbard, Esq., has lately, it is said, gone East for the purchase of iron sufficient to lay the road.

The line is stated to be very straight, of easy grades, and well stocked, traversing a fine region of the State, and touching at several important points. Much credit is due to the President for his energy in carrying forward this enterprise.

Cleveland and Pittsburg Railroad.

We give in another column an abstract of the Report of this road for the year ending November 30th, 1855.

The total receipts for the year were, \$581,877, of which \$521,942 were from the main line; which is at the rate of \$5,000 to the mile.

The road being yet unfinished, a large amount of the capital account is unproductive, which shows the operations of the past year in a less favorable light than if the entire line of the company had been in operation.

The works in progress will carry the road both to Wheeling and Pittsburg. The Wheeling extension will be a very valuable auxiliary to the main line, as it will connect that city directly with Cleveland and the Lakes. At Wheeling, a junction will be formed with the Baltimore & Ohio railroad, and a very direct route opened to Baltimore. Wheeling is the seat of a large commerce and of very extensive manufactures, which find one of the best markets at Cleveland and upon the Lakes. From the transportation of these, the road will derive a large revenue. In this direction Wheeling is the proper terminus of the road, and is necessary to be reached to the proper development of its traffic.

The Pittsburg Branch is also making good pro-

gress, and will serve as an avenue to that city of the trade of several important counties of Ohio, which will thus have a choice of markets between it and Cleveland. The trade between these cities is very large and is daily increasing.

The main line of this road has some important features in its favor. It traverses a very excellent, and densely settled section of the country, a portion of which is underlaid with coal. It connects by the shortest practicable route Lake Erie and the Ohio river, between which there must always be a very extensive commerce and a very large amount of travel.

The company appear to have adopted a prudent and conservative policy, and are rapidly relieving themselves of all their floating liabilities. They have elements of business, which properly cultivated cannot fail to give them very large receipts. The carriage of coal alone will in a short time supply a very large and profitable traffic to the road. This draws with it a large amount of other business which is incidental to it. The local business of the road should be excellent, as no portion of the West is better settled, or better cultivated, and its extension to Wheeling should make it a first class passenger road.

Detroit as a Manufacturing City.

There are within the City of Detroit 46 stationary steam engines, employed in manufacturing establishments of various kinds, among which are ten iron machine shops, two locomotive manufacturing, several brass foundries, sash door and blind factories, tobacco and morocco factories, tanneries, sawmills, plaster-mills, flouring mills, &c. There are in the city 343 mechanic shops of various kinds. Among the most important manufactures in the city is that of iron and machinery which is now carried on most extensively. The Detroit Locomotive Works occupy an entire square of ground, and have invested a capital of \$250,000. The number of men employed during the past year was 300. The quantity of the chief articles used was 1,000 tons pig iron, 1,800 tons coal, 1,000 cords wood, 400 tons bar iron, 35 tons copper tubes, 30 tons brass castings. During the year they built fourteen first-class locomotives, and rebuilt two old ones; built three propeller engines, and seventeen stationary engines and boilers for the same. They are now building locomotives for the Michigan Central and the New York Central Railroads, and have under way several propeller engines. There are eight or ten machinery and boiler shops, employing from fifty to one hundred and fifty men each, and some of them using annually 2,000 tons cast iron, 300 tons wrought iron, 30 tons copper, from 500 to 600 tons coal, 50 to 100 cords wood, and having a capital invested of from \$50,000 to \$80,000. The manufactures of some of the largest of these establishments for the year 1855, reach upwards of \$200,000. About six months since a company commenced operations under the style of the Detroit Car Company, for the manufacture of railroad cars. Since that time they have completed four large passenger cars, two baggage cars, and forty-eight freight cars, all of which will compare favorably in workmanship with those of any other Company east or west. These cars were all built for the Detroit and Milwaukee Railroad, and the Company have a heavy contract for furnishing rolling stock for this road. From seventy to eighty men are regularly employed in the various shops.

A company of capitalists of this city have also established at Wyandotte, eleven miles below, on the Detroit river, a heavy iron manufactory and rolling mill, which is supplied with iron by the Eureka Iron Mining Company. The Company have invested at Wyandotte, \$150,000 in the purchase of real estate and the erection of a rolling mill and blast furnace—\$44,000 in the former.—

\$50,000 in the Rolling Mill, the machinery for which was purchased at two thirds its real value, and between fifty and sixty thousand dollars in the furnace and ore beds. The Rolling Mill Co. have already commenced the erection of another Rolling Mill for re-rolling railroad iron. In this mill, which will be completed the present season, they will invest at the outset, \$50,000 more, with a capacity for rolling 6,000 tons, and which can be easily enlarged. The mill will manufacture, or will possess a capacity for manufacturing 8,000 tons of iron yearly, worth at least \$240,000, employing about 75 men, to whom about \$35,000 will be annually paid out. The mill, already completed, has been in operation since November, and has manufactured about 250 tons of square, flat, oval, and round bar iron, of a very superior quality, and which readily commands \$90 per ton. Thus far it has used only scrap iron, and iron for the Collins's Co., but hereafter it will be supplied principally from the new blast furnace with Lake Superior iron. The Lake Superior iron is found to be of such a superior quality that orders are flowing in upon the Wyandotte works from all directions, and they have now more orders for iron than they can possibly fill.

Journal of Railroad Law.

FRAUD OF DIRECTORS—HOW FAR BINDING ON THE COMPANY.—FALSE REPORTS BY THE DIRECTORS TO THE COMPANY.—THEIR EFFECT.

A case was recently decided in the House of Lords in England involving principles very similar to those of the Schuyler case, *i. e.*, how far a corporation are liable for the fraudulent actions of their directors.

The case is that of the National Exchange Co. *vs.* Drew XXXII. E. L. & E. R. p. 1. The facts in the case are as follows.

At the annual meeting of the National Exchange Co. in 1846 and 1847, reports were presented by the Directors to the Company representing the affairs of the Company as in a very prosperous state. These reports were, however, delusive and fraudulent, the Company being actually insolvent at the time. Shortly after the second meeting rumors unfavorable to the stability of the company were circulated, and as a consequence the shares began to fall in the market. As a means of counteracting these rumors Mr. Barlow, the manager of the Board of Directors induced Mr. Drew to purchase some shares of the company's stock, agreeing that the company should advance the money for the purchase, and should hold the stock until it could be sold for a profit, without being called on for any contribution in money. The amount paid for the shares was £600, for which the company sued Mr. Drew. The Court of Sessions (Scotland) gave judgment for the defendant. The Company appealed.

LORD CRANWORTH, *Lord Chancellor*.—After commenting upon some other questions in the case proceeded as follows. It is said that there was no fraud on the part of the Company. The fraud as it was said was a fraud by the Directors and not a fraud by the company; that in fact the company were not deceivers but deceived. Now upon this subject I will remark that the directors of this company appear to have had the duty of superintending, directing, managing, and transacting the whole business and concerns of the company. Part of that duty was to make an annual report as to the state of the concern and they are stated to have done it.

Now for the present purpose I will assume that in order to raise the value of the Company and of particular shares held by the Company, they

fraudulently misrepresented the real state of its affairs, the real amount of its assets, and of the demands upon it. The question is what is the consequence of the Company's receiving such a report (if you can separate the Company from the Directors) and publishing it to the world? I confess that in my opinion, from the nature of things, and from the exigencies of society, that must be taken as between the Company and third persons, to be a representation of the Company. The Company as an abstract being can represent or do nothing. It can only act by its managers in its ordinary transactions or by its Directors or Agents where there are duties to be performed by the Directors in other matters. When, therefore, the Directors, in the discharge of their duties fraudulently, for the purpose of misleading others as to the share of the affairs of the Company, represent the company to be in a different state from that in which they know it to be, and the persons to whom that is addressed act upon it in the belief that it is true, I cannot think that society can go on without treating that as a misrepresentation by the company; otherwise companies of this kind would be in this extraordinary predicament, that they might employ—nay must employ—agents to carry on their concerns, and that those agents might make representations be they never so false and never so fraudulent, and yet nevertheless that the company may and must benefit by those representations without being at all capable of being in fact told, "That is your fraud;" because the company can act in no other way than by its directors.

Now it was plausibly urged that these reports were not made by the company, but to the company. In form that is so. No doubt they are reports made to the company; but I assume for the present that they were made to the company under such circumstances, that what they so report is known and intended to be known, not only to the shareholders, but to all persons who may be minded to be shareholders, just as if they were published to the world. I repeat that I think the exigencies of society demand that the reports so made and so circulated should be deemed the reports of the company.

But it was said that the persons imposed upon were the company; that the company were the parties imposed upon and not imposing, and that these particular defendants were themselves part of those persons who were so imposed upon, because they were themselves the owners of 1,100 odd shares in the company previously to this purchase. I do not think that even by the law of England the circumstance that the person was already a shareholder would have made any difference in a transaction of this sort. I do not wish to bind myself conclusively with respect to the law of this country, but certainly by the law of Scotland a shareholder even in an ordinary partnership is considered as having a distinct identity from the partnership. It is quite clear to my mind that in a transaction of this sort the individual shareholders have a right to treat themselves as something different from the company, even if that could not have been the case according to the law of England. Therefore I come to this conclusion, that if the directors in the discharge of their duty of making these annual reports, giving a correct representation as to the state of the

funds of the company, fraudulently and with a view to raise the value of the shares of the company in their annual reports, misrepresent what the state of the company is under such circumstances, that third persons, or even shareholders (whom for this purpose we may treat as third persons) are deceived and act upon that misrepresentation, the persons so deceived and so acting have a right to treat themselves as having been fraudulently deceived by the company.

Judgment affirmed.

Grand Trunk Railway.

At the annual meeting of English stockholders, on the 7th ult., two letters addressed by Thomas Brassey, Esq., of the firm of Peto, Brassey & Co., contractors on that road, to Hon. John Ross of Canada were read. The object of the communications, which were said to be confidential, was to secure a moderate guarantee of, say, five per cent. on the capital invested in that undertaking, by the Canadian Government. The writer, after advertising to the present condition of the European money market, observes that an impression is gaining ground in the public mind that the prospective advantages of the road have been greatly exaggerated, that there is little immediate prospect of a dividend, and that both to contractors and others the most serious consequences may possibly follow from such a state of things. That were the contractors obliged to take an antagonistic position, the worst consequences to the market value of the stock, and to future investments in the Province must result. The effect would be to shut up the only source from which Canada can hope for many years to derive aid in prosecution of her undertakings. A proposition was made to amalgamate the western portion of the Grand Trunk with the Great Western road, so as to obviate competition; but the latter interest seems opposed to the measure. The letter states that the directors have proceeded on the assumption that the enterprise would yield dividends of at least 11½ per cent.; and that it would be strange indeed if this figure should be brought down to less than five per cent. It is claimed that there would practically be no risk for Government to guarantee dividends to such an amount. If an unfavorable result, however, were possible, provision might be made for compensation in subsequent years, when business had sufficiently increased. The effect of such a measure would be beneficial and most important, restoring confidence and enabling the contractors, without ruinous loss, to fulfil their engagements. This method has been adopted by the French Government, and with the best results; and yet they have never been called upon to pay a single shilling. For this proposed aid, a consideration is suggested, viz: the reversion of the whole railway property, after 99 years, to the State. With such encouragement it is suggested that the company should take on itself the raising of £3,000,000 additional, for the further prosecution of public works in the Province—to be guaranteed in like manner.

The summary of Mr. Brassey's scheme is—

"A guarantee of 5 per cent. on the share capital of the Grand Trunk Company."

"An undertaking on the part of the Company to subscribe an additional three millions on the like guarantee upon that account—any deficiency borne by the Government to be made good out of future net earnings beyond 5 per cent of dividend."

"The whole undertaking to revert to the State in absolute property at the expiration of, say 99 years."

I believe that this scheme would remove all difficulties, and I am quite sure that without this or some such scheme, the difficulties are insuperable."

Madison and Indianapolis Railroad.

The thirteenth annual report of this Company has just been received, and shows their total gross earnings for 1855 to have been \$286,146.82. The ordinary or working expenses were \$173,266.94, in addition to which were the following extraordinary items:

Construction and extraordinary repairs.	\$18,987.68
State's interest.	2,256.50
Claims paid by Treasurer, not audited.	12,507.84
Debts contracted prior to 1855.	79,127.86

Mak'g, with ord'y expense, a total of..\$286,146.82

The receipts of the several lines operated by the company were—

Madison and Indianapolis.	\$268,166.16
Martinsville and Franklin.	11,030.48
Columbus and Shelby.	9,950.18

Total\$286,146.82

And working expenses are chargeable as follows:

To M. & I. R. R.	\$160,548.50
M. & F. "	7,498.89
C. & S. "	5,219.52

Total\$173,266.45

The working expenses on the main line are thus shown to have been 60 per cent, while on the branch lines they were 63 and 75 per cent, respectively. The principal item of extraordinary expense has been the relaying, ditching and graveling of the plane at Madison. This portion of the work is now in better condition than ever before, and has been operated with ease and safety. No further expenditure will be needed. Several miles of the road have also been re-laid and ballasted, and it is designed to continue this until the whole line shall be put in complete repair. The ordinary expenses will thus be greatly reduced. But one accident, and that resulting from carelessness, took place during the year. The road has been operated through the past winter without interruption.

From the Legislature, in 1855, an act was obtained by which the State compromises her claims against the company, amounting to \$300,000, for one-fourth of that sum, payable in five per cent. State stock. These were duly delivered in February of the present year, and an instrument of release has accordingly been obtained.

In order to settle the difficulties with the Peru and Indianapolis Company, two referees were appointed by each party. After a lengthy investigation, the matter was adjusted,—the sum of \$36,975 having been awarded to the M. & I. Co. The court, at the same time, entered a decree, annulling the contract of consolidation, placing the parties on their original footing, and making each party liable for the debts contracted on its own account.

With the Jeffersonville company, a contract for ten years from December last has been entered into. This company are to have the use of the Madison road between Edinburgh and Indianapolis,—transporting their passengers and freight with their own machinery. For these and other priv-

ileges necessary to carry them out, the Jeffersonville company agree to pay 60 per cent. of their gross earnings on that section of the road, provided the total receipts on the same do not exceed \$65,000. Should they be over that sum, but not exceed \$75,000, the rate to be 55 per cent., and 50 per cent. if the receipts exceed \$75,000. Settlements to be made monthly. The contract is found to work to the mutual satisfaction and advantage of both parties.

By an arrangement made with the City of Madison, the latter resigns to the company all her interest in the Columbus and Shelby road for the sum of \$24,000. The company may then dispose of this work as they see fit. It has not yet been decided whether to take it up altogether, or continue operating it as hitherto.

At a meeting of the stockholders in New York, in May last, it was resolved to make an effort to raise \$250,000 on income or second mortgage bonds, to liquidate the State debt, interest overdue, and the iron debt of the Columbus and Shelby road. This has been accomplished.

The present liabilities of the company are as follows:

Capital stock.	\$1,647,700
First mortgage bonds.	600,000
Second " "—amount sold.	500,000
Due for advances in New York.	30,000
Home indebtedness, say.	75,000
Scrip dividend of January, 1854.	131,816

Total.....\$2,984,516

The annual interest on the debt will be about \$82,000. Whatever net earnings may be beyond this sum, are to be applied to the reduction of floating debt, extraordinary repairs, &c.

In February last, the late President, Dr. E. W. H. Ellis, resigned, and was succeeded by Mr. Frederick H. Smith of Newark, N. J. The present incumbent is said to bring to the position a good reputation for ability, and prudent and economical management. Resolutions highly commendatory of Dr. E. were passed by the Board.

The Directors for 1856 are—Nathan Powell, C. L. Shrewsbury, W. M. Dunn and W. N. Jackson, all of Madison; Samuel Moore of Mooresville; C. J. Peck, J. P. Drake, Allan May and E. W. H. Ellis of Indianapolis; N. J. Jackson of Tipton, and F. H. Smith of Newark, N. J.

Memphis and her Railroads.

The *Eagle* gives a synopsis of the advancement of railroads terminating at that place. The MEMPHIS AND CHARLESTON has 75 miles of the main stem completed, besides the Somerville branch, 13 miles. This work will be completed through to Chattanooga this present year; the iron necessary for the unfinished part having been already purchased, and will be brought forward as required.

Of the MEMPHIS AND OHIO road, 45 miles are already in operation, and the work is steadily and rapidly progressing to the Kentucky line. Valuable aid has lately been extended to it by the City of Louisville and the State of Tennessee.

The MISSISSIPPI AND TENNESSEE line has already about 15 miles completed, and the rest is progressing favorably. The State of Mississippi has recently extended aid to this enterprise. It is expected to be finished through to Grenada in two years and a half, when a direct line to New Orleans will be in operation.

A large number of men are at work on the MEMPHIS AND LITTLE ROCK road, and about 30 miles

are graded and ready for the iron. The Legislature recently passed a law, endorsing \$350,000 of bonds subscribed by the City of Memphis, and Little Rock Railroad. The iron for 30 miles will shortly be brought up from New Orleans. The *Eagle* concludes thus:

"Thus it will be seen that the railroads of Memphis are in a most promising condition. Already there are one hundred and seventy-five miles of railroad in operation, running out from this city in three different directions; forty-five miles north; one hundred and fifteen, or one hundred and twenty miles east, and fifteen miles south.—Our city is rapidly becoming a great railroad centre;—and with all our connections complete, who can tell where the greatness of Memphis is to stop? Who will say that within ten years from this time, it will not have 100,000 inhabitants?—And who can tell what a century may bring forth? Who will not say that our modern Memphis, on the banks of a Nile of which the old Egyptian world never dreamed, is not to be greater than Thebes with her hundred gates, or than London, with her teeming millions?"

Central Virginia Railroad.

The Charlottesville *Jeffersonian* states that the whole line of this road is now laid with heavy rail; the last piece of flat rail was taken up between Cobham and Lindsay's, in Albemarle county, a week since. The workmen are now engaged in finishing the road west of Staunton, and by the time the spring travel commences, the road will be completed to Millboro' in Bath county.

European and North American Railway.

A movement is being made in New Brunswick with a view to the completion of the European and North American Railway. We have before us the report of the Attorney-General, Hon. Charles Fisher, and the Railway Bills introduced into the house. The plan proposed is to give up the contract with Sir S. Morton Peto and als., and adopt the Nova Scotia plan of building it by the government as a public provincial work, raising the money by an issue of provincial debentures. Among the papers laid before the House is a letter from Messrs. Baring Brothers, offering to raise £800,000 sterling for this purpose, to advance £50,000 at par on 6 per cent. bonds, on 30 years, and negotiate the balance on the best terms possible, to the amount of £290,000 per annum. The correspondence is full of interest to all parties in British North America.

The government plan is opposed by the Hon. John H. Gray, of St. John, and others, who advise the acceptance of the recent proposal of Sir Morton Peto and his partners, to proceed with the work on securing an increased guarantee, or a further loan of Provincial credit similar to that granted by Canada last year in aid of the Grand Trunk Railway. These parties, however, offer to surrender their contract on favorable terms in case the plan for a government road is carried in the Legislature. All parties concur in saying that the road must go forward without further delay whichever plan is adopted, and a meeting of the European and North American Railway Company is called to act on this, and on any question that may arise, on the 2d April next.

In order to secure the completion of the line from Bangor to Halifax, the means will be wanted to build that portion which lies in Maine. It has been suggested, that the State should aid this line by a loan of its credit to a limited amount, and for this purpose the present legislature should submit that question to the people. A loan of the State credit to the amount of one-half the cost, not to exceed \$10,000 per mile, would at once induce other parties interested to take up the work of its construction. The building of this line from Bangor to St. John and Halifax, is a great enterprise for this State to accomplish, the carrying out of which would affect every public and private interest, and double the value of all the public lands in Maine.

There is a population of 600,000 persons in the Lower Provinces whose business intercourse with the United States is already great, and under the influence of the reciprocity treaty, is rapidly increasing.

The value in sterling of all the Imports imported into the Province of New Brunswick, during the year 1855, was £1,431,330. During the year 1854, the value of Imports was £2,068,773, showing a decrease in 1855, as compared with the previous year, of £637,443.

The two heaviest items of their Imports are flour and dry goods. The quantity of flour imported into the Province in 1854 was 146,141 barrels, valued at £334,487. The value of dry goods imported in 1854 was £517,727, sterling. In 1855, £194,622 sterling. It will be seen from this that while the importation of flour has increased considerably last year, dry goods have decreased very materially.

The new vessels registered at the Port of St. John during the year 1855, were 76, measuring 40,986 tons register. At Chatham, Miramichi, for the same period, the number was 14 vessels, measuring 11,671 tons register. At St. Andrews, which include St. Stephen, the number was 5 vessels, 1,904 tons register. The total amount of new shipping registered during the last year was 95 vessels, measuring 54,661 tons per register.

The number of vessels of all kinds belonging to St. John on the 31st of December last, was 566, measuring 110,451 tons; St. Andrews, 195 vessels, 12,572 tons—making altogether 866 vessels, measuring 138,292 tons belonging to New Brunswick at the end of last year.—*State of Maine.*

The Lead Trade of Galena.

The following table shows the shipments of lead from Galena from 1842 to 1855, inclusive:

Year.	Pigs.	Pounds.	Value.
1842.....	447,909	31,853,680	\$702,321
1843.....	553,261	39,148,270	916,069
1844.....	524,672	43,726,040	1,224,357
1845.....	778,408	54,494,850	1,613,047
1846.....	732,404	61,268,219	1,491,651
1847.....	772,556	54,085,920	1,714,523
1848.....	684,969	47,737,830	1,546,705
1849.....	628,934	44,025,380	1,615,731
1850.....	568,569	38,201,230	1,671,651
1851.....	474,115	33,189,050	1,534,062
1852.....	408,628	28,603,960	1,178,483
1853.....	425,814	29,806,980	1,639,380
1854.....	493,617	30,125,550	1,732,219
1855.....	430,365	30,125,550	1,732,219

Total..7,859,231 556,019,149 \$20,201,133

This shows that notwithstanding the immense amount of lead that has found its way to Galena during the last fourteen years, the increase has been steady from year to year, and the almost daily discovery of more and rich deposits in the mineral region, are evidence that the mines are only beginning to be fairly worked. That region extends over a wide extent of country in this State, Iowa and Wisconsin, and its treasures cannot be exhausted for ages to come. The above statement by no means exhibits the entire amount mined in the lead region of the Upper Mississippi during the period specified. A great deal has been shipped from Dubuque, and the trade is largely increasing from year to year at that point. We have not the figures before us on which to present a positive statement, but we should say that the lead trade of Dubuque has been one-third that of Galena, and for a few years back probably more. Some lead has also been shipped from Potosi, above Galena in Wisconsin.

Galena has derived an immense advantage from the lead trade—indeed we say that it owes its existence to that trade—but the time is not distant when a very large part of the lead mined in the Mineral Point district will find its way to Chicago over the railroad now being constructed from Mineral Point southward to connect with the Central, a distance of only about thirty miles. Most of the lead from that region will of course go eastward, and a considerable portion of it will stop in this

city to be manufactured, and thence distributed in various forms in every direction. It is understood that in all our machine-shops and many other manufacturing establishments lead is very extensively used, and the aggregate demand for the raw material will increase very largely with every passing year.—*Chicago Democratic Press.*

New Mode of Making Iron.

Some two years ago, Mr. James Renton represented to certain capitalists in Cleveland, that he had invented a method of converting ore into first rate iron by one melting. The ore was to be simply cast into his furnace, and came out pure malleable iron. It was further promised that the process would produce iron in such quantities and so cheaply as to eclipse all the old methods, and to introduce a new era in the manufacture of that important article. His statements were so plausible and his theory so ingenious, that a number of capitalists of that place formed a company, purchased the right to his patent in Cuyahoga county, erected a furnace according to his instructions, obtained powerful steam machinery, bought a large tract of ground, and imported a quantity of Lake Superior iron ore. When everything was completed and the furnace set to work, it proved a complete failure! Large sums were expended in making experiments and changes, but all to no purpose. The thing had to be abandoned, after suffering a heavy pecuniary loss. The company instituted suit against Renton to recover damages. The case came on for trial. The *Leader* says:

"The jury in the case of Forest City Iron Works vs. James Renton and others, brought in a verdict in favor of plaintiffs of \$24,676.32. The question involved was fraud in the sale of a patent right for making iron, and known as the 'Renton Process.'—*Chicago Tribune.*

Railroad Earnings.

GREAT WESTERN (CA.) RAILROAD

The business on this road for the five weeks ending 18th April, was—

Passengers.....	\$184,363.57
Freight.....	149,991.06
Mails, &c.....	9,661.25

Total.....\$344,015.88

Corresponding period last year.....242,055.89

Increase.....\$101,959.99

Austrian Railroads.

The treaty for the sale and concession of the Austrian railways in Italy to the section of capitalists headed by the Rothschilds (of London and Paris), has been definitely arranged. They are to purchase 278 English miles which are already completed, and to undertake 293 miles which remain to be constructed, in addition to the Central Italian line. The total network to come into their possession will therefore comprise about 680 English miles. The company are to pay for the finished lines £2,400,000, by instalments spread over six years, with £660,000 additional, in case the average profits during that time shall exceed seven per cent. The whole capital required is estimated at £10,000,000, on which the Austrian Government guarantees five per cent.

TO CONTRACTORS.

PETTES' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

417 N. DAVIDSON, 9 Spruce st., N. Y.

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD. }
No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

3U

A. WILKINS.

NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1856.

Extension of Trunk Line to Nelson's, Shubenacadie.



TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until SATURDAY, the 10th day of May next, at 12 o'clock, noon, for the Construction and Finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, or the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Rails, Chairs, Spikes and Side Keys. The work to be completed by the 30th day of June, 1857.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock A.M.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

8114 JOSEPH HOWE, Chairman.

ELLIOTT & CO., NO. 4 WILLIAM STREET, NEW YORK.

(ONE DOOR SOUTH OF BEAVER STREET.)

RAILROAD AGENTS AND COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION

FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,

No. 4 William st., N. Y.

To Bridge Contractors.

PROPOSALS will be received at the office of the EDGEFIELD AND KENTUCKY RAILROAD COMPANY, at Nashville, Tenn., until the 20th day of May next, to build the Bridge across Cumberland river, for the joint use of the LOUISVILLE & NASHVILLE and the EDGEFIELD & KENTUCKY RAILROADS, according to the provisions of the Act of the late General Assembly, appropriating two hundred thousand dollars for its construction. The superstructure will be about seven hundred feet long, including a draw with one hundred feet opening. The piers will be from sixty to eighty feet high, in water from twelve to eighteen feet deep at its lowest stage, and the foundations will be upon piles, or put in with coffer dams, or otherwise, as the nature of the river bottom renders expedient.

Bridge Contractors are invited to send plans and specifications for superstructure, of both wood and iron, for spans of from one hundred and sixty to two hundred feet long, and when of wood, with a proposal for preserving and rendering it fire proof.

Propositions may be made for the entire structure, or for the foundations, masonry, or superstructure, separately. The foundation must be bid for per pier, the masonry per perch of twenty-five cubic feet, and the superstructure per lineal foot. Any further information can be obtained by addressing the Chief Engineer of the Edgefield and Kentucky Railroad at Nashville.

The following is a copy of the Act of the General Assembly referred to:

"Be it enacted, That the Edgefield and Kentucky Railroad and the Louisville and Nashville Railroad are entitled to the sum of one hundred thousand dollars each, to construct a Bridge across the Cumberland river at Nashville, and that they are hereby consolidated for that purpose, and shall be entitled, upon application, to the sum of two hundred thousand dollars, for which the Governor shall issue Coupon Bonds of the State, at six per cent. at thirty years, to be issued as twenty thousand dollars of the work shall be done, from time to time."

JNO. L. HELM, President

Louisville and Nashville Railroad Company.

EDWARD S. CHEATHAM, Pres't

Edgefield and Kentucky Railroad Company.

NASHVILLE, April 18th, 1856.

4117

Railroad Iron.

1,300 TONS New York & Erie pattern, 57 lbs. weight, ready for immediate delivery. For sale by

THEODORE DEION,

10 Wall st., near Broadway.

New York, April 16th, 1856.

3116

NOTICE TO Contractors and Capitalists.



San Francisco and Sacramento Railroad.

SEALED PROPOSALS will be received by the undersigned in New York City from April 10th, until May 10th, 1856, for the construction and equipment entire of the SAN FRANCISCO AND SACRAMENTO RAILROAD, California, from the City of Sacramento to the City of Beacia, a distance of 58 miles.

The railroad is upon the main trunk line from San Francisco to the interior, over which passes three-fourths of the entire inland trade and travel to California, saving 30 miles in distance over the present route, reducing the time from 8½ to 3½ hours, and passing through the fertile lands of Bolano and Yolo Counties, the richest agricultural counties in the State. It connects at Sacramento with the Sacramento Valley Railroad now built and running, and is the key to San Francisco for all lines running from Northern and Eastern California.

Maps, profiles, and specifications can be seen and every information obtained upon application to the undersigned Room No. 7, Metropolitan Bank Building, cor. Broadway and Pine st., New York.

THEODORE D. JUDAH,

Chief Engineer and Commissioner, S. F. & S. R. R.
NEW YORK, April 7th, 1856. 1m16

To Railroad Contractors.



ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. O., March 25th, 1856.

SEALED PROPOSALS will be received at this office, until 12 m. on Thursday, May 15th, 1856, for the construction of ONE TUNNEL, five thousand eight hundred and eighty feet in length; one tunnel, two thousand feet; one tunnel, nineteen hundred and fifty feet; and two, four hundred feet each;—also for the masonry of the piers and abutments of TEN BRIDGES, comprising about twelve thousand feet of TRESTLE WORK including the timber and driving the piles.

The Company reserve the right to reject any proposals, and to require bidders to give satisfactory security for the faithful execution, according to contract, of the work they may undertake.

Plans and Specifications may be seen, and the time for completing and all other information obtained at the office of the Engineer, on and after the 6th of May.

WALTER GWYN,
Chief Engineer B. R. R. R. in S. C.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a.m., for Buffalo direct, without change of baggage or cars. At Hornellsville this train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

BOOKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

11f. D. C. McCALLUM, General Sup't.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.

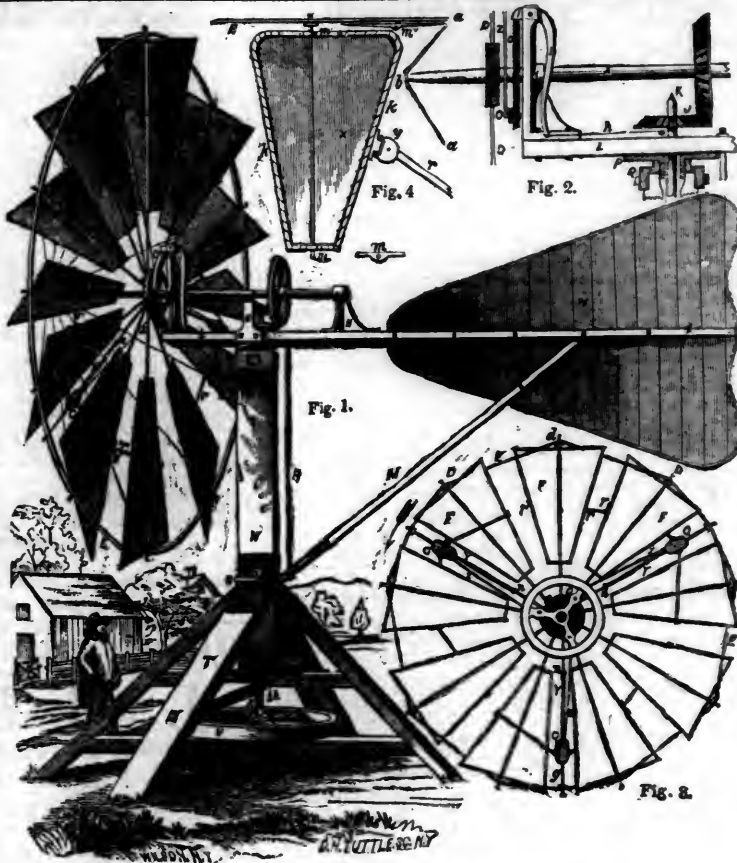
From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	18 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

THIS MILL IS ADMIRABLY ADAPTED TO RAISING WATER AND SAWING WOOD AT RAILROAD STATIONS.—It is entirely self-regulating thus: The tension of the springs X, keeps the sails F, turned or set to receive the power (wind), and the centrifugal force (of the weights G), whenever the velocity becomes too great, turns off the power, by turning the sails out of, or edgewise to, the wind. Unlike steam or horse, it requires no attendance, eats no oats, burns no fuel, sets fire to no buildings, but is always reliable when there is wind. Sufficient tank capacity should be supplied to provide for calms. Sizes of mills vary from 6 feet in diameter of wind-wheel to 50 feet, and prices from \$60 to \$500. A mill giving an average of about 5½ horse power, 16 feet diameter, will cost \$200. All requisite information will be furnished on application to this office, where a model may also be seen. These mills are about being put up on the Boston & Worcester and Mobile & Ohio railroads where their operation may also be witnessed. Address or call on

N. DAVIDSON, General Agent, No. 9 Spruce st., New York.



FRANK G. JOHNSON'S
PATENT SELF-REGULATING WINDMILL,
Brooklyn, N. Y.

PHILADELPHIA RAILWAY AGENCY,

AND GENERAL SUPPLY DEPOT OF ALL ARTICLES USED BY RAILROAD COMPANIES,

No. 12 and 14 Walnut st., PHILADELPHIA.

THOMAS M. CASH, Agent.

THE following list of Railroad Supplies, purchased to order, or in Store on Consignment:

RAILROAD IRON.—Railroad Bars, Railroad Chairs, Bar Iron, Spikes, Pig Iron, Castings.

AXLES.—American Hammered, English Hammered. American Rolled, English Rolled.

CAR WHEELS.—In rough or on ax'es.

OILS.—Sperm, Whale, Lard, Bleached Whale, Solar, Machinery.

CAR GREASE.—Tallow, Yellow, Soft White, Stiff White.

LANTERNS AND LAMPS.—Locomotive Head Lights; Wray's 28 inch Reflector, 21 do. do.; Olcott's 23 do. do., 21 do. do.; Porter's 21 do. do., 17 do. do.; Miller's 22 do. do., 20 do. do.; Arm Lanters, Breast Lanters, Hand Lanters.

PATENT OIL CANS.—Brass, 3 pints, 1 quart, 1 pint; Tin, 3 pints, 1 quart, 1 pint.

PLAIN OIL CANS.—Brass, 3 pints, 1 quart, 1 pint.

PUMPS.—For Water Stations.

MACHINIST'S TOOLS.—Lathes, Planing Machines, Drills, etc.

TURN TABLES.—Of Cast Iron, with Parry's Anti-Friction Box.

SIGNAL LANTERNS.—Large Square, 10 inch Reflector,

Red; Medium Square, 10 inch Reflector, Red; Small Square, 6 inch Bull's Eye, Red; Large Round Fresnel Lens, Red; Common Square, Large, Red; Common Square, Small, Red; Brass Globes, Red; Brass Globes, Green; Brass Globes, Blue; Common Tinned Japaned Lantern; Engine Lanters; Large Square Signal Lantern for Stations, Bridges, Switches, etc., etc.

LOCKS, WHISTLES, etc.—Car Locks, Switch Locks, Oil Caps, Cylinder Cocks, Gauge Cocks, Heater Cocks, Jack Screws, Steam Whistles, Spring Balances, Locomotive Bells, Signal Bells, Steam Gauges, Wrenches, Bolts, Nuts, Washers.

INDIA RUBBER.—India Rubber Hose; India Rubber Springs; India Rubber Packing.

CAR FINDINGS.—Push, Enamelled Head Linings, Hair Cloth, Damasks, Curled Hair, Cotton Duck, Brass and Bronze Hat Hooks.

BRUSHES, etc.—Paints, Paint Brushes, Linseed Oil, Varnish Brushes, Varnish, Glue Brushes, Glue, Glue Kettles, Conductor's Badges, Baggage Checks, Engineer's Stationery, Hardware of all kinds, Spafford's Self Adjusting Safety Signals for Draw Bridges.

LOWMOOR TIRES.

SCOTCH IRON.

PIG IRON, Bars, Boiler Plates, Sheets, Hoops, Railroad Bars, Tyres, &c.

CALEDONIAN PATENT LAP-WELDED TUBES

PATENT CAST IRON PIPES—made from best Scotch pig iron—cast vertically and drill easily.

6m13

WILLIAM ROY, Agent,

74 Broadway, New York.

James Gould & Co.,

ALBANY, NEW YORK,

At their old established works, manufacture to order—

RAILROAD CARS

of materials, workmanship and finish, equal to any made elsewhere, and solicit the orders of parties desiring to purchase.

ALBANY, April 16th, 1856.

Notice to Contractors.



OFFICE OF THE LONG DOCK COMPANY,
Jersey City, April 15, 1856.

SEALED PROPOSALS will be received at this office until the 6th day of May, proximo, at 10 o'clock A.M., for grading two miles of railroad, including a double track TUNNEL, about 4,000 feet long.

The Tunnel is located in Hudson City, about one mile from the Hudson river, and through the Ridge of Trap Rock known as "Bergen Hill."

The whole work to be completed on or before the first day of November, 1857.

Specifications, Plans, Profiles, Sections, &c., of this work may be seen at this office, or at the office of the NEW YORK AND ERIE RAILROAD COMPANY, Erie Place, West Street, City of New York.

HOMER RAMSDALL,
President L. D. Co.

MEMPHIS & OHIO RAILROAD.



Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R.
Memphis, Tenn., April 11, 1856.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and cleaning, graduation, masonry and bridging of forty miles of the Northern division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.

The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for banding.

The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.

It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1858. Good reference will be required of Contractors as to ability to carry out their contract.

Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET,
Engineer M. and O. R. R.

6117

York and Cumberland R. R.
NOTICE.

To the York and Cumberland Railroad Company,
and all whom it may concern.

BY virtue of the Deed of Conveyance to me, executed by said Company, and of the Trust powers therein named, which deed bears date the Sixth day of February, A. D., 1851; and by the concurrence of several of said bondholders, as well as in my own behalf, as grantee and bondholder, this is to give notice to said Company, pursuant to the terms of said deed, and to all whom it may concern, that for breaches of the conditions and covenants in said deed contained, by said Co., to and with the undersigned as contractor, and to and with the bondholders, described in said deed, I did, on the Thirty-first day of March last, past, and for the purposes of the deed and trust aforesaid, take full and complete possession of the premises and property therein described, both "personal and real, rights of way and corporate franchise, with all its privileges and immunities, as the same exist by virtue of the said Company's act of incorporation and the laws of the State, together with all the buildings upon said premises," excepting only the Depot and lot of land whereon the same stands, situated in the City of Portland, but meaning to include all iron rails, road-bed, track, and other structures of said Corporation, that has been acquired by said Corporation, "be the same more or less, and throughout the whole line of said road, and including all cars, engines and furniture, that have been purchased by said Company;" and that I shall dispose and sell the same for the purposes aforesaid, by public vendue, on WEDNESDAY, the Thirtieth day of April current, at the Depot of said Company, in the City of Portland, at Ten of the clock in the forenoon, to the highest bidder, for cash, payable at the close of the sale, and on execution of the deed of sale, and to the full extent of the powers derived to or by me, under and by virtue of said deed, and not otherwise. Said deed is recorded in the Registry of Cumberland County, book 226, page 467; and in the Registry of York County, book 216, page 472; and in the records of the town of Westbrook, Vol. 3, page 20, and in the records of Gorham, book 1, pp. 144, 145, 146, and in the records of Portland, Vol. 7, page 145—to which several records reference is made for more precise information, as also to the several printed annual reports of the acting Directors and Treasurer of said Company, in August of the years 1851, 1852, 1853, 1854 and 1855. For all other desirable information which the Treasurer of said Company can furnish from his books, application can be made to S. W. EATON, Treasurer, who will cheerfully facilitate inquiry respecting the premises.

J. G. MYERS.

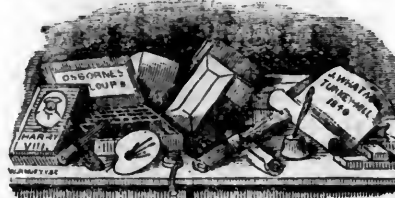
Portland, April 3d, 1856.

3615

STATIONERY.

Hufty's

Engineers, Architects and Draftsmen's
STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books.

All goods packed with care, and forwarded to any part of the United States.

JOSEPH HUFTY,
Successor to H. L. Lipman,
129 Chestnut St., Philadelphia.

May 15, 1854

BUSINESS CARDS.

PHILADELPHIA AGENCY

OF
M. & J. WING,
MANUFACTURERS OF
STEEL, FILES, SAWS, &c.
JERICHO WORKS,
SHEFFIELD,
ENGLAND.

An assortment of the above articles kept constantly on hand, and for sale by

THOS. M. CASH,
12 WALNUT STREET.

H. M. SMYTH
COMMISSION MERCHANT
AND
MANUFACTURERS' AGENT,
No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axes, wrought-iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

Rollins & Haviland,

STOCK BROKERS.

38 Exchange Place NEW YORK.
JOHN T. ROLLINS. WALTER HAVILAND.

London Agency for Sale of
Bonds, &c.

MESSRS. LANCE & CO. are making more generally known in England, the great advantages of American Securities for investment.

During the present year Messrs. Lance & Co. have disposed of a large amount of American and Canadian Railway Bonds, and are fast extending their connection, they will be happy to correspond with parties having good Amer. Securities for sale.

Messrs. LANCE & Co. have had experience in the purchase and shipment of iron, and offer their co-operation to those about to negotiate for the disposal of bonds and the purchase of rails. P.S.—Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published.

10 Regent St., WATERLOO PLACE.
LONDON, Oct. 1855. 6m46

ELLERY & GIBBONS,

No. 10 WALL ST.

BANKERS, DEALERS IN DOMESTIC AND FOREIGN EXCHANGE, &c., are prepared to negotiate Stocks, Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't Ochs Bk., N. Y.
SILAS K. EVERETT, of Everett & Brown, N. Y.
WELLS, FARGO & Co. 185f
CHARLES W. LAWRENCE, Esq., N. Y.
DANIEL & Co., Bank's Philad.
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2.	For Side Hill Cuts and Fills	14.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
3.	Base 12 ft. Slopes 1 1/2 to 1	15.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
4.	" 14 " 1 1/2 to 1	16.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
5.	" 15 " 1 1/2 to 1	17.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
6.	" 15 " 1 to 1 1/2	18.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
7.	" 15 " 1 1/2 to 1	19.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
8.	" 16 " 1 1/2 to 1	20.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
9.	" 16 " 1 to 1 1/2	21.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
10.	" 18 " 1 1/2 to 1	22.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
11.	" 18 " 1 1/2 to 1	23.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32
12.	" 18 " 1 to 1 1/2	24.	" 20	" 24	" 24	" 25	" 26	" 28	" 30	" 30	" 32	" 32	" 32	" 32

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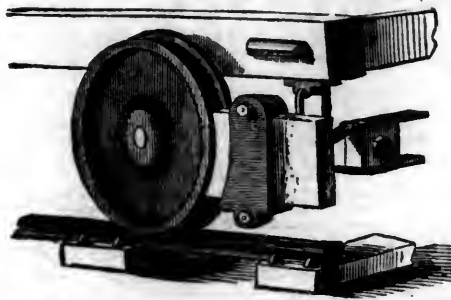
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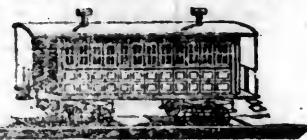
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NOTICE is hereby given, that there will be a Stockholders' meeting of the Dubuque and Pacific Railroad Company, at the office of the Company, in the City of Dubuque, Iowa, on the third Monday in May next, at two o'clock, p. m. for the purpose of amending the Articles of Incorporation, among other things, so as to increase the number of the Directors to thirteen, and to transact such other business as may be legally done at a Stockholders' meeting. And further notice is hereby given, that, on the first Monday in June next, the annual meeting of the stockholders, for the election of Directors, will be held at the office of the Company, in said city.

H. P. LEACH, Sec'y D. & P. R. R. Co.

ULSTER IRON.

THE subscribers keep on hand a full assortment of this superior make of iron, suitable for railroad, locomotive repairs, &c., &c.

EGLESTON, BATTELL & CO.,
108 South st.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SATURDAY, MAY 3, 1856.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, May 3, 1856.

Railway Affairs in Canada.

Railway matters are not going on smoothly nor prosperously in Canada. We refer more particularly to the Grand Trunk Railway which is its great work, having a length of line of some 1,200 miles, and which proposes to supply railroad accommodations to the greater part of the Province.

It has not been difficult for some time past to foresee what has taken place and what is yet to follow. The first mistake committed was in the scheme: Railroads should always be constructed in reference to distinct and well defined objects. Every portion of their line should be equally adapted to accomplish such objects. The Erie railroad for instance, was constructed for the accommodation of the business between New York and Lake Erie. To attempt to extend this road through Pennsylvania, or Ohio, would be to seek to accomplish two or more objects under an organization fitted to accomplish only one. Now a portion of the Grand Trunk extends below Quebec, while another is to unite Lake Ontario with Lake Huron. These links have nothing whatever in common. Both call for different systems of construction and management, which, being part of one line, and belonging to one company, they are not likely to receive. In so far as peculiarities of each are not

attended to and respected, they will, of course, fail to realize success.

A road to be successful must grow out of the commercial necessities of a given case, in the same manner as do ships or banks. To undertake such enterprizes, unless in obedience to a clearly existing want, is to run the risk of disaster, as the conditions on which success is predicated seldom happen. Now the Grand Trunk was a creation of political considerations, which defined its line, route, organization, &c., &c. To secure that degree of concert of action required to carry the bill through Parliament, it was necessary to have a scheme co-extensive with the Province. But public schemes are not always wisdom, nor when applied to matters of business do they often produce beneficial results. The Canadians, consequently, find their road to be unproductive and themselves in a dilemma very difficult to solve.

Another mistake committed was in the mode in which the road was attempted to be constructed. The greater part of the whole line, to cost some \$45,000,000 was let to one company of foreigners. The contractors are, undoubtedly, men of large means and of experience in the construction of European, but not, unfortunately, in the construction of American roads. Now, experience and ideas which may do well for Europe, are entirely out of place in this country. We are a people whom necessity has taught the art of supplying by expedients the lack of capital, and we presume, we hazard nothing in saying that American Engineers and Contractors would accomplish substantially the same useful result at two-thirds the cost of work done by English Engineers and Contractors. We might, if necessary, give satisfactory reasons for the great difference between the two. Perhaps it would be sufficient to refer to the progress of the public works in the Provinces under foreign contractors for proof of the correctness of our statement.

There are, therefore, three causes for the ill success of the Grand Trunk line,—the heterogeneity of the parts that compose its line,—the fact that it grew out of, and has been controlled by political considerations;—and that its construction has proceeded upon a false and vicious plan. These works should have been let in small contracts, for cash, to the lowest bidder. Had the

Canadians the experience in these matters of the people of the States, they would have foreseen from the beginning the evils and embarrassments that now beset them.

After getting into a dilemma, the next thing to be done is to get out of it. This is the question which is now exercising the Canadian Parliament. The capital for the construction of the Grand Trunk has been raised in London. A considerable portion of its cost is represented by stock, which threatens to be comparatively valueless. As the contractors receive a portion of this stock in payment for work, its low price also threatens to embarrass them, and they have hinted in pretty distinct terms, that something must be done for their relief. Another consideration addressed to the Canadians is the injury to their credit in London, should the stock in the Grand Trunk prove worthless. They are told that it was a Provincial scheme, got up, and put upon the public, under the sanction of the Provincial Government which is responsible for the extravagant estimate of earnings which, it is claimed, allured people at a distance to embark in the road.

What course will be eventually taken by the Provincial Government we, of course, have no means of guessing. We should think the better plan would be for the Province to guarantee a low rate of interest on the whole cost of the road, and then sell the road, in detached pieces, such as have no relation to, nor are complements to each other, to private companies. There are good reasons for such suggestions. The people of the Province will be benefitted by the construction of the road to an amount much greater than its cost, even should it prove unproductive. It is a sufficient reason for selling the road, that no work of such vast magnitude as the Grand Trunk can be properly managed by one head. Were it divided into a dozen different companies, each would devote themselves to the development of the resources of their particular routes, and the result would be, that in a few years the revenues of the line would be vastly increased, and the expenses proportionally diminished. The Provincial Government, should the road fall into their hands, would be entirely incompetent for its management, while at the same time it would become a fruitful source of corruption and embarrassment in their internal

affairs, a result to be avoided at almost any present sacrifice of money.

But whatever course may be taken by our neighbors, they have a very difficult task before them. It will be well for them to bear in mind that nothing is so common and so certain, as great revulsions in commercial affairs, consequent upon immense investments and losses in railroads; and that as they have just been in the heyday of prosperity they must expect soon to pass through a corresponding period of embarrassment and prostration, similar to that which has recently fallen with so much severity upon the United States.

Mississippi, Washita, and Red River R. R.

From the report of this company for the year ending 30th September last, we learn that this undertaking is making steady and satisfactory progress. The long protracted and unusual drought of last year, closing up the rivers and leaving the planters in many cases with two years' produce on hand, has had the effect of stimulating them to greater exertions, in order to secure a reliable means of exporting their produce to market, and supplying themselves with other necessities from abroad. Conferences have been had with the managers of the Memphis, El Paso, and Pacific road; and a connection will probably be formed with this important work, towards the construction of which Congress has granted sixteen land sections per mile. The total length of these two lines will be about 1,000 miles, traversing some of the richest parts in the South. The Texas road was to be commenced in January last. Its construction will bring a large passenger and freight business to the Washita line. After the application to the Legislature for a grant of swamp lands had been refused, a new effort was made by the Board to obtain the necessary means from the people along the line. The measure resulted successfully. Many planters came forward and took stock liberally,—the payments to be made in work, real estate, or money. Within the last twelve months, two-thirds of the local work on 40 miles has been completed ready for the iron. There are now 74 miles additional under contract, completing the span from Camden to the Mississippi. The sums paid for these show that the cost will not exceed the estimates of the Chief Eng'r. By the Fall of 1857, it is estimated that 94 miles will be ready for opening, completing the distance from Camden to the Mississippi. There will then be a span of 34 miles only to finish the road to Red River; and propositions have already been received to take the grading and grubbing of this at the Engineer's estimates.

The cost of construction with a moderate equipment will not, it is believed, exceed the previous estimate, \$1,990,104. That the business of the line will come fully up to the estimates, is considered beyond a doubt. The company's assets already amount to over \$860,000. Drew, Bradley, Calhoun, Washita, Columbia, and Fayette counties will vote subscriptions, as the road approaches their borders. By the terms of their charter, the company were obliged to carry on operations simultaneously at both ends of the road. The total work done on the Eastern Division of 20 miles, at 30th September last, amounted to \$33,319, for which requisitions to the amount of \$22,879 have been issued. On the Western Division the work done amounts to \$27,649, on which has

been paid in cash \$17,969. The principal part of the work put under contract is payable in stock, or eight per cent. convertible stock bonds. The trestle work has been proposed for, but need not be let for some time. In Spring it was designed to commence bridging the Salina and Washita rivers. These are the only streams on the route requiring bridges over 30 feet in length. If the iron be only forthcoming, track-laying can certainly be begun by September ensuing.

The following is a revised estimate of the cost of constructing one mile,—rails to be of the T pattern and to cost \$55 per ton.

100 tons iron at \$55	\$5,500
Ties, spikes, chairs, track-laying, &c.	1,800
Cost of one mile superstructure	\$7,300
154 miles at \$7,300 per mile	\$1,124,000
Sidings, turn-tables, switches, &c.	52,500
Local work	436,692
Engines and cars	120,000
Depots and stations	75,000
Shops	85,000
Wharf improvements at Mississippi, Camden and Red River	25,000
Engineering and salaries	50,000
Contingencies	21,712

Total

The equipment to consist of three passenger, three freight, and two gravel engines, eight passenger, three baggage, sixty freight, and twenty-five other cars.

The Secretary's report shows the company's assets and liabilities to be as follows:

ASSETS.

Amount invested in road to date, for work done on construction	\$61,207
Amount paid for experimental surveys, location and salaries of officers	33,662
Personal property	3,222
Total investment in road to date	\$98,092
Duo from stockholders	415,391
Stock taken in work yet to be done	91,411
Real estate	255,000
Bills renewable	399
Cash and cash items in the hands of Sec'y and Treasurer	705

Total assets

LIABILITIES.

Bills payable	\$21,363
Outstanding requisitions	13,740
Due on contracts for work done and for which requisitions have not been issued	3,467
Due contractors in stock	20,110
	58,679

Balance assets over and above liabilities \$802,318

Elgin and Joliet Railroad.

The contract for building the entire road from the junction to Joliet has been let to A. H. Taylor & Co., of Joliet. The road is divided into two sections, the first of which, beginning with the junction and extending twelve miles south, will be commenced immediately, or in the course of a few weeks. It is intended to complete the grading the coming summer, get out the ties the following winter, and lay the track in the following spring—to be ready for the trains by the 1st of June, 1857. After which the remaining portion of the road will be pushed rapidly forward toward completion, and is, according to the contract, to be completed by the 1st of July, 1858—or as much sooner as the resources of the company will justify.

The subscriptions to the capital stock of the company now amount to \$100,000, and will undoubtedly be largely increased soon.

Such is the substance of statements made at a meeting of the Board of Directors recently held at Joliet.—*Chicago Press.*

Delaware Railroad.

An effort is now being made to obtain from the people of Philadelphia a subscription of \$70,000 in aid of this work. It is claimed that this road as originally located, (from Seaford, on the Nantecoke river, to Dona, near Delaware Bay) was a New York project, in order to secure the southern trade by the projected Air Line railroad. The northern terminus, however, being fixed at a point on the New Castle and Frenchtown road, will obviate any danger of that character. This line, it is expected, when completed will connect with Norfolk, and thus restore to Philadelphia much of the southern trade which has recently been directed to New York by the coast line of steamers. The local business is said to be promising. The road was opened to Middletown in September, and to Dover in February last. Up to the beginning of April it has carried upwards of 80,000 passengers, and freighted among other things 70,000 bushels of grain, 30,000 bushels of lime, and 1,340 tons of general merchandize.

It is claimed that this line will be highly valuable to Philadelphia in another respect, viz: the closing by ice of the Delaware. The road approaches at one point to within 29 miles of the Breakwater, which is always accessible to shipping. Such a winter as the last shows the necessity of having a land route between the City and the Ocean completed and in operation at an early day.

New Haven, Hartford, and Springfield Railroad.

CHARTER OF THE COMPANY.

The charter of that part of this road between New Haven and Hartford, was granted in 1833, authorizing the company, under the name of the "Hartford and New Haven Railroad Company," to build a railroad between the above mentioned places. The first charter of the kind in Connecticut was granted the year previous. The one granted this company is very liberal in its provisions; authorizing them to construct a single, double or treble track, and to take lands and materials therefor. Authorized capital, \$1,000,000, in shares of \$100 each; to be exempted from taxation till the profits should afford a dividend of five per cent. per annum. The charter was made perpetual; and the rates of tolls, fares, and dividends left entirely to the company's option; no provision or reservation being made by the Legislature to "alter, amend, or repeal the act." These powers and privileges have been amended from time to time, as follows: In 1839, the company were authorized to borrow money, for which purpose they might mortgage the road and its appurtenances; to buy lands; to change certain points of the line as originally located; to increase their capital; to own steamboats, and run them in connection with their road. In 1835, a charter had been granted, authorizing a company, by the name of the "Hartford and Springfield Railroad Company," to construct a railroad from Hartford to the north line of the State. This grant, however, was never carried into effect. Another effort was made in 1840, with a similar result. In 1842, the Hartford and New Haven Company were authorized to extend their road from Hartford to the State line,

with all the powers, &c., in the Hartford and Springfield charter conferred upon themselves. Permission to unite with the Hartford and Springfield Company in Massachusetts, was granted in 1845. The right to build a branch road from some point on the line to the city of Middletown, had been conferred the year previous, on an independent corporation. In 1849, the two interests were empowered to consolidate. This branch unites with the main line at Berlin, and is regularly operated by the New Haven and Hartford Company. A small branch through the city of Hartford to the Connecticut river, had been chartered in 1845. In 1852, the company were authorized to increase their capital stock by 6,500 shares, making a total of 30,000 shares, or \$3,000,000.

ROUTE, SUPERSTRUCTURE, ETC.

This road is 62 miles in length, or, including branches, 73 miles, of which nearly six are in Massachusetts. It extends from navigable waters in the city of New Haven through numerous and populous manufacturing places, the principal of which, besides the termini, are North Haven, Wallingford, Meriden, Berlin, Hartford, Windsor, Locks, Thompsonville, and Longmeadow. Between the cities of Hartford and Springfield, 26 miles, the road occupies the route of the Connecticut river. For the remaining 36 miles, it occupies in the main the central portions of a similar great valley. The position of the road in these valleys is in the centre, nearly latitudinally, of the great secondary and sand-stone formations of the State. While it lies within a few miles of the granitic rocks on both sides, it does not cut through any of these. In this respect it possesses a peculiarity above all the railroads in Connecticut. The Berlin Branch is 10 miles long, and the Hartford Branch, three-fourths of a mile.

The ruling grades of this road are very low. with a large proportion of road-bed level or nearly so. In one instance only, for a fraction of a mile, is the graduation as high as 40 feet per mile. At New Haven, the road is five feet above high water. After passing a minor summit, it pursues the same level for eight miles to North Haven. Thence northerly the grade rises moderately, with the exception of about a mile at Holt Hill, where the ascent is 30 feet per mile. The main summit occurs near Beaver Ponds, 20 miles from New Haven, and 150 feet above tide-water. Thence the road descends to the northward for five miles, to Berlin flats. From this point there is a moderate ascent to Hartford, 11 miles, where the road is 36 feet above tide. The remaining distance is either level, or so nearly so as to offer no obstructions of any account to the speed of trains. At Springfield, it is about 20 feet above Hartford, or 56 feet above the sea level.

The curvature is nearly equally favorable. Between New Haven and Hartford there is but one curve with a radius as short as 1,200 feet. At points within the limits of New Haven, Hartford, and Springfield, curves occur with 1,000 feet radius; but on the whole the line may be justly characterized as composed of long tangents joined by easy curves, admitting the highest rates of speed with safety.

The embankments are 26 feet in width at the graded surface; and the excavations from 30 to 38 feet, according to the drainage required, &c.

The road-bed has been thoroughly prepared with the most suitable materials.

There are in all about 3,400 feet of truss bridging on the road, the principal structure being the bridge over the Connecticut river, fourteen miles above Hartford, 1,300 feet long. There are no pile or draw-bridges. The character of the masonry may be inferred from the circumstance that, while most roads have suffered more or less from heavy freshets, this road, during the long period of its operation, has never but in one instance lost an abutment, or culvert.

The double track superstructure consists of the T rail, weighing 58 lbs. per yard, laid on white chestnut cross-ties, placed about 30 inches apart from centre to centre. The chairs weigh about 15 lbs. each. The gauge is the ordinary 4 feet 8½ inches.

CONNECTIONS.

At the city of New Haven this road connects with the New Haven and New York railroad in such a manner that passengers can proceed from one line to the other without change of cars. Connections are also made with the New Haven and Northampton and the New Haven and New London railroads, besides having a very superior connection with its own steamboat docks, at the same place. At Hartford, it connects with the Providence, Hartford, and Fishkill railroad proceeding eastwardly to Providence, R. I., and westwardly to the city of Waterbury. At Springfield it unites with the Western railroad of Massachusetts, extending in the one direction to Boston, and in the other to Albany, N. Y. To the northward the line is prolonged by the Connecticut River railroad, leading by means of its connections, to Northern and Eastern Vermont, Western New Hampshire, and ultimately Quebec, Montreal, and other places in Canada.

HISTORY.

The preliminary surveys were executed in May and June, 1835. In September following, the books were opened for subscription, and in three days the sum of \$5,750,000 was obtained, one million of which was distributed, and the company duly organized. Immediately afterwards the final surveys and location were commenced and carried forward through the ensuing winter. In June, 1836, the grading of the first eighteen miles, extending from New Haven to Meriden, was let to contractors—to be graded for a double track, and completed by May, 1837. The contract for iron specified a strap-rail 13-16 of an inch thick. On the 1st of July, 1836, ground was broken at Meriden, and on the 10th of October following, the Northern Division, between Meriden and Hartford, was put under contract, to be finished by the middle of August next year.

So far everything had been smooth and prosperous. Symptoms of a reverse, however, soon began to manifest themselves. In the fall of that year the stockholders began to be tardy in paying up their assessments. In the financial crisis which then swept like a storm over the country, the contractors were obliged to suspend operations over the whole line, and the company necessitated to resort to private credit for means to resume work. In the spring of 1837, their prospects were so disheartening that the road was in several places enclosed, plowed and cultivated, during the season.

In order to prosecute the enterprise, application

was made to the Legislature for the aid of State credit; and also to the United States Bank at Philadelphia. Both measures were unsuccessful. At last, with the aid of favorable decisions in the courts, with regard to delinquent stockholders, small amounts of money were obtained monthly from the principal shareholders. These added to a moderate amount of private assistance, enabled the company to carry forward, through 1837, operations in grading, and to purchase part of the superstructure for the Southern division. In October, 1838, the Northern division was re-let; and in December, that part of the road between New Haven and Meriden was regularly opened for business, with very favorable prospects from the outset. The company had, at this date, only one eight ton engine, which was used for passenger trains exclusively, the freight cars being drawn by horses. It was then supposed that the latter could be advantageously used on railroads by individuals as by the company. The first charters, consequently, contained provisions authorizing the erection of toll-houses, toll-gates, the appointment of toll-gatherers, &c. The rate of speed then adopted for the passenger trains was from 12 to 18 miles an hour.

The Northern division, between Meriden and the city of Hartford, was opened in December, 1839—being four and a half years from the date of the company's organization. Much work, however, still remained to be done, particularly within the limits of Hartford, which was completed during the ensuing years.

In 1842, arrangements were made for extending the road from Hartford north to Springfield. The work on this was commenced in the latter part of that year, and continued through 1843 and 1844 till December, when it was opened for public use for its entire length. In the following year, the company commenced to re-lay their track between New Haven and Hartford, with a heavy T rail, which was mostly finished in 1846, together with the short branch line in Hartford. In 1848, arrangements were completed for exchanging business with the New Haven road. The Middletown branch was also commenced, and the road-bed much improved in many places.

In 1851, the work of laying a double track was commenced, and vigorously prosecuted till the close of the year, when 24 miles had been put in operation. This was continued through the following season, and completed throughout in 1853. The work is of the most substantial character. The Company has no floating debt.

GENERAL ACCOUNT.

The financial condition of this company, at the 30th September last, stood thus:

Capital stock—25,500 shares.....	\$2,350,000
Six per cent. bonds issued, due 1873....	939,000
Reserve fund.....	150,981
Contingent fund.....	90,000
Profit and loss account.....	174,846
Dividends and accounts unpaid.....	13,286
	<hr/>
	\$3,717,563
Cost of main road, branches, depots &c....	\$3,059,933
Real estate on hand.....	63,153
Tomlinson's bridge stock.....	102,889
Equipment.....	254,000
Materials on hand.....	85,045
Cash on hand, bills and accounts receivable, &c.,.....	152,544
	<hr/>
	\$3,717,562

The annexed statement shows the cost, gross receipts, &c., of this road for the various years ending 30th September, from 1836 to 1855 inclus.

Year.	Cost of Road, &c.	Length of Rd & Branches.	Gross Recpts.	Expenses.	Net Recpts.	Rate of Divid.
1836.....	\$107,009 64	18	\$31,983 98	\$11,500 00	\$20,483 98	10
1837.....	217,821 72	36	65,147 77	23,152 98	41,992 79	10
1838.....	880,329 18	36	91,805 43	29,270 53	62,534 90	10
1839.....	1,229,606 17	36	90,760 97	30,420 35	60,340 62	10
1840.....	851,121 04	36	99,294 70	32,808 42	66,486 28	10
1841.....	960,098 80	36	89,294 70	32,733 47	56,561 23	10
1842.....	999,049 15	36	98,632 70	32,711 80	65,920 90	10
1843.....	1,368,921 43	36	183,834 40	62,711 80	121,122 60	10
1844.....	1,621,720 31	62	183,834 40	89,187 95	94,646 45	10
1845.....	1,690,260 27	62	324,725 28	130,426 59	194,298 69	10
1846.....	2,109,866 64	62	430,212 95	145,668 59	284,544 36	10
1847.....	2,405,313 16	72	482,808 03	142,401 23	340,406 80	10
1848.....	2,681,541 10	72	490,381 45	196,454 90	293,926 55	10
1849.....	2,405,313 16	72	556,004 58	235,011 30	320,993 28	10
1850.....	2,742,245 18	72	600,408 74	289,685 08	310,723 66	10
1851.....	3,164,883 45	72	639,528 98	304,180 16	335,348 82	10
1852.....	3,339,336 55	72	751,551 61	366,422 34	385,129 27	10
1853.....	3,339,336 55	72	751,551 61	366,422 34	385,129 27	10
1854.....	3,339,336 55	72	751,551 61	366,422 34	385,129 27	10
1855.....	8,566,018 90	72	730,012 83	377,213 48	352,799 40	10

The following gentlemen have held the office of President of the Company—

JAMES BREWSTER.....	from 1835 to 1836.
SAMUEL J. HITCHCOCK ..	" 1836 " 1840.
DANIEL BUCK.....	" 1840 " 1842.
DAVID WATKINSON.....	" 1842 " 1844.
CHARLES F. POND.....	" 1844 " 1855.

The following gentlemen were Engineers, during the construction of the road and its branches—

A. C. Twining, Chief Engineer,	1½ year.
E. H. Broadhead, Assistant 1 year,	Chief 2 y.
James N. Palmer, Assistant 4½ y,	Chief 2 y.
George C. Miller, Assistant 1 y.	
R. S. Van Rensselaer, Chief Eng'r on Extension road, 2 y.	
S. Willis Pratt, Chief Engineer, 2 y.	

Railroad Consolidation.

A plan is on foot for forming a union between the Kennebec and Androscoggin and Penobscot and Kennebec railroads. This latter line has its eastern termination at Bangor. A meeting of parties in this view lately place at Waterville. As a general thing a consolidation of interests in connecting railroads is a judicious movement. In all these concerns great care and consideration is necessary to have the union fairly made, the rights of both parties being fully disposed of.

Iowa Central Air Line Railroad.

At a meeting of the stockholders, held at Lyons, on the 25th ult., the following persons were chosen as managers for the ensuing year:

Hon. S. S. Jones, President, St. Charles, Ill.; N. W. Isbell, A. Daniel, and Charles Ney, Marion, Iowa; J. H. Fisher, Anamosa, Iowa; Thomas Greene, Wyoming, Iowa; John E. Goodenow, Maquoketa, Iowa; E. A. Wood, Sabula, Iowa; E. H. Leaming, Lyons; A. R. Cotton, Lyons; G. S. Hubbard, Chicago, Ill.; Alvin Hunt, New York.

Railroads in Iowa.

Whether as regards the fertility of her soil, her climate, her adaptedness for railroad construction, or her rapidly increasing wealth and population, no State in the Union would seem to have a more prosperous future before it than Iowa. It is estimated that her population, which, in 1850, was 192,000, is, at the present time, 500,000—an increase of over 160 per cent. in six years. Already numerous efforts to build railroads and other public works have been made, though without aid from the State or General Government. The following notice of these is copied from a recent communication to the *N. Y. Courier*:

THE MISSISSIPPI AND MISSOURI RAILROAD.—This company was organized in 1853, under the general laws of Iowa, and embraced three divisions; 1st, from Davenport to Council Bluffs; 2d, from the Junction (26 miles from Davenport,) through Muscatine to Oskaloosa; and 3d, from the Junction to Cedar Rapids. The estimated cost of these lines with equipments was \$9,000,000, embracing 382 miles of road. In this estimate the cost of the superstructure, grading, &c., from Fort des Moines to Council Bluffs, is not included. To complete the three divisions, and render them available for active service, will probably require a total expenditure of \$12,000,000. This road, so far as eligibility is concerned, will be to Iowa something what the Illinois Central is to Illinois, but built, as a matter of course, under less favorable auspices to its projectors. The main line commences at Davenport, passes through one corner of Muscatine into Cedar County to Iowa City, the capital of the State—distance 55 miles. To this point it is finished and trains commenced running regularly on the 17th of January, 1856. It is to be extended West, through Iowa, Poweshiek and Jasper counties to Fort des Moines, a thriving town on the river of same name. Arrangements have been made to commence this spring to work upon the division between Iowa City and Fort des Moines, running by the fall of 1857—a distance of 192 miles. From Fort des Moines it will pass through the south end of Dallas, north end of Adair, Cass, and Potawatamie counties to Florence on the Missouri river, and from thence, perhaps, to Bluffs City, a few miles below, and two miles back from the river, directly opposite Omaha City in Nebraska. The distance from Iowa City to Fort des Moines is 120 miles, from Fort des Moines to Council Bluffs 136—total from Davenport to Council Bluffs 311, and Chicago, 492.

THE MUSCATINE AND OSKALOOSA DIVISION.—This branch is finished from the junction (Wilton) to Muscatine, on the Mississippi river, 30 miles below Davenport, distance from latter 39 miles, and was the first road opened for traffic in Iowa. The cars commenced running in October 1855.—From Muscatine in its passage west, it is graded to the Iowa river 20 miles, and the iron on the spot. It is expected it will be laid and cars running to Fredonia in September next. From Fredonia it will pass through Washington, Lancaster, to Oskaloosa in Mahaska county, the second in size of any inland town in the State, distance from Muscatine 95 miles, from Davenport 134. A survey has been made with a view to extend this division in a direct line to the Missouri river, opposite the Platte, 22 miles below Council Bluffs. It is doubtful, however, if it will be carried beyond Oskaloosa for some years to come, as the two southern tiers of counties, west of range 25, are yet too sparsely settled. The country between Oskaloosa and the Mississippi river is well settled and comprises some of the finest land in the State. Along the line through which the road is to pass, the farmers have subscribed liberally in aid to secure its early completion to Oskaloosa.

THE CEDAR RAPIDS DIVISION.—This branch will commence at Wilton and extend in a north-west direction through Tipton in Cedar county, to Cedar in Linn county, a distance from Rapids of 50 miles,—63 from Muscatine, and 76 from Davenport.

The amount of subscriptions required by the Company from residents along the line, being raised, the work will doubtless go through at an early day. It is designed to extend this road ultimately into Minnesota, as fast as the business along the different points of survey offer sufficient encouragement. The farmers and citizens generally, are quite liberal in their support of roads, more so than I have noticed at the East.

THE MISSISSIPPI AND MISSOURI RAILROAD.—With its divisions diverging from Davenport and connected with the roads of Illinois, soon to centre at Rock Island to meet the first and only bridge across the Mississippi river, must possess superior advantages to any trunk road across the State.—The bridge will be finished and ready for use by the 10th of April. (We omit a description of this structure, as that is given in another column.)

THE DUBUQUE AND PACIFIC RAILROAD, is designed to extend across the State in a direct westerly line to Sioux City, on the Missouri river, 115 miles above Council Bluffs. Between Dubuque and Ft. Dodge, on the west fork of Des Moines river, the soil, for richness is quite equal to any part of the State, and is rapidly being filled up by thrifty farmers and industrious mechanics, the water power in the eastern portion of the route affording ample facilities for mill sites, at a trifling expense. The road will pass through the counties of Delaware, Buchanan, Black Hawk, Grundy, and Hardin, to Ft. Dodge in Webster county, where it will probably stop, at least for several years to come. In the western part of the State where the surveys have been made, although the lands are nearly all taken up—(a large part in fact by speculators)—and settlers coming in on both sides of the line pretty fast, the adjacent counties are too thinly populated for this road to compete with the two southern lines for the through travel or freight.—The first twenty-eight miles from Dubuque to Dyersville have been let to R. B. Mason, favorably known in the construction department of the Illinois Central and New York and New Haven roads; and the fact of his connection with any of the roads of Iowa, is a guarantee that this road will be speedily pushed forward to the center of the State. The interests of the Illinois Central, Chicago and Galena, and other roads in Northern Illinois, are identified with the speedy extension of this road into the heart of Iowa as a feeder—distance 182 miles to Fort Dodge, 127 from Fort Dodge to Sioux City. Total distance from Dubuque to Sioux City, 309 miles.

THE BURLINGTON AND MISSOURI RIVER RAILROAD.—This road, which is about the same length across the State as the preceding, is graded to Mt. Pleasant, in Henry county, 28 miles, and will be ready for the cars on the 1st of January next.—The grading of 25 miles more of the road to Fairfield, in Jefferson county, is contracted for, and will be finished during the ensuing fall. Several locomotives and cars have been ordered for the first division of the road out of Burlington. For 120 miles west, the road will pass through the oldest settled part of Iowa, and its early completion to Chariton may be regarded as secured, from the liberal support of subscribers along the line. From Fairfield, the road is located to strike through the county towns of Ottumwa, Albia, Chariton, Osceola, Allan, Quincy, and Montgomery county, to California City, in Mills county, which is on the Missouri river opposite the mouth of the Platte, 22 miles below Council Bluffs. The character of the soil, and the agricultural resources of Southern Iowa, are equal to any part of the State; and the citizens along the line for several miles, feel a lively interest in the work, as does Burlington the eastern terminus, a city of some twelve thousand inhabitants.

The foregoing are all the trunk lines projected. There are several lateral roads, some of which have been commenced, and others surveyed and located. They are the

IOWA CENTRAL AIR LINE RAILROAD, designed to be a continuation of the Chicago and Dixon Air Line Railroad, finished from Chicago to Fulton City on the Mississippi, 136 miles. It com-

mences at Lyons, directly opposite, and is to run through the north end of Clinton county to Maquoketa, in Jackson county, from thence through Anamosa to Marion and Cedar Rapids, in Linn county, with a view of intersecting the Dubuque and Pacific road at Cedar Falls, in Black Hawk county. Several miles have been graded, at a cost of \$3,000 per mile, including ties and masonry. In the several counties through which the road is to pass, meetings have been held, for the purpose of procuring aid to complete the road to Cedar Rapids, 73 miles. Six hundred thousand dollars, I understand, have been secured for that purpose; and no doubt the further prosecution of the work will be commenced at an early day. The road will probably stop at Cedar Rapids until its further extension west is demanded by the local patronage along the line.

THE CHICAGO, IOWA, AND NEBRASKA RAILROAD.—This road is only designed to extend for the present to Cedar Rapids. It is to start from Clinton, 2½ miles below Lyons on the Mississippi, nearly opposite the terminus of the Dixon Air Line, and pass into the central part of Clinton county to Dewitt, the county seat, from thence to Tipton, in Cedar county, and to reach Cedar Rapids in a north-westerly direction. This, it may be said, is a rival route with the one just described—Clinton and Lyons being rival points for the business expected from the Chicago and Dixon road; but as the latter is in some way interested in the new city of Clinton, possibly Lyons, which is the largest and oldest place, will lose the encouragement originally expected from the Chicago interests, both in money and patronage. Several highly influential capitalists in Chicago are at the head of this enterprise, and are determined to carry it through. They have the co-operation of the citizens of Clinton and Cedar counties, who are willing to aid it liberally.

One road is sufficient for the present, at least; but as the feelings of the citizens on both routes are enlisted, the two roads will be commenced and possibly finished; or the Nebraska line may be induced to turn theirs off from Tipton to Iowa city, on the tract originally graded for the defunct "Lyons and Iowa Central," whose bonds sold for a few cents on the dollar, two years ago. To Iowa city from Clinton the distance is 73 miles, and from Chicago, 208. From Iowa city to Chicago, by way of Davenport and Rock Island, it is 236, making 28 miles saving in the former route. Having Iowa city as its terminus, the Chicago, Iowa, and Nebraska road would secure all the advantages that it could derive, by extending it on to Florence or any point on the Missouri river.

KEOKUK AND MUSCATINE RAILROAD.—This road is designed to obviate the difficulty in the navigation of the Mississippi at the lower rapids. It will extend from Keokuk, the southernmost point of the State, up the bank of the river to Fort Madison, from thence to Mount Pleasant, (intersecting the Burlington and Missouri River road) to Muscatine—distance 132 miles. The iron for the first 30 miles is on the ground, and the grading and masonry nearly ready for it. Four locomotives have been purchased, and negotiations for the purchase of 1,000 tons more of iron, a sufficient quantity to lay the track to Bentonsport, have been opened.

Another road has been surveyed from Keokuk to Fort Des Moines, along the river by that name, to be called the Des Moines Navigation and Railroad Company, having privileges to improve the navigation of the river, and the construction of a road from Keokuk to the Fort. The road is located, and I understand the lettings on portions of the work will be made this spring. The river is the largest in the State, but only navigable for boats of light draft a few months in the year.—Keokuk has a population of 10,000 persons, and is a place of considerable trade. The country around, for some 60 miles, is thickly settled, and the road from Keokuk, west, will, no doubt, pay immediately handsome dividends.

There is projected a road from Dubuque to Fort Des Moines, but no survey has yet been ordered. It is needless to dwell upon the great advantages

railroads afford to a new State, situated as Iowa is, with the Mississippi on one side and the Missouri on the other. The history of the extensive railroad system of Illinois is an evidence of the great value of these iron thoroughfares to an agricultural and stock raising country, such as Iowa and Nebraska are destined to be. They impart an increased value to an extent of many miles, (on each side) to cultivated farms and unimproved lands through which they pass; and it may be proper to state that every farmer with whom I have conversed is disposed to aid in his subscriptions and support the roads passing through his lands, besides giving the right of way. The cost of building railroads at the west, ranges from \$12,000 to \$30,000 per mile.—Over flat prairies the cost is about \$15,000. In Iowa, on account of the successive undulations the cost is rather more. The streams being very numerous, more bridging is required; but the contrast in expenditure between the cost of Western roads and those built in the Atlantic States or in Ohio, is, nevertheless, very striking. The cheapness with which they can be kept in repair and operated, the diminution in wear and tear, with the difference in cost of building, and equally as liberal patronage as the Eastern roads, should commend the Western roads to capitalists as a means for safe and permanent investment.

Evansville and Crawfordville Railroad.

The annexed circular addressed to the stockholders in this corporation shows their business for the six months ending February 29th to have been as follows:

The undersigned respectfully submits a statement of receipts by account of transportation and general expenditures in gross, for the half year ending February 29th, 1856, as follows:

The earnings of the road for the 6 months ending February 29th, have been as follows:

	Pass'rs.	Freight.	Mail & Ex.	Total.
Sept. 1855.	11,198	4,119	1,291	16,609
Oct.	13,833	4,451	1,591	19,881
Nov.	12,461	6,061	1,442	19,464
Dec.	11,165	6,857	1,442	19,464
Jan. 1856.	14,160	6,459	1,489	22,100
Feb.	9,860	6,811	1,555	17,827

\$72,684	\$34,360	\$8,312	\$115,857
Operating expenses.....	49,507		
Interest on Bonded Debts.....	34,685		
Interest on Floating Debt.....	7,651		
			91,843

Surplus.....\$24,013

The earnings of the last six months, as compared with the corresponding period of last year, show the following increase:

	1855-6.	1854-5.	Inc.
September	16,609	3,485	13,173
October	19,881	3,940	15,970
November.....	19,964	5,548	14,416
December	19,464	9,855	9,608
January	22,109	10,792	11,316
February	17,827	9,971	7,855

\$15,857 \$43,515 \$72,312

This exhibit is not required by the Charter or By-Laws of the Company; but the Directors, at their meeting on the 4th of March inst., finding the Company embarrassed by a floating debt of about one hundred thousand dollars, without any available assets to meet it, except the surplus earnings of the road, after paying expenses and interest on the bonds, all of which ought justly to be expended on the same during the present season, and feeling anxious to pay off these debts with as little delay as possible, have felt constrained to resort to some special measure to accomplish this object. And believing that a further issue and sale of bonds would do so at an early day, they passed an order directing the President to cause a number to the amount of three hundred thousand dollars, to be prepared ready for sale, bearing interest at the rate of ten per cent.

per annum, payable in five years from date at the office of the Company at Evansville. They also ordered the President to execute a mortgage (subject to the prior mortgage), upon the whole road and equipments, between Evansville and Terre Haute inclusive, to secure the payment of the interest and principal of said bonds when due.

The mortgage has been executed to Chauncey Rose, of Terre Haute, and John Ross, of Vincennes, as Trustees, to secure this issue of bonds, and placed upon the records of the several counties, along the line of the road from Evansville to Terre Haute. And the bonds have been prepared, and are dated on the 12th day of March, 1856, payable in five years from date with interest, coupons attached, payable semi-annually on the first days of March and September, in each year, at the office of the Company at Evansville, until the principal shall be paid.

Five hundred of these Bonds are of the denomination of one hundred dollars each, making \$50,000; and five hundred of the denomination of five hundred dollars each, making \$250,000.

They are undoubted security, and it is expected that they will be promptly taken at home by the stockholders and others interested in the success of the road, to the extent which it may be desirable to dispose of them at present.

It is not expected that an amount of these bonds exceeding \$150,000 will be sold. This amount will enable us to pay off the floating debt, purchase additional machinery and erect such necessary buildings as will enable us to operate the road economically and successfully.

The present bonded debt of the Company is one million and ninety thousand dollars, the interest on which is payable semi-annually in the city of New York, at the rate of seven per cent. per annum, making \$76,300. The receipts of the road for six months, ending the 29th of February, as shown above, were \$115,857.18, and estimating the earnings of the next six months at the same ratio, would make the receipts for the present year \$231,714.36; and estimating 40 per cent. on this sum for expenses and repairs, would leave a balance of \$62,728.02, as net earnings—equal to 7½ per cent. on the stock of the Company.

In view of these facts, and the largely increasing business of the Road, we hope that the stockholders, and others interested in the success of the enterprise, will come forward promptly and take a sufficient amount of the Bonds to enable us to pay off the floating debt at once, and, during the season, such further sum as will be required to supply all facilities for the convenient and economical operations of our business. This being accomplished we have the assurance, in the experience of the past year, that in the next and after years we shall be able, from our earnings, to pay semi-annual cash dividends on our stock.

W. D. GRISWOLD, President.

March 6th, 1856.

North Pennsylvania Railroad.

This great work, in which the interests of Philadelphia are so largely involved, is, we are glad to say, placed in a position which insures its early completion beyond peradventure. The subscription list to the one million mortgage loan, which was proposed to relieve it from pecuniary embarrassment, has been filled, and from this time forward it will have no financial difficulties to encounter. We have especial satisfaction in announcing this result.—*Phila. North American.*

Rutland and Burlington Railroad.

It is stated with much confidence that the Rutland road will commence paying interest on its first mortgage in August next, and it is believed by those who are best acquainted with its business resources that it will soon demonstrate its capacity to earn interest on both first and second mortgages. The trustees have been obliged to make large expenditures for extra repairs and in settling vexatious lawsuits, but these troubles are fast disappearing, and the net earnings of the company must soon tell a better story.—*Boston Courier.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	67	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscog. & Kennebec	55	642,343	1,473,080	2,245,020	190,805	12,807	none	15	Tennessee and Alabama	30	1,067,496	465,500	1,624,920	263,306	141,168	8	
Androscoggin	20	91,192	232,193	343,317	29,396	none	none	91½	Tennessee and Mississ.	30	248,486		679,008	In progr.			
Kennebec & Portland	56	1,114,725	1,601,236	2,470,600	259,330	124,038	6	88	Tennessee and Charleston	288	2,103,177	958,275	3,563,362	176,484	102,016		
Portl., Saco, & Portland	51	1,367,000	1,119,237	1,486,327	233,234	120,834	2	82	Mobile and Ohio	153	2,568,555	1,802,921	4,536,412	199,932	109,236		
Boston, Concord, & Montreal	93	1,808,093	1,069,512	3,771,310	390,221	143,565	2	82	Miss. Central	188	642,534	none	628,303	In progr.			
Cheahire	53	2,085,925	899,313	3,179,687	329,744	158,632	2	82	N.O., Opelousa & G.W.	55	2,930,425	671,645	2,657,565	In progr.			
Concord	85	1,485,000	none	3,016,633	370,529	138,299	2½	41½	Vicksburg, Shreveport, & Tex.	55	1,111,760	none	1,079,895	In progr.			
Northern, N. H.	82	2,768,409	none	1,780,062	162,687	55,173	none	41½	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Con't & Passumps. Riv.	81	1,048,146	767,608	5,378,428	394,971	214,798	none	41½	East Tennessee and Va.	111	625,425	988,592	1,033,731	In progr.			
Rutland & Burlington	120	2,253,376	2,662,396	8,463,366	620,119	214,798	none	41½	Nash. and Chattanooga	161	2,319,330	1,467,051	3,843,694	316,090	112,177	none	
Vermont Central	117	5,000,000	3,225,635	2,188,595	498,754	140,377	6	68	Covington & Lexington	95	1,302,804	2,235,939	3,733,753	264,973	138,694	16	
Boston and Lowell	27	1,830,000	150,000	4,179,535	854,426	339,060	6	82½	Lexington and Frankfort	29	431,091	159,299	635,363	90,930	34,864		
Boston and Maine	93	4,076,974	1,500,000	3,673,818	60,917	8,740	none	8	Lexington & Big Sandy	100	540,117	61,525	570,463	In progr.			
Boston and N.Y. Central	74	2,240,300	359,132	3,077,154	558,671	219,689	65	86	Lexington and Danville	65	608,236	600,061	1,589,560	244,014	96,902	6	
Boston and Providence	67	4,600,000	655,428	4,865,490	1,008,004	404,461	6½	86	Louisville and Frankfort	254	866,989	77,294	613,231	In progr.			
Boston and Worcester	48	681,690	280,598	997,252	119,221	65,527	3	29½	Atlantic & Gt. Western	118	1,881,655	2,025,925	2,852,652	268,293	140,822	46	
Cape Cod	62	1,591,110	273,241	1,802,244	286,633	108,787	5½	45	Beaufort and Ind.	141	4,473,721	374,127	4,546,133	1,626,601	557,905	9	102½
Connecticut River	60	2,583,400	2,947,737	4,621,616	647,281	306,998	48	48	Clev., Col., and Cin.	200	2,676,426	2,689,301	5,124,629	736,272	396,960	10	79
Eastern, Mass.	167	3,540,000	153,700	3,765,998	681,163	225,071	7½	86	Cleveland and Toledo	103	1,000,000	1,000,000	1,000,000	In progr.			
Fitchburg	14	600,000	16,000	654,603	191,857	55,777	8	86	Clev. and Mahoning	133	2,780,744	3,043,992	5,637,466	581,877	309,518	63½	
Nashua and Lowell	21	600,000	none	553,963	198,491	56,533	6½	86	Clev. and Pittsburg	60	2,100,000	1,464,394	2,961,978	433,620			
N. Bedford and Taunton	67	3,015,100	292,650	3,302,949	653,499	205,738	6	86½	Cin., Hamlet & Dayton	131	1,120,450	1,131,265	2,326,459	In progr.			
Old Cory and Fall River	77	2,232,541	1,063,620	3,209,727	286,726	87,313	none	9½	Cin., Wilm. & Zanesville	55	1,484,560	149,000	1,481,733	356,366	187,518	10	85
Vermont and Mass.	155	5,150,000	3,066,420	10,495,905	1,826,673	633,013	7	89½	Columbus and Xenia	63	437,838	422,658	860,496	In progr.			
Western, Mass.	46	1,141,000	205,565	1,261,271	204,780	75,760	2	42	Dayton, Xen. & Belpre	140	1,076,602	393,011	1,185,826	In progr.			
Worcester and Nashua	43	1,510,020	338,461	1,806,696	311,430	138,057	7	78	Dayton and Western	35	310,000	500,000	733,769	In progr.			
Providence and Worcester	72	2,350,000	939,000	3,313,932	730,012	352,799	10	120	Eaton and Hamilton	42	454,690	904,459	1,155,135	171,929	65,000	23	19
Hartford and N. Haven	128	1,845,010	2,090,124	4,060,869	258,685	119,611	none	4	Little Miami	65	2,963,921	1,171,785	3,648,172	681,562	336,708	90	
Hartf. Prov. and Fishkill	110	2,000,000	474,177	2,429,066	330,792	183,351	none	4	Mad River and L. Erie	205	2,451,650	2,572,932	4,440,661	Recently opened.		none	10
Housatonic	57	1,031,890	673,995	1,577,167	238,266	none	4	26	Central Ohio	138	1,520,927	3,485,076	4,283,447	1,111,626	662,117	9	
Naugatuck	62	2,992,450	2,264,650	4,906,784	986,025	341,667	none	26	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	In progr.			
N.Y. York and N. Haven	60	738,258	335,165	1,450,318	88,007	30,313	none	36	Pittsburg, May'sville & Cin.	60	1,350,000	2,206,357	3,562,357	328,958	164,479	none	
N. Haven and N. London	66	509,200	1,073,673	1,594,363	124,044	66,331	none	36	Sandusky, Manass. & Newk.	127	403,975	609,050	888,858	In progr.			
N. London, W. & Palmer	66	2,122,300	873,489	2,997,153	304,236	88,458	2½	36	Scioto and Hoeking Valley	115	1,000,000	950,000	1,000,000	In progr.			
Norwich and Worcester	32	439,095	1,625,099	1,840,695	117,716	9,904	none	36	Springf., Mt. Vernon & P.	242	2,600,000	4,630,000	5,630,000	In progr.			
Albany Northern	33	443,330	317,859	974,322	In progr.				Tol., Wash. & St. Louis	245	4,196,679	1,006,125	2,080,438	In progr.			
Black River and Union	100	1,487,374	1,501,183	2,819,090	172,476	66,333	none	30	Cin., Log. and Chicago	252	706,945	1,177,596	1,844,541	127,400	64,552		
Buffalo, Corn. and N. Y.	92	798,439	2,567,849	3,401,868	288,392	31,896	none	30	Evan'sville & Crawfordsv.	109	1,213,723	1,442,859	2,176,461	356,012	193,142	7	60
Buffalo and N. Y. City	99	1,300,000	1,040,000	2,494,364	679,750	356,763	10	100	Indiana Central	66	611,400	1,261,179	1,907,911	360,176	134,375	48½	
Buffalo and St. Line	47	434,111	322,393	1,275,796	174,039	66,506	none	100	Ind., Clev. & Pittsburg	83	834,157	1,101,971	1,671,544	206,544	94,318	none	20
Canadawaga & Niagara F's	95	1,315,000	2,279,854	3,495,832	135,433	48,649	none	34	Jeffersonville	67	1,014,282	694,000	1,205,000	286,146	112,880	none	
Cayuga & Susquehanna	35	687,000	590,680	1,197,562	135,433	48,649	none	30	Madison and Indianapolis	81	1,647,700	1,336,816	2,000,000	464,827	371,402	none	10
Hudson River	144	8,758,486	6,250,362	12,737,898	1,812,067	603,946	none	30	New Albany and Salem	238	2,635,121	5,281,448	6,643,189	150,000	90,000	none	17
Long Island	95	1,875,148	688,949	2,555,986	301,793	116,462	none	93	Perry and Indianapolis	73	858,314	858,314	1,500,000	287,512	189,702	10	96
New York Central	534	24,134,860	14,462,742	38,523,913	6,663,581	3,622,126	8	93	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	96
New York and Erie	184	10,923,958	25,126,669	33,439,431	5,488,993	2,627,118	none	56½	Chicago and Rock Is'd	182	3,141,500	2,387,165	5,214,162	In progr.			
New York and Harlem	138	5,717,100	4,069,769	8,768,203	1,635,577	234,126	none	19½	Chicago and St. Louis	220	1,475,300	1,811,557	2,761,429	722,589	379,821	20	
Northern, N. Y.	118	1,633,022	4,069,769	5,470,714	520,153	135,754	none	3½	Chicago, Burl. and Quincy	138	2,300,000	1,325,000	3,625,000	In progr.			
Oswego and Syracuse	35	399,000	216,681	723,683	126,540	59,982	3½	70	Chic. St. Paul & F'd du Lac	178	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	113½
Pottsdam and Watertown	29	467,200	294,189	749,683	In progr.				Galea and Chicago	208	2,271,050	19,416,392	20,374,446	1,532,118	527,952	100	
Rensselaer & Saratoga	23	610,000	140,000	896,423	241,149	82,600	7	70	Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	100	
Saratoga and Whitehall	48	600,000	395,000	1,000,000	71,909	21,089	none	70	Peoria and Quawaka	93	569,889	818,454	1,388,342	In progr.			
Syracuse & Bingham's	80	768,369	1,578,504	2,272,777	159,484	55,598	none	70	Ohio & Miss. (Wat. Div.)	147	1,780,295	2,292,403	4,870,586	Recently opened.			
Troy and Boston	27	437,830	787,073	1,109,422	156,363	55,184	none	70	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.			
Watertown and Rome	97	1,370,378	700,979	2,068,063	404,374	172,474	3½	70	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.			
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,355	75,534	none	70	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	679,656	95½	
Camden and Amboy	94	3,900,000	11,407,300	8,636,523	207,127	96,941	12	121	Mich. South'd & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96½
Camden and Atlantic	60	309,320	1,522,131	1,729,642	122,417	60,080	none	70	Green Bay, Mil. & Ch.	155	764,076	442,726	1,193,766	In progr.			
New Jersey	30	3,482,856	690,000	4,310,011	861,514	500,747	10	121	Milwaukee and Miss.	108	1,826,428	2,467,889	3,678,757	691,843	417,443	17	83½
New Jersey Central	63	2,000,000	2,283,176	6,883,149	393,728	171,603	6		Milwaukee and Water'n	72	354,861	132,000	514,238	In progr.			
Morris and Essex	53	1,157,805	375,000	1,656,550	225,393	102,474	6		Milwaukee and Horicon	15	554,200		354,109	In progr.			
Allegheny Valley	44	1,637,897	344,554	1,958,317	Recently opened.				Milwaukee & La Crosse	61	1,351,832	532,131	1,883,963	In progr.			
Cataw. Wil. & Erie	63	1,700,000	1,940,000	3,640,000	219,233	52,450	none		Racine and Miss.	47	921,906	380,715	1,280,321	In progr.			
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,381	66,994	6		Hannibal & St. Joseph	28	292,351	580,000	823,310	In progr.			
Del. Lack. & Western	109	3,051,622	3,854,702	6,022													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	96	
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	92 1/2	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	92 1/2	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87 1/2	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	90	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	95	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	73	
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	86 1/2	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	73	
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	90 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	90 1/2	
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	89	89 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	91
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	83	
Indianap. & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	90	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	83	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	80	77
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1853	80	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	100
Do. do.	650,000	Do. 2d do. 1853	8	April, October	"	1863	96 1/2	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	90	91
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	97
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1865-66	95	97 1/2
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1872	76	80
Do. do.	2,000,000	Income, convertible	7	April, October	"	1860	96	97
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Feb'y, July	Phila.	1875	83	85
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1861		
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	96	100
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	78	79
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	75 1/2	76 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870		

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	84
Do. do.	1,123,500	Do. do.	6	Jan'y, July	do.	1875	86	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95 1/2	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867		108
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	96	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	93 1/2	94
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	91
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83 1/2	85 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	86	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	89 1/2	90
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	71 1/2	71 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	88 1/2	88 1/2
Do. (Free Land)	3,000,000	Mfge 345,000 acres-priv. 7 shares	7	March, Sept.	"	1860	92 1/2	93
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860-72	86	88
New York and Harlem	1,800,000	Do. do.	7	June, Decemb.	"	1865-60	78	80
New York and New Haven	750,000	No mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
New Haven and Hartford	1,000,000	1st mortgage, do.	7	Feb'y, August	"	1861	92 1/2	
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1868	85	85 1/2
Do. Goshen Branch	1,500,000	Do. do.	6	May, Novemb.	"	1853	90	91
New York Central	8,287,000	No mortgage, do.	7	15 June, 15 Dec.	"	1864	102 1/2	103
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	Jan'y, July	"	1866		105
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866		105
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866		105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	93 1/2	94 1/2
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93 1/2	94 1/2
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	83 1/2	85 1/2

CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.	CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.
New York, 7 per ct. 1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	Divers	87 1/2
Do. 5 do. 1858-60	May,	95	97 1/2	New Orleans, 6 per ct. cp. R.R. X	X	Do.	75
Do. 5 do. 1870-75	August, and	95	97 1/2	N. Orleans, 6 per ct. cp. municipal	X	Jan'y, July	83
Do. 5 do. 1890	November,	94	99	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	91 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	98	98	Pittsburgh, 6 per ct. coup.	X	Divers	75 1/2
Allegheny, 6 per ct. coup.	X	Jan'y, July	66	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	92 1/2
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug.	81
Boston, 6 per ct. coup.	X	April, October	97	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	X	Do.	78 1/2
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.	100 1/2	101 1/2	Do. do. Municipal.	X	Do.	79 1/2
Cincinnati, 6 per ct. coup.	X	Divers	89 1/2	Sacramento, 10 p. ct. cp. 1862-74 X	X	Do.	80
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	90 1/2	S. Francisco, 7 p. cp. 1865 pay. N.Y. X	X	May, Novemb.	78 1/2
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871 X	X	Do. do.	96
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August,	101	102 1/2	Do. 10 do. pay. N.Y. X	X	Jan'y, July	104
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N.Y. 1875 X	X	Do. do.	60 1/2
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	94	96	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. cp. 1880-83 X	Divers	70	79 1/2	Do. 6 p. ct. cp. Mun. 1874 X	X	March, Sept.	80
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales.

By HEWSON & HOLMES.
For the week ending April 23rd, 1886.

BONDS.	Per ct.
\$6,000 Covington & Lex., 7 per ct. 2nd Mortgage	65
5,000 Little Miami, 6 per ct. 1st Mortgage	82
2,105 Little Miami, Dividend Scrip. June issue	92 1/2
800 Cin. Hamilton and Dayton, Divid. Scrip.	102 1/2
1,500 Ind. & Cin. 7 per cent. Dividend	70
2,000 Cin. and Chic., 10 per ct. Real Estate	40
715 Cleveland & Pittsb., Dividend Scrip.	63
1,000 Hillsboro' and Cin., 7 per cent. 1st Mortgage	59
STOCKS:	
200 Shares Ohio & Mississippi	7 1/2
25 " "	8
150 " Little Miami	93
10 " "	93
100 " Indianapolis and Cincinnati	60
60 " Eaton & Hamilton	22
21 " Dayton & Western	19
150 " Cin. & Chicago	50 1/2
38 " "	9
50 " Mad River and Lake Erie	15
14 " Cincinnati, Hamilton, & Dayton	60
40 " Columbus and Xenia	55 1/2

By KIRK & CHEEVER.

For the week ending April 22nd, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	97 1/2
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	59 1/2
Marietta & Cincinnati, 7 per cent. 1st Mort.	63
Indianap. & Cin., 2nd Mort. 7 per ct.	80
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	50
Cin., Wil. & Zanes. 2d Mort. 7 per ct.	58
Covington & Lexington, 10 per ct. Income	55
Indianapolis and Cincinnati Dividend	70
STOCKS:	
Cin., Wilin. and Zanesv., 15.—Cin., Ham. and Dayton, 45.— Col. & Xenia, 86 1/2.—Cincinnati & Chic., 6.—Central Ohio, 10.— Covington and Lexington, 18.—Dayton and Western, 18 1/2.— Eaton and Hamilton, 23.—Fort Wayne and Western, 100.— Indiana Central, 48.—Indianapolis and Cincinnati, 48.—Little Miami, 92 1/2.—Mad River & Lake Erie, 15.—Marietta & Cin., 13.—Ohio and Mississippi, 7 1/2.—Hillsboro' and Cincinnati, 11 1/2. —Peru and Indianapolis, 18.	

Extract from the Circular of Robt. Benson
& Co., per Arabia.

London, April 11th, 1886.

During the week our markets have exhibited a buoyancy which has scarcely been maintained yesterday and to-day. We have had considerable arrivals of gold—upwards of £500,000—but on the other hand large shipments were made last week from the East, which fact, coupled with renewed indications of a demand for British capital to execute foreign works, have tended to check returning confidence. Fears are revived of undue speculation, which, unless restrained, may lead to a continuance of a tight money market. The recent fall in the prices of produce has caused several failures, and tends to create some distrust.

Consols, quoted in our last 92 1/2, 93, and 93 1/2, gradually advanced to 93 1/2, 94, and 94 1/2, but have been drooping again. They closed yesterday at 93 and 93 1/2, and are to-day 92 1/2 and 93 1/2. This decline began to take place on its being ascertained that the Bank of England Directors had separated without lowering their rates of discount.

The payment of £1,350,000, the last instalment but one of the new loan, took place yesterday, which, notwithstanding its being also the settling day for consols, was accomplished without extreme pressure on the money market—the rate of interest remaining about 5 1/2 per cent, although in some instances higher rates were paid.

The new and speculative stocks brought upon the market have tended to withdraw attention from American securities, the market for which has consequently been quiet. New York and Erie Railroad 3d mort. bonds have changed hands at 84 1/2 and 3/4, and the bonds of 1875 at 82.—Pennsylvania 1st mort. at 90, and 2d mort. sterling bonds at 89 and 90, ex-interest. There have been transactions in all the various securities of the Illinois Central Railroad Company—the 6 per cent. bonds at 72 1/2 and 75; 7 per cent. bonds at 79. Freeland at 82 1/4 and 83 1/4, and the shares at 3 discount.

ROBT. BENSON & CO.

Lake Pontchartrain.

The Mississippi Legislature have adopted resolutions relative to the re-opening of water communication between the Mississippi river and the Gulf of Mexico, by way of Lake Pontchartrain and

the Lake Borgne, and have requested members of Congress to secure, if possible, an appropriation for the object. The old channel was closed by General Jackson, as a military measure designed to protect the city of New Orleans against invasion by the English in 1814-15.

American Railroad Journal.

Saturday, May 3, 1856.

Death of Thomas Rogers.

MR. THOMAS ROGERS, of the well known firm of Rogers, Ketchum & Grosvenor, proprietors of the extensive Locomotive Works, at Patterson, N. J., died at his residence in this city, on the 19th ult. As Mr. Rogers has been closely identified with the progress of railways in this country for the past twenty years, and by his mechanical skill, sound judgment, and unwearied industry, probably contributed more than any other American to the improvements which have rendered the locomotive such a wonder of art, and the masterpiece of human ingenuity, a short sketch of his life is both appropriate to a *Journal* devoted to the railway interest, and must be most interesting to the public.

Mr. Rogers was born in the county of New London, Conn., early in the year 1792. He was apprenticed at the age of sixteen years to the trade of a house carpenter, and probably had no other means of education than that furnished by a meagre attendance upon town schools. In 1812, he removed to Paterson, N. J., where he worked for some time at his trade as a journeyman carpenter. The breaking out of the war with Great Britain, by shutting out all foreign fabrics, turned the attention of our people to domestic manufactures, and Mr. Rogers commenced the construction of cotton machinery, and for this purpose entered into copartnership with a gentleman by the name of Clark, under the style of Clark & Rogers. At a subsequent date, a Mr. Godwin became a member of the firm, the style of which was changed to that of Godwin, Rogers & Co. The firm continued to carry on business as manufacturers of cotton machinery, till 1831, when Mr. R. retired with a capital of \$38,000, and built what was called the *Jefferson Works*. In 1832, he formed a connection with Messrs. Ketchum and Grosvenor, his late partners, still continuing his former business. About this time, the Paterson and Hudson River, New Jersey, Camden and Amboy, and other roads were approaching completion, and opened a new field for enterprise, which Mr. Rogers, with his characteristic energy and sagacity, was first to seize hold of, and which he ever after pursued with unremitting attention. He first obtained a contract for the iron works on the bridges over the Hackensack and Passaic rivers, on the Paterson Railroad. He next obtained an order for several sets of wheels and axles for the South Carolina Railroad, and soon after commenced the manufacture of wrought iron tyres. These minor branches of manufacture served as an introduction to works on a much broader scale, and in 1835, he commenced preparations for the manufacturing of Locomotive Engines, in the construction of which he chiefly distinguished himself, and accumulated the greater part of his large property.

The first engine constructed by Mr. Rogers was the *Sandusky*, built in 1837 for the Mad River

road. The engine weighed 9 or 10 tons, and the price paid for it was about \$6,500. The firm continued to construct some eight or ten engines annually for several years, and never we believe materially increased the above number till after 1842. That year brought about a general prostration of the railway interest. Orders for locomotives fell off to such a degree that his works were unemployed for several months. During this period Mr. Rogers went to Europe for the purpose, we believe, of seeing whether contracts could not be obtained from that quarter. Work was offered him, but not on terms he was willing to accept. Soon after his return business began to revive. Increased orders from our own works came in, and the firm soon enlarged their works so as to enable them to turn out 3 or 4 engines per month. The capacity of these works was gradually increased to an extent that enabled them to construct 100 engines annually, which is not far from the average number constructed for several years past. The reputation enjoyed by the "Rogers" engines was such as to fill the works with orders at all times. The engines of no maker have been more sought for, nor are so generally found upon railroads in every section of the United States.

As a mechanic Mr. Rogers' distinguishing characteristic was strong common sense united with indomitable energy and industry. He was not, probably, very widely read in his profession, but there was no man who had juster notions as to the qualities that constituted a perfect machine. He was keenly alive to improvements from whatever source suggested, but no man better understood where lay the true line between theory, and practical working. The consequence was that he was always up to, or generally in advance of his contemporaries, and probably no man in the country contributed so much to improvements in the design, proportion, and style of finish of the locomotive engine, while he never suffered from the discredit which always follows unsuccessful experimenting. While the engine of Stephenson in its main features is still the type of the present machine, the improvements made upon it constitute the greater part of its practical value. Among the improvements due to Mr. Rogers is the *elevated crown*, adopted for the purpose of getting more steam room. The *link motion* was also first practically applied in this country by Mr. Rogers.—Numerous other improvements equally valuable might be enumerated.

The firm of which he was so long the leading member enjoyed a financial success fully corresponding to his merits as a mechanic. No concern engaged in a similar business suffered so little from the ordinary fluctuations of business. The estate left by Mr. Rogers will probably realize considerably more than a million of dollars. His works will be continued under the charge of Mr. W. S. Hudson, for several years past his principal assistant, and a gentleman well qualified for his successor.

Illinois Central Railroad.

The balance of this company's stock, amounting to 10,000 shares, has all been taken at par, subject to the assessment the shares already issued. The assessments on these shares will bring immediately into their Treasury two hundred thousand dollars.

Ohio and Mississippi Railroad.

There appears to be no doubt of the speedy completion of this road. Messrs. Barlow & Davis, who went to Europe for the purpose of making terms with the first mortgage bondholders, have succeeded in getting an agreement for funding two and one-half years' interest on the bonds.—They also, we understand, purchased the requisite amount of iron. The means for completing the road are furnished by an association of wealthy gentlemen in this city, so that there now seems to be no impediment to the rapid progress of the work. We have already stated the terms upon which the road was to be finished by the parties now having it in charge.

We have received from Mr. Geo. H. HENSHAW, the author, a copy of his lithograph drawing, representing the system of organization adopted on the Erie Railroad. The character of the design may be judged of when we state, that on a sheet 30x45 inches is shown the entire road, with all its officers, from the President and Superintendent down to the common day laborers. The design is represented under the emblem of a Tree, the roots of which represent the President and Board of Directors, with the other principal officers as offshoots from the stem. From the Superintendent, the trunk divides into five principal branches, corresponding with the five divisions of the road. On these are marked all the stations, at their respective distances apart, in connection with which we have the various local agents, superintendents, &c., &c., represented by different sized leaves. Other branches again represent the Departments of Engine Repairs at Piermont, Susquehanna, Dunkirk, and Buffalo; also the Car, Bridge, Telegraph, Ferry, Printing, and other Departments. The whole thing shows beautifully the principles of subordination in office; and the connection of every department with the General Superintendent as centre. The figure is got up in handsome style. It was first suggested by Mr. McCallum for reference merely; but has been lithographed, and is now offered for sale at the low price of *One Dollar*. Some conception of the labor employed on it may be formed from the fact that the roots, stem, branches, twigs, and leaves include over 4,700 persons in all! There are also explanatory tables accompanying. Copies may be obtained by applying at Room No. 8, Erie Buildings, New York.

Texas Western Railroad Co.

We learn that a purchase of one thousand tons of rails has recently been made for this work.—The rails are of American iron, best quality, and weigh about 60 lbs. per yard.

The rails are now in course of shipment to Shreveport, where they are expected to arrive during the month of May. They will be laid on the first ten miles of the road, beginning at the western terminus of the Vicksburg and Shreveport R. R., and extending to the town of Marshall, in Texas.

Maysville and Lexington Railroad.

This road was sold at Lexington, on the 23d ult., to an agent of the first mortgage bondholders for \$105,000. The passenger cars brought from \$900 to \$1,200 each; freight cars, \$40 to \$60 each; the iron rails, \$26 a ton. About \$1,500,000 has been expended on the road, of course there has

been an immense sacrifice of property. It is estimated that it will require \$1,000,000 to complete the road.

Keokuk and Its Improvements.

Keokuk, Iowa, April 17th, 1856.

EDITOR AM. R. R. JOURNAL.

Dear Sir,—Knowing the lively interest you have so long taken in matters relating to the West, more particularly in connection with the internal improvements leading thither and spreading therein, I feel as if no apology would be looked for as an accompaniment of a letter on that subject. Not many years ago, we were in the West as soon as we crossed the Alleghany Mountains in Pennsylvania, or Cayuga Lake in New York. A few years later, the western part of Ohio, Michigan, &c., appeared to be the boundary. Now, there is no West until you strike across the Mississippi river. Missouri, Iowa, &c., may be regarded as the Western States. But in a few years more, with the rolling tide of emigration unchecked, these in turn will become Central, and States yet unnamed will constitute what will be called, THE WEST.

It seems but the other day that the first railroad was opened in the United States, (namely the Mauch Chunk road in Pennsylvania, 9 miles long, from the mines to the Lehigh river, in the Spring of 1827); now we see, in full and successful operation, nearly 25,000 miles, connecting the most remote parts of the older States with the great Atlantic seaports, and uniting the Interior cities and towns more intimately in business and social intercourse. It is easier now to travel from the Atlantic cities to various points on the Mississippi river, a distance of one thousand miles, than it was within my recollection, to penetrate to the middle of Pennsylvania, only one hundred and fifty miles from Philadelphia.

Continuous railroads are now opened from Baltimore, Philadelphia, New York and Boston, to the following points on the Mississippi river, beginning at the most southerly at the mouth of the Ohio river; namely, Cairo, St. Louis, Alton, Quincy, Burlington, Davenport, Galena, and Dubuque. Not many months hence, another junction point will be effected at Keokuk. And amongst all the new western cities, Keokuk is destined at a very early period, to take a high stand as a truly desirable place of business and residence. It is peculiarly situated, being just at the foot of the lower rapids of the Mississippi river, and at the junction of the Des Moines river with that stream. Practically, it is at the head of unobstructed navigation of the Father of Waters; which must forever remain as an advantage for commercial purposes. You are aware that the State of Iowa is one of the richest agricultural fields in the Union! The Des Moines Valley lying diagonally across the entire State, and abounding in all the elements that can make a country prosperous, terminates at Keokuk, at the extreme south-eastern angle of the State. The Des Moines Valley Steamboat Navigation, now in the course of construction, and which is to be finished in about two years, terminates at Keokuk. This improvement has already established some very superior water powers, which are profitably employed; and many more will be created as the works progress;—all of which will be handsomely sustained by the increasing population and business of this magnificent

valley. A railroad extending from Keokuk up the Mississippi valley, through Montrose (at the head of the Rapids), Mount Pleasant, Muscatine, Iowa City, Davenport, and Dubuque, is now in the course of construction. Within a few months it is to be opened to Montrose, which will add greatly to the facilities for passing round the Rapids that so seriously obstruct navigation during many months of the year. Another leading railroad is also in active progress passing directly through the Des Moines Valley, from Keokuk to Fort Des Moines, 152 miles, which will, within a few years, be extended westward from Fort Des Moines to the Missouri river, striking Nebraska, and also in a north-west direction entirely across Iowa to Minnesota. Could you see the hundreds who disembark here daily from steamers coming from the Mississippi and Ohio rivers, and the still greater numbers passing in through Dubuque, Burlington, &c., you would agree with me that the day is very near when Iowa will contain a population of over a million, giving profitable employment to many hundred miles of railroad. Even now her population cannot be much less than four hundred thousand. Iowa is a large State, with as small a proportion of waste land within her borders as any State in the Union. The great body of the land cannot be surpassed in natural fertility; the prairies are rolling, intersected with clear streams, and interspersed with timber. A very large portion of the State is underlaid with coal of good quality, and it abounds with quarries of fine limestone and sand-stone. Nature has indeed scattered her bounties over this favored region with a profuse hand. Moderate exertions on the part of man will soon make it the garden of America. The emigration this Spring is very great, and it seems to be increasing. Although but a portion of this living current flows westward through Keokuk, to reach this desirable region, it may safely be predicted that a much larger proportion of the future business to be created by this inflowing population, will be best accommodated at this point on the river, owing to its happy location. Keokuk must continue to be the leading commercial city of the State. Eight or nine years ago, it was an insignificant village; already it is a flourishing city of over 9,000 inhabitants, and commanding a trade far more than commensurate with its population. It is, judging from all its surroundings, destined to be a large place—one of the great cities of the Mississippi valley. If it has attained to its present importance, within a very few years, without the fostering aid of any railroads, what will it not be with an extensive railroad system in complete operation!

You have doubtless been the means of stirring many an individual to look into the Great West. You have been through it to some extent yourself; but if you revisit one of these thriving Western cities, after only two or three years' absence you will find an entirely new state of things presented. I saw Keokuk last year; but the improvements since made in the number and style of the buildings, the great extent of street grading, the numerous houses now in the course of erection, its increased business from the river and with the interior, its crowded hotels,—all tell a story of progress, progress! I am admonished that my letter is growing too, and I must conclude. Permit me however, to throw a glance at a few

statistics of population in the counties through and very near which, pass the Des Moines River Steamboat Navigation and the Keokuk, Fort Des Moines, and Minnesota railroad. From the Census of 1854, *Lee county contained 23,000; Van Buren, 13,843; Jefferson, 11,117; Wapelle, 10,521; Davis, 9,787; Keokuk, 7,299; Mahaska, 9,093; Monroe, 4,577; Appanoose, 6,265; Marion, 9,315; Jasper, 3,466; Warren, 4,446; †Polk, 5,368; Dallas, 2,392; Madison, 3,112;—making a total of 123,600, in 1854. The population has increased greatly since. In the county of Story, north of Polk (not enumerated above) which, in 1854, contained only 836, there were, according to a census taken by the inhabitants, in 1855, 4,000! By the time the improvements referred to are completed, there will be a population of nearly 200,000, tributary to them! In 1854, there were according to the Census, 329,000 in the State; showing over one-third of the entire population to be along the Des Moines valley at that time.

Is it likely that a railroad which can be graded for six or seven thousand dollars per mile, running through the heart of such a region can fail? It will be in part tested within a year, by the opening of the first division, 38 miles, to Bentonsport.

With an industrious, intelligent, and enterprising population, rapidly increasing in number and wealth, and directly on the great line of emigration, such improvements must not only be of vast benefit to the people generally, but be lucrative investments.

At present, Keokuk is approached from Chicago, by railroad to Burlington (50 miles above); and by steamers thence to Montrose, at the head of the Rapids, thence in stages 12 miles, or at this time, by steamers passing over the Rapids. Or it may be reached from Chicago, Indianapolis, &c., by railroads leading to Quincy, 45 miles below, on the Mississippi; thence by a first class daily line of steamboats. From St. Louis, Alton, &c., by a first class daily line of steamers, a daily line of freight steamers, and a separate daily line of passenger steamers. From these items may be inferred something as to the present importance of this point.

Yours truly

R.

Railroads in Florida.

We observe that the people of that State are bestirring themselves in the construction of railroads. Three separate companies have each a road under construction. One of these starts from the Atlantic, at Fernandina, and runs in a south-westerly direction to an outlet on the Gulf of Mexico. The second commences at Jacksonville on the St. Johns river, which runs into the Atlantic, and runs westward 60 miles to Aligator in Columbia county. The line is there taken up by a third company, and carried farther westward to Tallahassee, whence it is eventually to be extended to Pensacola. The road first mentioned was commenced last Fall; the other two this Spring; and the grading is simultaneously progressing from Tallahassee eastward and from Jacksonville westward to the point of meeting, where they will constitute a continuation from the Atlantic to the Gulf, by a junction with the St. Marks

* Lee, is the county in which the city of Keokuk stands. Its population in 1855 was over 28,000.

† Fort Des Moines is in Polk county.

at Tallahassee. The Legislature of the State has, by law, granted aid to the Companies for the iron and equipments of their respective roads; and has also authorized county and town subscriptions to the capital stock of these roads, by a vote of the citizens, empowering the corporate authorities to issue bonds, and requiring them to levy and collect such a tax as will pay the interest and redeem the bonds. An issue of bonds accordingly by the town of Jacksonville, and by the county of Columbia has been prepared and is now offered for sale.

The importance of these great enterprises to Florida and to the whole United States we have frequently pointed out.

Journal of Railroad Law.

COMMON CARRIERS.—MISDELIVERY OF GOODS.

We have often had occasion to illustrate and comment upon the liability of common carriers for the loss of goods entrusted to them for transportation. They are also liable for any damages that may arise by reason of delay or miscarriage of the goods. The following case from the last volume of the English Law and Equity Reports is an illustration of this liability. Mr. Sauquer, a provision merchant in Morlaix, France, had been in the habit of making consignments of butter via the London and South-western railway to Allen & Anderson, London. The usual brand or mark on the casks when intended for Allen & Anderson was the letter A. Allen & Anderson's place of business was Hibernia wharf.

In September, 1854, Mr. Sauquer forwarded 314 casks consigned "to order" marked A, but addressed to Brewer's Quay. Of these casks the London and South-western railway, conceiving that there was an error in the direction sent 154 to Allen & Anderson. The rest went to Brewer's Quay as addressed.

Mr. Sauquer subsequently made some endeavors to collect the value of the butter from Allen & Anderson. But before any payment had been made, to Mr. Sauquer on that account, Allen & Anderson failed. Mr. Sauquer then sued the Railway Company for damages for the misdelivery of the goods. The jury rendered a verdict in his favor for the value of the butter at the price at which it was sold by Allen & Anderson. On the trial the Chief Justice instructed the jury that the defendants had been guilty of a breach of duty in delivering to Allen & Anderson at Hibernia wharf goods which had come to their hands upon a contract to deliver them to order at Brewer's Quay; for that, although where goods are addressed to "A. B., No. 10, Northampton street," and A. B. has removed to No. 11, inasmuch as the essence of the direction is "A. B.," a delivery to him at No. 11 will satisfy the contract; yet that, where there is a contract to deliver goods marked A. "to order, at Brewer's Quay," the essence of the direction is "Brewer's Quay," and a delivery elsewhere will not be a right delivery; and, consequently, that the only question for them to consider, was, whether the delivery to Allen & Anderson, of the 154 barrels, had been accepted by the plaintiff in satisfaction of the right delivery.

On the appeal, the following opinion was rendered by—

MAULE, J.—The only question before us is, whether or not the plaintiff had a cause of action. The defendants received these goods upon a contract to deliver them to the shipper's order at

Brewer's Quay. Instead of doing this, they chose to assume that, because there had been former dealings in butter between this particular consignor and Allen & Anderson, and these butters were marked with the letter A., they were intended for that firm, and accordingly delivered a portion of them, namely, 154 casks, to Hibernia wharf for Allen & Anderson. The plaintiff had an undoubted right of action for the defendants' failure to deliver the butters at Brewer's Quay. There is no color for saying that the defendants were authorized to deliver them anywhere else, or to Allen & Anderson. It is said that the plaintiff did not complain as soon as he might and ought to have complained. He trusted, no doubt, no loss would result to him from the defendant's breach of duty. It, however, turned out otherwise; and, as soon as a loss did arise, he brought his action. Even if the plaintiff, after he had become aware of the misdelivery of the goods, had ratified it, that would not have disposed of the cause of action once vested.

Suppose the defendants had dropped the goods half way, and they had afterwards been delivered to the plaintiff in a damaged state,—he would still have his right of action and might keep the goods. Judgment for the plaintiff.

Northern Central Railroad.

At the late election of Directors for this road, the following gentlemen were chosen for the ensuing year, viz:

Wm. H. Keighler, Simon Cameron, John Herr, Francis White, Eli Lewis, Wm. D. Miller, Wm. H. Brune, Zenos Barnum, R. M. Magraw, Lloyd N. Rogers, William E. Mayhew, Wm. F. Packer.

All of these were members of the old Board, except two, one of whom declined to serve.

Cleveland, Medina and Tuscarawas Railroad.

REPORT OF THE PRESIDENT.—This road is being constructed by virtue of a charter obtained March 1851, favorable to the object, and free from any individual liability.

Its line extends from Grafton station, a point on the Cleveland, Columbus and Cincinnati Railroad, 25 miles from Cleveland, to Bridgeport, a town on the Ohio river, opposite Wheeling, Va.; about 130 miles in length, and passing through the counties of Medina, Wayne, Stark, Tuscarawas, Harrison and Belmont.

Preliminary surveys have been made of the entire line sufficient to show its feasibility, and the approximate cost of construction.

In the fall of 1852, and the winter of '52 and '53, that portion of the line extending from Grafton station to Dalton, 41.8 miles, was located by W. E. Ferguson, whose reputation as an Engineer is a sufficient guaranty that the location was made with the greatest care, with reference to the strictest economy in the location of the road, avoiding curvatures and heavy grades.

In the spring following, the work of graduation was commenced, which continued uninterrupted until the fall of 1854, when, for the following reasons, the work was mainly suspended: First, the depressed condition of the finances of the country, and second, all had been done that was deemed necessary and prudent to do, prior to the purchase of the iron—that portion remaining unfinished consisting of very light work and not expensive—as shown by reference to the accompanying Engineer's report.

Notwithstanding preliminary surveys have been made preparatory to the location of the line to Bridgeport, it has been determined by the Directors of said Company, to first put the North-Western Division, connecting the Cleveland and Toledo Railroads, with the Ohio and Pennsylvania Rail-

road, in running order, then if sufficient means are provided on the line to defray the expense of construction, to extend it onward.

The commercial traffic between the Atlantic cities and the extensive Lake Prairie country of the north-west and west, seems to require and demand the construction of thoroughfares, free from the objections incident to the northern routes in the winter season. The past winter has clearly demonstrated, that while the more northern routes through New York have been blocked up with snow, the transit of trains impeded for days in succession, the Central Pennsylvania and Ohio and Pennsylvania Railroads have hardly been disturbed; their trains, with scarcely an exception, have been able to make their daily runs.

This road, with its connections, are calculated to supply that demand. It forms a link between two important thoroughfares, the Central Pennsylvania, and Ohio and Pennsylvania on the East, and the Cleveland and Toledo and Northern Indiana and Southern Michigan on the West, completing a line of railroad as short or shorter than any other route connecting the East with the West.

The importance of this route for the transportation of stock and freight during the winter months, cannot but be appreciated; while the stock has been detained on the more northern routes until frozen or the expense of keeping has more than used up the expected profit, on the Central Pennsylvania Road there has been little or no detention.

The entire cost of this division of road when fully equipped and in perfect running order, is estimated at \$702,802, or \$16,738.81 per mile, which estimate shows an increase of the first by Mr. Ferguson, of \$88,820, but when the difference in the value of the iron necessary to its construction is taken into the account, we find that the estimated costs nearly correspond.

FINANCIAL CONDITION.

There has been already expended in the construction of the road, including Engineering and right of way, \$160,000.

The estimated cost to finish it ready for use, including the whole graduation, cross ties, and bridging, is \$100,000. To defray this expense, additional subscriptions have been made to the amount of \$130,000, payable as the work progresses.

The amount of old and new subscription which is available and uncollected, applicable to the construction of this portion of the road is—

To which add Real Estate.....	1,950 00
" " Personal Property.....	1,400 00

	\$191,028 93
Total Liabilities.....	48,846 60

Balance Assets.....	\$142,182 33
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The work for the completion of said division, has been contracted to S. N. Sargent, on terms favorable to the interest of the Company which will be prosecuted with vigor, whenever the iron is procured.

For the purchase of iron necessary to the completion of said road, we confidentially anticipate the sale and negotiation of the first mortgage bonds, of which we had \$400,000, made convertible, bearing interest at seven per cent., semi-annual, and payable in 1865, secured by a first mortgage lien on the 41.8 miles of road; of this issue, a portion have been sold; the purchase money is on interest, subject to call when needed for the purchase of iron.

The Cleveland, Medina and Tuscarawas Company, have agreed, by resolution, to set aside forty thousand dollars per annum of the earnings of the road, to be invested either in bonds of the Company or other good securities, as a sinking fund, to pay off the bonds of the Company falling due in the year 1865.

This resolution may be considered as a part of the contract with the purchaser of said bonds.

L. D. TOLMAN, President.

From the Chief Engineer's report we learn that the route passes through the following places of note, viz: Grafton, on the Cleveland, Columbus, and Cincinnati railroad; Fairview, on the Ohio and Pennsylvania; Dalton, Massillon, and thence down the Tuscarawas valley to Bridgeport, opposite Wheeling, Va. About 36 miles from Grafton it strikes the coal deposits. The country on its route is said to be in a high state of cultivation.—It is the company's design to concentrate all their energies on that part between the C., C. & C. and O. & P. roads. There have been subscribed \$525,000 towards the construction of the southern part of the line. The route is very direct, and crosses only one stream requiring an arch of more than a 12 feet span. Of the first 38 miles, 22½ are level or have grades below 20 feet; while only 4½ miles exceed 35 feet. The total rise and fall will be 799 feet, about two-thirds of this being in the direction of their heavy traffic. The maximum grade going south is 50 feet, and going north 30 ft. per mile. Only five of the 38 miles have curves. The total degrees of curvature are 550. Shortest radius, 1,900 feet, except in one instance at a station.

The work was let and commenced in the early part of 1853, but suspended in the fall, in consequence of the short crops and the unfavorable condition of the money market. Between Grafton and Medina a large proportion is graded, and about five-eighths of the whole valuation of grading, bridging, cross-ties, &c., is done. The amt expended, in round numbers, is \$160,000. A contract has recently been made for completing the grading, masonry, and track-laying, for \$100,000; making \$260,000 in all, besides the cost of superstructure. The estimate of cost for 42 miles, with rails weighing 52 lbs. per yard, and including \$100,000 for equipment, is \$702,820, or \$16,733 per mile. In local resources, there are at least 600 miles tributary to the road, containing an average population of 57 per mile. By this route, Massillon will be nine miles nearer to Cleveland than by any other route. From Pittsburg to Toledo, there will also be a gain of two miles. From New York to Chicago, by way of Philadelphia and over this line, the distance will be only 917 miles, or 39 less than the shortest now in use. The State Geological Report says that probably no county in the State contains more coal than Tuscarawas; there being at least 550 square miles, containing on an average six feet in thickness, which would yield 6,000,000 tons to the mile, or 3,300,000,000 tons in all. This is sufficient to meet the demand of the State for some centuries. The forests are now rapidly disappearing. In Fairfield, near Dover, and also at New Philadelphia, valuable beds of iron ore have been found, some of which are being worked. Limestone is abundant at numerous points on the line. At one or two localities hydraulic lime has been made. It has been ascertained that the whole of this county has been underlaid with salt springs. There is scarcely a doubt that brine may be obtained nearly everywhere by boring from eight to twelve hundred ft. At Fairfield, coal works have been erected, by which from three to five hundred tons a day can be delivered, as soon as facilities are afforded. At Massillon, large iron furnaces have been put up, which will require 11,000 tons of ore, and 4,000 tons of limestone yearly, both of which will re-

quire to be transported over 20 miles of the road. It is said that the receipts of the Ohio and Pennsylvania road at Massillon are from \$60,000 to \$100,000 per annum. The following is an estimate of business to be done on that division from Grafton to Fairview:

Travel—200 daily at \$1.00.....	\$62,600
Freight—100 tons daily at \$15.0.....	46,950
Coal—400 tons daily at 75 cts.....	93,900
Mails and express.....	12,000

Total.....	\$215,450
Working expenses—50 per cent.....	107,725

Net earnings.....\$107,725
The interest on the whole cost, \$702,800, is \$49,197, which deducted from net earnings leaves a balance of \$58,527—sufficient to cancel \$600,000 of bonds in six years.

Pittsburg and Steubenville Railroad.

The Directors of the above road have issued an address to the people of Pittsburg and Alleghany City, on the subject of their recent difficulties. The project which was submitted to them last February, for leasing and finishing the road by Roberts, Watts, and others, was rejected. There was then only one course left—to apply to the City and County for additional aid to carry the work forward. A majority of the Councils and County Commissioners agreed to ask the Legislature to authorize them to guarantee the company's bonds to a certain extent.

This action was sent on to Harrisburg, and it induced a series of inquiries from the Senators of the County as to whether proper guards and restrictions could be placed around such guaranties on the part of the City and County, &c.

A special Committee of Councils was then appointed to confer with the Board of the Pittsburg and Steubenville Railroad Company, and the result of their conference was a report to Councils, which was approved by them, and copies of the proceedings transmitted to Harrisburg. A great deal has appeared in the papers under anonymous signatures, and we apprehend from a source whose antecedents will show more hostility to the road than real interest for the tax payers of this county, in some of which articles it has been stated that the limit of the guaranty would not be sufficient to complete the road. We deem it proper to state that we, who have at least as good sources from which to obtain information on this subject as others, believe the amount named, together with our other valuable resources, to be sufficient.

The estimated cost of completing the road is.....	\$513,000
The amount of liabilities of the Company is \$317,000, from which deduct deferred payments on Real Estate due in 1859 and 1865, \$49,000, leaves.....	268,000
Add for rolling stock.....	150,000

Makes a total of.....\$931,000

The present resources of the Company which can be made available so soon as the work again commences, amount in round numbers to.....\$100,009
Add to this the avails of the guaranteed bonds, say, \$1,050,000, at 90 per cent.. 945,000

Makes a total of.....\$1,045,000

Leaving a surplus of \$115,000. And should it be deemed advisable by the owners of the road to permit these guaranteed bonds to be sold at the same prices as were obtained for a portion of unguaranteed bonds, to wit: 80 per cent., thus realizing \$40,000 therefor, there will still be sufficient to complete and equip the road. The great question for the tax payers of the city and county is, and we think they generally so understand it, whether it be better to lose the entire investment

they now have in the road, and resort to taxation to meet the interest on the bonds issued for the same, and provide an annual sinking fund for the redemption of the principal, or have the work go with a certainty of its completion?

As to the question of revenue, we believe any sensible and unprejudiced person will admit that, take the worst view of the matter, the road will at least pay the interest on the mortgage bonds, and as its business increases will, of course, contribute more and more every year to the payment of interest on the City and County Bonds, and ultimately pay all the interest, when the full amount of its business is reached, and the local interests along its line developed.

Montgomery and West Point Railroad.

At a meeting of the stockholders of the Montgomery and West Point railroad company, held on the 8th ult., the following gentlemen were elected officers of said road—

Charles T. Pollard, President; Thos. M. Cowles, Wm. Taylor, Wm. M. Marks, and B. S. Bibb, of Montgomery, R. R. Cuyler, of Savannah, and J. P. King, of Augusta, Directors.

An abstract of the report gives the total receipts for the year ending March 1st, to have been—

Passengers.....	\$178,008 25
Freight.....	127,535 25
Mails.....	27,330 41

Total.....	\$332,873 91
Expenses and interest on loan.....	244,262 50

Leaving net income.....\$88,611 41

Within the year 85,338 passengers have passed over the road; and 57,974 bales of cotton, of which 21,326 have been delivered at Montgomery, 22,552 at Columbus, and 14,096 at West Point.

Smith's Car-Seat.

Our present common car-seat, with the back shifting in either direction, was a quite important invention to save turning the car at the end of the road. Mr. Albert M. Smith of Rochester, whose convenient belt-clasps are already well known, has lately constructed a model which in effect makes the back high or low at pleasure, while still retaining the reversible quality, and nearly all the simplicity of the ordinary seat. A night seat should have a high back to support the head, and should incline back at a considerable angle, while a day seat should have a low back to allow of uninterrupted vision and social intercourse.—The back of Mr. Smith's seat is to be about the usual width, is upholstered on each side, and is curved to fit the back as usual. There are four short knobs or projections on each end of the back, and the straps or connection between the latter and the fixed part are T-shaped, and are ingeniously provided at each extremity of the T-portion with spring catches or self-locking mechanism to receive and hold these projections. For a day seat the back is held at each end by the two central knobs, and conforms in appearance to the common car-seat, but by pressing the upper edge forcibly backward the lower socket released its hold, and the back may be whirled half over on an axis passing through the upper one, and the lower socket receives and retains a knob near what was previously the upper edge of the back. The back is now sustained considerably higher than before, and by reason of its curvature stands at just the proper inclination to sustain the head and shoulders in a half reclining position. The cushion is also made adjustable to a slight degree by hand, but this appears a matter of minor importance. The main feature of the seat has been described with some care, and it is evidently a most valuable improvement if the peculiar sockets can be cheaply and durably constructed. The inventor contends that it can be built and maintained at about the same price as those now employed, while it is easy to see that it occupies no more room and involves little or no additional weight. Although easily disconnected by a suitable movement, the sockets appear quite strong and the back will not, probably, change position

in consequence of any motion of the car, however violent. The improvement is susceptible of ready application to seats now in use, and we hope the plan will be immediately tested.

Rock Island Railroad Bridge.

This magnificent enterprise has just been completed and opened for public use. A brief description of the work will doubtless prove interesting to our readers.

The bridge is owned by an independent corporation called the Rock Island Railroad Bridge Company, to whom the Chicago and Rock Island and the Mississippi and Missouri Railroad Companies guarantee a certain rate of dividend. The President of the Bridge Co. is Henry Farnum, Esq.—Messrs. Stone, Bloomer & Co., of Chicago, were the contractors. The work consists of two separate structures, the one connecting Illinois with Rock Island, and the other that island with Iowa. The former is 465 feet long, having three spans each 150 feet. The main bridge is 1,581 feet, having five spans, each 250 feet in the clear, and a draw of 286 feet—the latter being the longest in the United States. The piers of the main bridge are 7 feet wide at the top by 35 feet long; and those on the "Slough" bridge 5 by 35. Their respective heights from the river bed are 38 and 25 feet, the foundations resting on solid rock. The abutment on the east side of the main bridge is 85 feet high, and on the west side 30 feet,—both being T abutments,—and having, as also the piers, a batter of three-fourths of an inch per foot. The centre pier is 32 feet diameter at top, and is protected by a crib 350×40 feet running up and down the river. The northern end is faced with boiler iron so as to cut the ice. All the other piers have also cutwaters. The descriptions of the other parts of these structures that we have seen show the whole to be one of the grandest pieces of work that this age has witnessed. Unbroken railroad communication is now open to Iowa City, and will doubtless reach the Missouri at an early day.

We learn that the total cost of this structure will be in the neighborhood of \$250,000.

Sheffield and Savannah Railroad.

We have received from the Chief Engineer a copy of his report of the preliminary surveys of the first two divisions of this work. The charter for its construction was granted in 1854, to the Chicago and Rock Island railroad company, who were empowered to build it as a branch line, creating a separate capital stock if deemed necessary. The route selected leaves the Rock Island road at Sheffield, in Bureau county, 136 miles from Chicago, and proceeds in a north-westerly direction to Prophetstown, 24 miles. This constitutes the first division. The second extends from Prophetstown to Albany, about 20 miles, and making a total of 44½ miles. The first division is remarkably favorable for construction. The highest grades are but fifteen feet to the mile, while a large proportion is level or nearly so. No curves need be run with a shorter radius than 5,730 feet. The second division, crossing a more elevated section of country, will require a somewhat circuitous route. Highest grade, 20 feet.—Shortest radius, 2,865 ft., occurring in one instance only. While much of the country traversed is level, and appears to be low and wet, a large portion is said to be fine, rich, and beautiful prairie, and easily capable of being artificially drained.—

The vicinity of Prophetstown is considered one of the richest portions in Rock river valley. Railroad facilities are much required here, owing to the intervention of Rock river on one side, and Green river on the other. Already a large agricultural business awaits the opening of a road, and this would soon be greatly increased by the demand for coal. At the town of Camanche there is a favorable point for crossing the Mississippi river.

The estimated cost for building and equipping these divisions is \$787,499, or \$16,830 per mile.

Pittsburg, Maysville and Cincinnati Railroad.

The annual meeting of this company was held on the 4th of March. From the report read we learn that operations in construction have been confined to the first division, lying between the point of intersection with the Steubenville road and McConnellsville, on the Muskingum river, 77 miles in length. The total stock subscribed is \$431,350, of which \$60,000 are still due. The increased estimates made for construction during the past year amount to \$68,607. The bills and accounts payable are \$31,000.

"Though the Board believe the assets that may be made available will be sufficient to cover the present liabilities of the company, yet the progress of the work has been considerably embarrassed, because those assets could not be made immediately available. Nearly every other company has had its crisis of embarrassments. The past two years have been times of great financial demands and embarrassments, causing general panics as well as local want of confidence in all public improvements."

Some assistance, in the shape of Guernsey county stock, has been received from the Central Ohio railroad company. Part of this, however, has been surrendered to the Commissioners, as being unavailable. No attempt has been made to force the company's own securities on the market, owing to the depression in financial matters.

The investments of the company are for

Construction and its incidents.....	\$307,735.37
General superintendence, &c.....	21,196.10
Engineering.....	34,111.04
Right of way and fencing contracts..	27,891.19

Total \$390,933.70

Messrs. Peacock, Lawrence, Fordyce, Stranathan, McConnell, Eli Shepard, and McMahan, having each received a majority of all the votes cast were elected Directors for the ensuing year.

Erie and North-East Railroad.

An act has recently passed the Legislature of Pennsylvania restoring this road to its rightful owners. The provisions of this amendment are as follows:

Section 1st legalizes the route of the road, as originally constructed.

Section 2nd requires the company to make, at their own expense, such changes in the Buffalo road as the Road Commissioners shall determine, disputes regarding property to be settled by the courts as hitherto.

Section 3d enjoins the company to make connections and afford facilities to the Sunbury and Erie Railroad equal in every respect to those afforded to any other company.

Section 4th obliges the company, within six months, to build a branch to the harbor at Erie, and also, within three months, to subscribe to the

Pittsburg and Erie Railroad the sum of \$400,000, payable at their own option in cash or seven per cent. coupon bonds. In lieu of this subscription they are empowered to build a road between Erie harbor and the coal-fields of Mercer county; provided the said \$400,000 shall be expended in good faith thereon. For that purpose the Pittsburgh and Erie Company may transfer to the E. & N. E. Co. their chartered rights and franchises; but in case of failure to do this, similar privileges are hereby granted the latter. The Governor is to retain possession of the East and North-East road until the stockholders have accepted the provisions of this act. Authority is granted to issue \$500,000 seven per cent. mortgage bonds additional. The Legislature reserves the right of altering or amending this act, as the public interest may require.

Section 5th requires that all suits brought against the company shall be tried in the county where the railroad is located.

Mississippi and Atlantic Railroad.

At a meeting of the stockholders in this Company, recently held at Vandalia, Ill., Henry Wing, Jos. Suppiger, Wm. S. Wait, J. D. Lansing, N. M. McCurdy, J. H. Waschefort, W. B. Archer, J. O'Fallon, S. J. Smith, W. M. Roberts, C. Rose, P. M'Martin, and R. H. Wiaslow, were chosen Directors for the ensuing year.

At a subsequent meeting of the Directors, the Board was organized by the choice of Wm. S. Wait, President, S. J. Smith, Vice President, Jos. Suppiger, Treasurer, and Wm. A. Jackson, Secretary.

Prospective Growth of Wisconsin in Population.

The Madison Argus makes the following estimate of the future population of Wisconsin, which seems well borne out by the past growth of that flourishing State. Our cotemporary, however, ought to have been better informed with respect to the increase of population in Illinois during the last five years, which has been fully 50 instead of only 30 per cent.

In 1840, Wisconsin had 30,000 inhabitants; in 1849, 305,000; in 1855, 552,000. In population she has outstripped all the Western States, no one having increased ten fold in ten years. In five years she has nearly doubled her population, having increased 257,000, whilst Illinois, a growing and rapidly-increasing State, has added but thirty per cent. to her population.

The territory of Wisconsin is no larger than either New York, Pennsylvania, Ohio, or Indiana. The last, by the last census, had a population of 1,000,000, the next before, 2,000,000, the second, 3,000,000, and the first, in round numbers, 4,000,000. Wisconsin has a richer soil than New York or Pennsylvania. The south-east counties of Wisconsin are the only settled portions of the State, whilst the north and north-west are comparatively a wilderness. Taking the population of New York at 4,000,000 for our data of calculation, and taking into account that she has a larger portion of sterile land than Wisconsin, and that the city and environs may be regarded as national and dependent upon position, we may safely give the rural districts 3,200,000, and moreover, were she as densely populated as Massachusetts, she would have 6,000,000; these being the data, and Wisconsin one-fourth larger, would contain 7,500,000, with the same number to the square mile. Taking the growth of Ohio and Indiana as the data of Wisconsin increase, we can safely predict in five years 800,000 inhabitants, in ten years 1,100,000, in fifteen years 1,500,000, in twenty-five years 3,000,000, in fifty years 5,000,000. These are subjects challenging the attention and interest of all desirous of seeking a home and State with special advantage.

A Contrast for Pennsylvania Study.

The Commerce of Massachusetts halts not upon the New York line. New York sheriffs do not there meet it with crow-bars to pry it off narrow tracks on to wider gauges, nor into deep mud. Nor do they meet it with tax warrants, and rob it of a portion of its lawful profits. The railroad cars of Massachusetts leap our boundary, and run freely right up to the Hudson. No "black mail" is levied at the river side upon the commerce of our sister State. On the contrary, we are about to bridge the obstruction presented by the Hudson, and let the loaded car which left Boston in the morning, roll without stop at evening into the heart of our State. The next day-dawn will find it upon the frontier of a foreign power. Pennsylvania should take shame at seeing this freight from distant Massachusetts, roll upon the Canadian rails which arch the Niagara, unclipped of a legislative Assembly, and unchecked by ruffianly rivalry. No "black mail" is levied at the Western end of the Suspension Bridge. The freighted car goes through Canada, and its contents are ferried over the Detroit River, without paying any tribute to the State of Michigan. Michigan does not tax the commerce of her sister States, nor permit any robbers, within or without her legislature, to fleece it. Westward goes this freight. It crosses the Indiana lines, without meeting an obstacle, legal or physical. The freight enters Illinois without pause. No alguazils, no sheriffs, no legislative hindrances, no tax, no "black mail" meets it at the portals of the Prairie State. No charge by the Treasurer of Illinois is made, for the privilege of continuing its uninterrupted way from her Eastern to her Western boundary. It crosses the Mississippi, undiminished by legislative robbery, and enters Iowa with the welcome which a wise and just State give to Commerce, and the traffic between the members of a Republican commonwealth. From the Massachusetts Bay to the Missouri river, this Massachusetts property in continuous transit traverses seven different political territories, one of them foreign to our Union, and encounters no tax, no disability, no unfriendly inconvenience, no injustice, on the entire way. How this fact should shame Pennsylvania into fair dealing and manful behavior to New York and Ohio!

Hannibal and St. Joseph Railroad.

The Hannibal Messenger states that the lettings for the balance of work on this road were made on the 15th ult. All the work is to be commenced forthwith, and pushed vigorously forward to completion. It is expected that the work on the first and second divisions will be completed, and the road opened to Salt river, about 50 miles, by July next.

H. STANLEY & CO.,

MANUFACTURERS OF

RAILROAD CAR WHEELS.

—ALSO—

DRIVING WHEELS, HORSE AND HAND CAR WHEELS, WHEELS ON AXLES, BUMPERS, JAWS, and BOXES fitted complete, and OTHER RAILROAD CASTINGS.

HENRY STANLEY, } No. 274 River st.,
JOEL MALLARY, }
HIRAM B. INGALLS, } TROY, N. Y.

Passenger and Freight Cars FOR SALE.

4 FIRST CLASS (60 seats) PASSENGER CARS.
35 BOX FREIGHT CARS, 28 ft. long.
11 PLATFORM "

The above are for a 4 ft. 8 in. gauge, and are well and thoroughly made. WILLIAMS & PAGE,
4118 44 Water st., Boston, Mass.

Railroad Iron.

1,300 TONS New York & Erie pattern, 57 lbs. weight, ready for immediate delivery. For sale by
THEODORE DEHON,
10 Wall st., near Broadway.
New York, April 16th, 1856. 3c16

PHILADELPHIA RAILWAY AGENCY,

AND GENERAL SUPPLY DEPOT OF ALL ARTICLES USED BY RAILROAD COMPANIES,
No. 12 and 14 Walnut st., PHILADELPHIA.
THOMAS M. CASH, Agent.

THE following list of Railroad Supplies, purchased to order, or in Store on Consignment:

RAILROAD IRON.—Railroad Bars, Railroad Chairs, Bar Iron, Spikes, Pig Iron, Castings.

AXLES.—American Hammered, English Hammered. American Rolled, English Rolled.

CAR WHEELS.—In rough or on axes.

OILS.—Sperm, Whale, Lard, Bleached Whale, Solar, Machinery.

CAR GREASE.—Tallow, Yellow, Soft White, Stiff White.

LANTERNS AND LAMPS.—Locomotive Head Lights;

Wray's 23 inch Reflector, 21 do. do.; Olcott's 23 do. do., 21 do. do.; Porter's 21 do. do., 17 do. do.; Miller's 22 do. do., 20 do. do.; Arm Lanters, Breast Lanters, Hand Lanters.

PATENT OIL CANS.—Brass, 3 pints, 1 quart, 1 pint; Tin, 3 pints, 1 quart, 1 pint.

PLAIN OIL CANS.—Brass, 3 pints, 1 quart, 1 pint.

PUMPS.—For Water Stations.

MACHINIST'S TOOLS.—Lathes, Planing Machines, Drills, etc.

TURN TABLES.—Of Cast Iron, with Parry's Anti-Friction Box.

SIGNAL LANTERNS.—Large Square, 10 inch Reflector,

Red; Medium Square, 10 inch Reflector, Red; Small Square, 6 inch Bull's Eye, Red; Large Round Fresnel Lens, Red; Common Square, Large, Red; Common Square, Small, Red; Brass Globes, Red; Brass Globes, Green; Brass Globes, Blue; Common Tinned Japanese Lantern; Engine Lanters; Large Square Signal Lantern for Stations, Bridges, Switches, etc., etc.

LOCKS, WHISTLES, etc.—Car Locks, Switch Locks, Oil Cups, Cylinder Cocks, Gauge Cocks, Heater Cocks, Jack Screws, Steam Whistles, Spring Balances, Locomotive Bells, Signal Bells, Steam Gauges, Wrenches, Bolts, Nuts, Washers.

INDIA RUBBER.—India Rubber Hose; India Rubber Springs; India Rubber Packing.

CAR FINDINGS.—Push, Enamelled Head Linings, Hair Cloth, Bismarks, Curled Hair, Cotton Duck, Brass and Bronze Hat Hooks.

BRUSHES, etc.—Paints, Paint Brushes, Linseed Oil Varnish Brushes, Varnish, Glue Brushes, Glue, Glue Kettles, Conductor's Badges, Baggage Checks, Engineer's Stationery, Hardware of all kinds, Spafford's Self Adjusting Safety Signals for Draw Bridges.

LOWMOOR TIRES.**SCOTCH IRON.**

PIG IRON, Bars, Boiler Plates, Sheets, Hoops, Railroad Bars, Tyres, &c.

CALEDONIAN PATENT LAP-WELDED TUBES

PATENT CAST IRON PIPES.—made from best Scotch pig iron—cast vertically and drill easily.

6m13

WILLIAM ROY, Agent,
74 Broadway, New York.

RAILROAD NOTICE.

NOTICE is hereby given, that there will be a Stockholders' meeting of the Dubuque and Pacific Railroad Company, at the office of the Company, in the City of Dubuque, Iowa, on the third Monday in May next, at two o'clock, p. m. for the purpose of amending the Articles of Incorporation, among other things, so as to increase the number of the Directors to thirteen, and to transact such other business as may be legally done at a Stockholders' meeting. And further notice is hereby given, that, on the first Monday in June next, the annual meeting of the stockholders, for the election of Directors, will be held at the office of the Company, in said city.

H. P. LEACH, Sec'y D. & P. R. R. Co.

To Railroad Contractors.

ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C., March 25th, 1856.

SEALED PROPOSALS will be received at this office, until 12 m., on Thursday, May 15th, 1856, for the construction of ONE TUNNEL, five thousand eight hundred and eighty feet in length; one tunnel, two thousand feet; one tunnel, nineteen hundred and fifty feet; and two, four hundred feet each;—also for the masonry of the piers and abutments of TEN BRIDGES, comprising about twelve thousand feet of TRESTLE WORK including the timber and driving the piles.

The Company reserve the right to reject any proposals, and to require bidders to give satisfactory security for the faithful execution, according to contract, of the work they may undertake.

Plans and Specifications may be seen, and the time for completing and all other information obtained at the office of the Engineer, on and after the 5th of May.

WALTER GWYNN,
Chief Engineer B. R. R. in S. C.

NOTICE TO**Contractors and Capitalists.****San Francisco and Sacramento Railroad.**

SEALED PROPOSALS will be received by the undersigned in New York City from April 10th, until May 10th, 1856, for the construction and equipment entire of the SAN FRANCISCO AND SACRAMENTO RAILROAD, California, from the City of Sacramento to the City of Benicia, a distance of 58 miles.

The railroad is upon the main trunk line from San Francisco to the interior, over which passes three-fourths of the entire inland trade and travel to California, saving 30 miles in distance over the present route, reducing the time from 8 1/2 to 3 1/2 hours, and passing through the fertile lands of Solano and Yolo Counties, the richest agricultural counties in the State. It connects at Sacramento with the Sacramento Valley Railroad now built and running, and is the key to San Francisco for all lines running from Northern and Eastern California.

Maps, profiles, and specifications can be seen and every information obtained upon application to the undersigned Room No. 7, Metropolitan Bank Building, cor. Broadway and Pine st., New York.

THEODORE D. JUDAH,
Chief Eng'r and Commissioner, S. F. & S. R. R.
New York, April 7th, 1856. 1m16

TO CONTRACTORS.**PETTES' ROCK DRILL**

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

4117

N. DAVIDSON, 9 Spruce st., N. Y.

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.

No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

3c1

A. WILKINS.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this Train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8 1/2 a. m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p. m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m., for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

Lit.

D. C. McCALLUM, General Supt.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Supt.

TALBOTT & BROTHER, SHOCKOE FOUNDRY

AND
MACHINE SHOPS,
CARY STREET, RICHMOND, VIRGINIA,
MANUFACTURERS OF

PORTABLE STEAM ENGINES, of all sizes, from 4 to 40 horse power.
STATIONARY STEAM ENGINES of any required power.
CIRCULAR SAW MILLS, complete.
TOBACCO PRESSES and SCREWS.
FLATTENING MILLS, LEVERS, SINKERS, &c.
WROUGHT AND CAST IRON WORK, for VERTICAL SAW and GRIST MILLS.

Brass and Iron Castings and Wrought Iron Work of every description, made to order with dispatch, and on reasonable terms.

CHARLES TALBOTT. JAMES M. TALBOTT.

T. & B. are also Sole Manufacturers and Agents in this city of

LEAVITT'S
"Young America Corn and Cob Crusher."

IRON BRIDGES

FOR RAILROAD AND OTHER PURPOSES
Bolts and Nuts for Bridges,
AND FROGS OF ALL ANGLES,
MANUFACTURED TO ORDER.

JOHN HUTCHINSON,
TROY, N. Y.

NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1866.

Extension of Trunk Line to
Nelson's, Shubenacadie.

TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until SATURDAY, the 10th day of May next, at 12 o'clock, noon, for the Construction and Finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, or the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Rails, Chairs, Spikes and Slide Keys. The work to be completed by the 30th day of June, 1867.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock A.M.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

6114

JOSEPH HOWE, Chairman.

To Bridge Contractors.

PROPOSALS will be received at the office of the EDGEFIELD AND KENTUCKY RAILROAD COMPANY, at Nashville, Tenn., until the 20th day of May next, to build the Bridge across Cumberland river, for the joint use of the LOUISVILLE & NASHVILLE and the EDGEFIELD & KENTUCKY RAILROADS, according to the provisions of the Act of the late General Assembly, appropriating two hundred thousand dollars for its construction. The superstructure will be about seven hundred feet long, including a draw with one hundred feet opening. The piers will be from sixty to eighty feet high, in water from twelve to eighteen feet deep at its lowest stage, and the foundations will be upon piles, or put in with coffer dams, or otherwise, as the nature of the river bottom renders expedient.

Bridge Constructors are invited to send plans and specifications for superstructure, of both wood and iron, for spans of from one hundred and sixty to two hundred feet long, and when of wood, with a proposal for preserving and rendering it fire proof.

Propositions may be made for the entire structure, or for the foundations, masonry, or superstructure, separately. The foundation must be bid for per pier, the masonry per perch of twenty-five cubic feet, and the superstructure per lineal foot. Any further information can be obtained by addressing the Chief Engineer of the Edgefield and Kentucky Railroad at Nashville.

The following is a copy of the Act of the General Assembly referred to:

"Be it enacted, That the Edgefield and Kentucky Railroad and the Louisville and Nashville Railroad are entitled to the sum of one hundred thousand dollars each, to construct a Bridge across the Cumberland river at Nashville, and that they are hereby consolidated for that purpose, and shall be entitled, upon application, to the sum of two hundred thousand dollars, for which the Governor shall issue Coupon Bonds of the State, at six per cent. at thirty years, to be issued as twenty thousand dollars of the work shall be done, from time to time."

JNO. L. HELM, President

Louisville and Nashville Railroad Company.

EDWARD S. CHEATHAM, Pres't

Edgefield and Kentucky Railroad Company.

NASHVILLE, April 18th, 1866.

4117

BUSINESS CARDS.

H. H. GOODMAN & CO.,
No. 7 WALL ST., NEW YORK,

Dealers in Railway, City, County, and State

BONDS,

RAILS, LOCOMOTIVES, &c.

We have on hand and for sale, of County Bonds—

Hardin County (Ky), 6 per cts. Davidson City (Tenn.), 6 p. cts.
Carter, Bath, and Montgomery (Ky), 8 per cts. Iowa County (Wis.), 8 per cts.
Also a variety of CITY, MINERAL POINT do. do.
COUNTY, and RAILWAY SECURITIES in smaller lots.
April 30th, 1866.

PHILADELPHIA AGENCY

OF
M. & J. WING,
MANUFACTURERS OF
STEEL, FILES, SAWS, &c.
JERICHO WORKS,
SHEFFIELD,
ENGLAND.

An assortment of the above articles kept constantly on hand, and for sale by

THOS. M. CASH,
13 WALNUT STREET.

H. M. SMYTH
COMMISSION MERCHANT

AND
MANUFACTURERS' AGENT,
No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axles, wrought iron Wheels, boiler, water, and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

ELLIOTT & CO.,
NO. 4 WILLIAM STREET, NEW YORK.
(ONE DOOR SOUTH OF BEAVER STREET.)

RAILROAD AGENTS
AND
COMMISSION MERCHANTS,

PURCHASE AND SELL ON COMMISSION
FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS.—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES.—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRS & SPIKES.—They are authorised to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William St., N. Y.

Rollins & Haviland,

STOCK BROKERS,
38 Exchange Place NEW YORK.
JOHN T. ROLLINS. WALTER HAVILAND.

Lord & Wright,

Counselors at Law, Cincinnati, Ohio. 161

ELLERY & GIBBONS,

No. 10 WALL ST.,

BANKERS, DEALERS in DOMESTIC and FOREIGN EXCHANGE, &c., are prepared to negotiate Stocks, Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't Oc'n Bk, N. Y. CORNELIUS W. LAWRENCE, Esq., N. Y.

SILAS K. EVERETT, of Everett & Brown, N. Y. DEXCEL & Co., Bank's Philad

WELLS, Fargo & Co. 181 Samuel Willets, Pres't of Am. Exchange Bank, N. Y.

London Agency for Sale of Bonds, &c.

MESSRS. LANCE & CO. are making more generally known in England, the great advantages of American Securities for investment.

During the present year Messrs. Lance & Co. have disposed of a large amount of American and Canadian Railway Bonds, and are fast extending their connection, they will be happy to correspond with parties having good Amer. Securities for sale. Messrs. LANCE & Co. have had experience in the purchase and shipment of iron, and offer their co-operation to those about to negotiate for the disposal of bonds and the purchase of rails.

P.S.—Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published. 10 Regent st., WATERLOO PLACE.

LONDON, Oct. 1855.

6m46

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.

A. W. GREENLEAF, late of No. 2 Wall st.

REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

ENGINEERING WORKS.

LYONS' TABLES.

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.

SHEET NO.	1. General Table for all Bases and all Slopes.	13. For Base 18 ft. Slope. 1 1/2 to 1
2. For Side Hill Cuts and Fills 15.	14. " 20 " 1 1/2 to 1	15. " 24 " 1 1/2 to 1
3. Base 12 ft. Slopes 1 1/2 to 1	16. " 24 " 1 1/2 to 1	17. " 25 " 1 1/2 to 1
4. " 14 " 1 1/2 to 1	18. " 26 " 1 1/2 to 1	19. " 28 " 1 1/2 to 1
5. " 15 " 1 1/2 to 1	20. " 28 " 1 1/2 to 1	21. " 30 " 1 1/2 to 1
6. " 15 " 1 1/2 to 1	21. " 30 " 1 1/2 to 1	22. " 30 " 1 1/2 to 1
7. " 15 " 1 1/2 to 1	22. " 30 " 1 1/2 to 1	23. " 32 " 1 1/2 to 1
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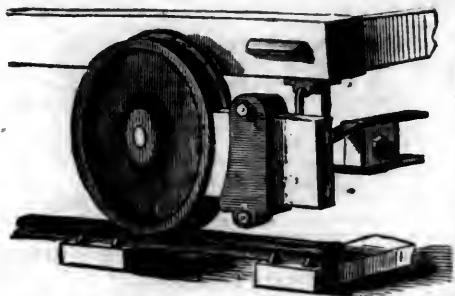
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The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

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Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R.
Memphis, Tenn., April 11, 1856.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and cleaning, graduation, masonry and, bridging of forty miles of the North river division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.

The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for handling.

The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.

It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1857. Good reference will be required of Contractors as to ability to carry out their contract.

Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET,
Engineer M. and O. R. R.

6117

Notice to Contractors.



OFFICE OF THE LONG DOCK COMPANY,
Jersey City, April 15, 1856.

SEALED PROPOSALS will be received at this office until the 6th day of May, proximo, at 10 o'clock A.M., for grading two miles of railroad; including a double track TUNNEL, about 4,000 feet long.

The Tunnel is located in Hudson City, about one mile from the Hudson river, and through the Ridge of Trap Rock known as "Bergen Hill."

The whole work to be completed on or before the first day of November, 1857.

Specifications, Plans, Profiles, Sections, &c., of this work may be seen at this office, or at the office of the NEW YORK AND ERIE RAILROAD COMPANY, Erie Place, West Street, City of New York.

8115

HOMER RAMSDELL,
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

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Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.
New York, Saturday, May 10, 1856.

Florida Railroad.

The construction of a railroad has been recently commenced, and is now making rapid progress across the neck of the Peninsula of Florida. We believe its completion is destined to effect a great revolution in the course of trade and travel, in opening a route which must supersede all others connecting the Gulf with the North-eastern States, as well as forming an important channel of communication between the latter and extensive portions of the valley of the Mississippi river.

The great features in favor of this route, of which the railroad forms a link, are the ease, rapidity, and economy with which intercommunication, or transit of passengers and merchandise can be effected. The distance will be less than by any other route by land or water; the time less; the cost of transit much less than by any interior route, and less for high-priced goods than by water; while for passengers between the North-eastern and the Gulf cities no other route will compare with it for comfort, cheapness, nor, probably, for safety, as the whole distance with the exception of the railroad will be by first class steamboats, over one of the safest routes in the world. It will in fact be at all times extensively used as a delightful route for pleasure travel and

for migration, northward in the summer, and southward in the winter seasons.

By reference to a map of the United States it will be seen that the only obstacle to a very direct route from New York to New Orleans by the Atlantic Ocean and the Gulf, is the *Peninsula* of Florida. The direction of the Atlantic coast is from South-west to North-east,—the difference in longitude between New York and the eastern coast of Florida, where crossed by the above road, being about eight degrees. But for the *Peninsula*, this route would be shorter and more direct than any one practicable for a railroad. The *Peninsula* with its system of keys or islands, however, extends itself some four or five hundred miles below the northern shore of the Gulf of Mexico, increasing the water route to the Gulf by twice this distance, and forcing vessels into one of the most dangerous tracks known to mariners. Between the coast of Florida and the Bahamas, the Gulf stream exerts its greatest force. Against the dangers of this unceasing current, no prudence or foresight can guard. The low and sunken reefs and islands which skirt the southern shore of Florida, are yearly strewn with wrecks, and costly cargoes of merchantmen. Added to these dangers are the tropical heats which render a voyage around the south coast of Florida so destructive to life and property. All these disadvantages weigh most heavily upon the commerce between the North and South, increasing vastly the charges for transportation and insurance, reducing in a corresponding degree the movement of merchandise, and entirely closing up the route to the traveller.

The evils to commerce resulting from the peculiar conformation of the *Peninsula* of Florida suggested at an early day the plan of cutting across it a canal, at that time the only known artificial mode of intercommunication. Nearly forty years ago a survey was made for such a work by General BERNARD, by order of the United States Government. General Bernard reported against the practicability of a canal, for the reason that a sufficient supply of water could not be maintained at the summit, on account of the open and porous nature of the soil. All ideas, consequently, of avoiding the dangerous navigation of the southern coast of Florida were necessarily abandoned, till the intro-

duction of railroads. For the construction of such a work, the route surveyed and found impracticable for a canal, offers extraordinary facilities. In many respects a railroad will serve a much better purpose than any canal that could, under favorable conditions, have been constructed. The barrier opposed by the *Peninsula* is, therefore soon practically to be surmounted. We propose to consider, briefly, the effect of such an achievement upon the course of commerce and travel between the South and the North, in swelling the volume of the present movement.

We will in the first place discuss its comparative advantages as a route of commerce over all others between the various Gulf ports and New York.

The commercial relations between New York and the Gulf of Mexico are now carried on almost entirely by sailing vessels,—there being only one semi-monthly line of steamships between New York and New Orleans. The rates of charges by the regular line of sailing packets will average about 15 cents per cubic foot, or about \$6 per ton. From New York to New Orleans, the average charge is about 10 cents per cubic foot; from New Orleans to New York 20 cents, on account of the great excess of merchandize going north. The rates of insurance will average 1½ per cent. The charges on a ton (by measurement) of freight worth \$1,100 from New York to New Orleans consequently average as follows—

Freight (15 cents per cubic foot) ..	\$6.00 per ton.
Insurance	17.87½
	\$23.87½

The cost by steamship will be—	
Freight (30 cents per cubic foot) ..	\$12.00 per ton.
Insurance, as above	17.87½
	\$29.87½

The average length of trip between New York and New Orleans by first class sailing vessels is about 20 days. The time required for the round trip by the regular line will average at least 90 days.

The steam packets make the trip from New York to New Orleans in about 9 days.

By the route proposed by the *Peninsula* of Florida, the time required for the transmission of freight between New York and New Orleans will be reduced to 4 days and 17 hours as follows—

By steamship from New York to Fernandina, 761 miles, at 13 miles the hour 58½ hours.
 Transfer and transit across the Peninsula 24 "
 From Cedar Keys to New Orleans, 399 miles, at 13 miles per hour 30½ "

113 hours.

—Equal to 4 days and 17 hours, or about one-half the time now required for steam packets and one quarter the time for sailing vessels.

The distance performed by water on the Peninsula route will be 1,161 miles; or only about one-half the whole distance around the Florida Keys. The cost of transportation would consequently be reduced in the same ratio. But in the Gulf a much less expensive class of steamboats would be used. This advantage, taken in connection with the greater stowage capacity of the ships, due to the fact that they would have to carry coal only for about 3 days' use, or 761 miles, against 9 days' use, and 2,000 miles by the outside route, leaves no doubt that the charge by the former route would not exceed one-half that by the latter.

The comparative cost by the several modes will stand as follows—

PENINSULA ROUTE.		Per ton.
By steamship to Fernandina, say	138	\$4.00
By railroad across the Peninsula, 138 miles		4.14
By steamer from Cedar Key to New Orleans		2.00
Insurance ¾ per cent.		9.62½
		\$19.76½

Outside route by steam packets as above. \$29.87½
 Do. do. sailing do. do. 28.87½

showing an advantage over steamships of \$10.11½ per ton; and \$4.11½ per ton over sailing vessels, irrespective of the saving of time.

The rates of insurance given are such as charged on the outside route by the Globe Mutual Insurance Company of New York. The charges on the Peninsula route are in part estimated. The charge to Savannah by steam is ⅝ per cent. The charge on the Gulf would not be greater than on Long Island Sound, nor more than ¼ per cent.,—making the whole charge for insurance by this route ⅞ per cent.

The rates of charges upon the two modes of transportation now used, are the average rates charged by W. NELSON & SON in this city, owners of the leading line of sailing packets, and by M. O. ROBERTS' line of steam packets.

The greater part of the freight is charged by measurement; 40 cubic feet being equivalent to a ton. By the steamship line heavy freights such as butter, cheese, and other kinds of heavy groceries pay one cent per pound. The charge per barrel, which averages between 5 and 6 feet, is about \$1.65.

Upon the construction of the proposed railroad, therefore, it seems demonstrable that it will take the greater part of the more valuable kinds of freight between New York (which in this discussion represents all the great Eastern cities,) and the cities bordering the Gulf of Mexico.

We have thus far said nothing in reference to the peculiar advantages which fit the Peninsula route to become a great highway of commerce.—The harbor of Fernandina, the Atlantic terminus of the proposed railroad, is one of the best on the

Atlantic coast South of Norfolk. Its entrance, having three channels, is easy of access with all winds. The average depth of water on the bar, at low tide, is 14 ft., with a rise of water at ordinary tides of 6 ft., giving a depth of 20 ft. at high tide. At neap and spring tides, the rise is from 7½ to 9 feet, giving a depth at all times of from 20 to 23 feet. The harbor has a depth of from 20 to 50 feet. It is perfectly land locked, with extensive anchorage and holding ground of the best description. The deep water line abutts the shore of Amelia Island for a distance of two miles. The railroad will run immediately upon the water line, affording every facility for loading and unloading. The entrance from the open sea to the wharves will be only about two miles. The highest part of Amelia Island, which lies between the harbor and the ocean, is, we believe, about 100 feet above sea level. There is probably no more healthy site for a town than Amelia Island. It is of sandy formation, of sufficient elevation for thorough drainage, and for its whole length lies exposed to the open sea.

The excellence of this harbor led to its selection as the first one south of Savannah to be fortified. A large fortification, (Fort Clinch,) is now being erected for its defence. The Chief Engineer of the United States, in his report upon the subject of erecting fortifications on the southern coast, says—"Cumberland Sound," (the entrance to Fernandina), "the most southern harbor on the coast of Georgia, is one of the safest and most accessible." It has 4 feet more depth of water than Charleston, which has ten over her bar. Savannah has eight feet at low water, at her wharves, and eleven feet at the anchorage below. Baltimore has sixteen feet, with a tide of from one to three feet. The greatest depth of water at the South-west Pass below New Orleans, is only thirteen feet with a tide of only about a foot. These statements will give a good idea of the value of the harbor of Fernandina, which has never less than twenty feet of water at high tide, a sufficient depth for most of the largest class of merchant ships and steamers.

The route for the railroad is very nearly straight and level, the greater part of the distance being over pine lands. No grade exceeding 12 feet to the mile need be used.

The Gulf terminus of the road is Cedar Key. This harbor has a depth of water over the bar of 10 feet at low water, and 12½ feet at ordinary high tides. The harbor is spacious and may be easily made a very commodious one. It has a depth of water equal to that of any port on the Gulf with which it will have any connection, with the exception of New Orleans, which has 14 feet at high water. For the Gulf a different class of steamboats, of much lighter draft, but of equal tonnage with ocean steamers will be used. The Sound steamers are a kind well adapted to the navigation of the northern part of the Gulf of Mexico. Their cost if compared with their tonnage, is much less than that of ocean steamers. They can be run at a much lower cost and carry at a much cheaper rate.

We have described the harbors, and the route for the railroad across the Peninsula, for the purpose of showing that the apparent advantages of this route are not in any manner neutralized by the lack of proper facilities for transit across the Peninsula. Our description of the harbors and o

the route is taken from official documents belonging to Government.

Upon the completion of the proposed railroad, therefore, sufficient reasons appear to have been stated, why the route to be formed by connecting lines of steamships, will compete successfully with all other routes or modes of conveyance. But there are additional reasons which will exert much greater influence than that of cost, and which would give to it, at double the cost of any other route, the carriage of the greater part of the more valuable freight between New York and the cities bordering the Gulf.

The application of steam to locomotion by placing the merchant and manufacturer entirely independent of the capricious forces upon which they once depended for receiving and forwarding their merchandise and products, and is effecting a great revolution in commercial affairs. In such, the great desiderata are certainty and dispatch. Their value is as much a subject of measure, as quantity or quality, or any other attribute of property. The use of steam gives the merchant the absolute control over his business. He buys with reference to a specific object or demand. Steam enables him to meet them. Without steam he would be subject to agencies over which he has no control, and which may cause a delay which may be equivalent to a very serious loss. The value of many kinds of goods depends upon the rapidity with which they are transported. The fickleness or whims of fashion render dispatch equally necessary even for goods, the quality of which is not injured by keeping. Hence, the steady increase of steamers wherever they can be well had, at the expense of sailing vessels. The vast magnitude and ramifications of the express business of the country most forcibly attests the value attached to celerity of movement. There is probably no more striking instance of value of speed and certainty, than the change that has taken place in the transportation of merchandise between Boston and New York. No person not immediately connected with this business has the least idea of its magnitude. The best evidence of this is the fact, that New England, of which Boston is the focus, is the great seat of manufacturing industry of the country, while New York is the point of distribution. So completely has this enormous business been monopolized by the great lines of steamers running in connection with railroads, that they have driven off every line of packets running outside of Cape Cod. Hardly a ton of freight except of the coarser or cheaper kinds, takes this route, though the charge by steamers is twice that by sailing vessels. These striking facts prove the value of rapid and regular movement. The result will be the same wherever steam can be successfully applied.

The change that has been effected in the intercourse between Boston and New York since the Peninsula of Cape Cod has been cut off by lines of railroad, is a good illustration of what is to follow the construction of a railroad across the Peninsula of Florida. The change must be much greater in the latter case than the former, for the reason that compared with the inside, the outside passage around the Capes of Florida is much more dangerous than that around Cape Cod. Another fact in favor of the former is the dangers and losses arising from the excessive tropical heats en-

countered by running down into the latitude of Cuba. Another, is the shallow harbors of the Gulf Ports excluding large vessels from them. When, therefore, the construction of the above road shall enable the merchant at New Orleans, Mobile or Galveston, to receive his goods from New York in six days after they shall be ordered, and in perfect order—the only limit to the business on this route will be that of the railroad across the Peninsula. No high priced merchandise will be sent round that can be sent across. The change will be as complete and perfect as that between Boston and New York.

We shall resume the consideration of this subject in our next number.

Railroad Earnings.

HUDSON RIVER R. R.

Receipts for April, 1856.....\$199,802.74
April, 1855.....140,586.27

Increase.....\$59,216.47

NEW HAVEN R. R.

The receipts of the New York and New Haven R. R. for April, were:

Passengers.....\$66,826.87
Freight.....10,000.00

Total.....\$76,826.87
Am't paid Harlem R. R. Co.....4,014.40

April, 1855.....\$72,811.97
67,068.40

Increase.....\$5,743.57

CLEVELAND & TOLEDO R. R.

The receipts of this road for April amounted to.....\$130,229
April, 1855.....102,810

Gain.....\$27,419

COLUMBIA R. R.

The amount of tolls collected on this road for April, were.....\$93,760.80
April, 1855.....32,239.87

Increase.....\$61,520.93

For the five months ending April 30th, the aggregate of these was \$374,113, against \$317,110 for the corresponding period of last year.

COVINGTON & LEXINGTON R. R.

Receipts for April, 1855.....\$26,577
April last year.....15,577

Increase.....\$11,000

CHICAGO & ROCK ISLAND R. R.

Earnings for April, 1856.....\$132,219.95
" " 1855.....119,322.63

Increase.....\$12,897.22

MICHIGAN CENTRAL R. R.

Earnings for April, 1856:

Passengers.....\$147,481
Freight.....125,882
Miscellaneous.....7,539

Total.....\$280,802
April, 1855.....235,485

Gain.....\$45,317

HARLEM R. R.

Receipts for April.....\$89,365
April, 1855.....77,154

Increase.....\$12,211

The earnings of the Lacrosse and Milwaukee Railroad (58 miles opened) in April were \$32,138. Those of the Galena and Chicago Railroad are

stated to have been, in round numbers, \$193,000, against \$175,000 in April, 1855.

Albany and Susquehanna Railroad.

In the last session of the Legislature of this State, a law was passed authorizing the towns along the line of the Albany and Susquehanna Railroad to subscribe to its stock. The *Coopers-town Freeman's Journal* has, some time since, proclaimed its opposition to the principle of town subscriptions for such a purpose. To this a reply has recently been made by Edward Tompkins, Esq., of Binghamton. This letter contains a variety of most interesting information with regard to the population of that part of the State. The road, it will be remembered, traverses the interior counties of Schoharie, Otsego and Broome, besides the county of Albany on the Hudson.

Mr. Tompkins sets out with observing that the county of Otsego, though possessing the highest advantages as to the character of its population, climate and productions, has yet decreased 774 in its population during the last ten years. The counties of Broome and Tioga in this State, and of Susquehanna in Pennsylvania, are similar in the main to Otsego, the principal difference arising from the circumstance that the latter was earlier settled. In 1840, the valuation of property in Otsego was nearly three times that of the other three united. At present these contain double her population and wealth. What has been the cause of the change? Simply this. Otsego has had no railroad facilities; the others have. A comparison of the census of 1855 with that of 1850 shows this in the clearest light. In 1850, Greene county contained 33,126 inhabitants. In 1855 it had only 31,157—a loss in five years of 1,989! Schoharie, in the same period, shows a loss of 29; and Chenango of 396. Otsego also falls 774 behind. Delaware, in four towns, lying contiguous to the Erie road, has gained 1291; but has also lost 1376 in the towns too remote from the line to be benefited by it. "Here then," says Mr. Tompkins, "is a territory larger than the State of Connecticut, with a fertile soil, a climate of unrivalled healthiness, a more than ordinary supply of water power, in the midst of schools and churches, with a dense New England population and New England institutions, presenting the only exception that can be found in the United States, to the general law of prosperity, progress and growth, that attend the children of New England wherever they go! The fact is as startling as it is instructive. It is not rendered less so by the consideration that during the same ten years, Broome county gained 10,843, and other railroad counties in like proportion." This is not all, however. The several towns of Delaware and Otsego present in detail the same results. The towns of Delaware having no Railroad facilities have decreased in five years 1,386. Even this loss has been in some measure counteracted by the expectation of such works. The same feature has been noticed in the towns of Otsego. Six of these which lost, between 1845 and 1850, 599, gained between 1850 and 1855, in consequence of railroad influence, 777. Mr. Tompkins continues:

"The day has passed when intelligent, enterprising men will settle in a region where they are deprived of the facilities that have now become indispensable for the transaction of business. Unless they can know what is going on in the great markets of our country as soon, and be able

to act as quickly in taking advantage of that knowledge as others, they are in no condition to compete with them with any chance of success.— Unless the farmer can get his products to market as cheaply and as rapidly from Otsego as from Broome or Chautauque, he will certainly not purchase your real estate, and those counties will continue to gain their thousands per year, while Otsego may think it fortunate if its losses are no greater than they have been heretofore."

The remainder of this communication is devoted to the general subject of corporate subscriptions to works of internal improvement, on the principle of general good. As this ground has been often travelled over in the *Journal*, we forbear continuing further. The figures given above will be interesting to many, as showing the principal cause why some parts of the Empire State are falling behind others in the Union in the increase of wealth and population.

The British System of Railroads.

It is shown that English railroad stocks yield about 2 per cent. on the invested capital. Only two very short lines bring over 7 per cent. In France, the Northern and Eastern Railroad yielded in the year 1855, 15 per cent.; the Lyons, and the Lyons and Mediterranean railroads 16 per cent.; the Orleans line 15½ per cent.; the Western Railroad 15 per cent. The entire length of the French railroads is 2,880 English miles. They cost £58,000,000, and their gross income last year amounted to about £9,848,000, about 14 per cent of which was clear gain.

If we compare the six principal railroad lines of France with the six principal railroad lines of England—namely, the London, the Northwestern, the Great Western, the Great Northern, the Midland, the Lancashire and Yorkshire, and the North-eastern—we see that their length is 2,660 miles, built at a cost of £122,000,000, consequently more than the cost double of the French lines, though they are only two hundred miles longer. The gross receipts are nearly the same, namely, £9,785,000.— Hence it is clear that the capital invested in English railways is estimated to be £300,000,000, in France £100,000,000, in the United States £150,000,000.

Even in the United States, where, at the close of the year 1855, there were about 23,384 miles of railroad, the receipts have diminished. The gross receipts during the past year of the 8,216 miles in the State of New York, which cost \$125,250,000, were only \$20,843,385. Though they yield nearly 7 per cent., they are considered a bad investment in a State where capitalists can get far higher interest for their money.

In Germany and Austria are numerous railroads which yield over 10 per cent. Among them are the Cologne and Minden, the Leipzig, Magdeburg, the Ferdinand, Northern Line, and several others. Still more numerous are the railroads which yield 6, 7, 8 or 10 per cent.

These results show that the English railroads yield the smallest, and the French the largest percentage on the capital invested. We may, as a general rule, say that English lines of railroad are too expensively constructed; still, it is not always so. The Belfast line cost £13,839 a mile, and the London and Blackwall £283,818. The principal railroad lines in England cost between £30,000 and £31,000 a mile. In France they constructed 54 miles of road for the same money that in England was expended on 40 miles, and in England 54 miles yield only as much 42 miles in France.

This hopeless condition of the British railroads induced a reaction in the past month. In England railroad profits have been diminished by too great a rivalry. The parallel lines have tried to ruin each other, and for the most part they have succeeded. A company, consequently, has been formed for promoting the interests of the British railways. The different companies have united their interests and will wage no more war with each other. As it is they will find ways enough to rob

the public. Even in England travelling by railroad is by no means cheap. The first class of the English and French luges can scarcely be compared, as to comfort and luxury, to our second class. The luxury of our first-class carriages, as on the Aix-la-Chapelle line in Bavaria, and on some of the Prussian railroads, is not to be found in England or France, and still less in Belgium, where the second class is scarcely to be compared with our third.

Railroad traveling in England is nearly three times as dear as on the continent. Season tickets in England are issued at a cheap rate. The company issues season tickets to persons for a certain distance, on which they may make two trips a day. These tickets are mostly taken up by persons who have business in the large cities, London, Liverpool and Manchester. They leave their homes early in the morning, and return after business hours. It would take nearly twice as much time if they lived in some remote part of London to go to their business-place, and they would even spend more money in omnibusses, etc. They prefer to live a few miles out of the city near a railroad. We are therefore not surprised to see that, in the year 1854, no less than 11,000,000 persons arrived at the several railroad depots in London; \$6,000 season tickets would be enough to make up this number.

The small profits of the English railroads is not to be accounted for by low fares for passengers or freight. There are other more important causes. The best fruits are eaten up by the so-called railway locusts. In this class of insects are to be reckoned, first, the directors, then the members of Parliament, the engineers, the gamblers in stocks, and, in general, the whole body of honorable sharpers. The directors gamble in stocks on the Merchants' Exchange, and in their hands are all the interests of the line. Is it astonishing that they make money and sometimes lose it, or is to be wondered at that railroad securities are at such a discount in England? Says the *Economist* in one of its late numbers:—"To gain money may risk life and honor; but he who has railways to manage can make a fortune at the expense of shareholders without risking either. It has happened that directors have fraudulently appropriated sums like £80,000 to buy their own shares, or have appropriated large sums of money, and accounted for it under the head of 'sundries.'"

In the year 1845 the railroads yielded from 8 to 10 per cent. These profits gradually fell from 10 to 5, from 8 to 4, from 9 to $3\frac{1}{4}$ per cent. on the capital invested, in spite of the increase of freight and passengers. This is owing to the secondary railway lines. These lines were generally so constructed as to be of use to the two principal lines. They were advertised for sale, and as each of the principal lines wished to acquire them, enormous sums were offered and paid for them.—Of course, the profits of the principal line were thereby proportionately diminished. But great swindles were effected in the matter of dividends. Expenses which should have been paid from the profits, were paid out of the capital. The amount so abstracted was not replaced, and purchases were made at long periods to avoid payment. This, naturally enough, gave higher, although imaginary dividends; the shares were coming up; the directors sold their shares and pocketed the gains. The only persons taken in were the simple shareholders, who believed in high dividends.—Large sums were paid to landowners as indemnity for expropriation.

In this way the companies had to pay from £4,000 to £8,000 a mile for land. In one case £120,000 was paid for a tract of land which was only valued at £5,000. A landowner once demanded £80,000 for his land, but finding rivals in the business, he ceded it for £80. The engineers were in many cases in the pay of these interested landowners. Even among members of Parliament these railway locusts were to be found. To have influence in the House of Commons, the companies elected members of Parliament as directors, and there are now no less than 81 directors members

of Parliament. A goodly share of the profits is made way with by lawyers and attorneys. We know a case where six of these locusts divided among themselves £57,000; and lately it was shown that a company had paid the sum of £180,000 for court and Parliament fees in the space of nine years. It should be borne in mind that the fees of witnesses before Parliament are six guineas a day.

But the real root of all these evils lies in the fact that the interests of the shareholders are wholly under the control of the directors. These latter are generally good speech makers; and are seldom opposed by the shareholders, for obvious reasons. Such are some of the ways of fortune in England. In America the same evils, to some extent, are to be found; but the Americans are less timid, and they are very energetic in remedying abuses. England is now checkered with railways, but the English have paid dearly for the experiments, by which the two continents have profited. —*Allgemeine Zeitung*.

Rome-Jacksonville and Rome-Gadsden Railroads.

Railroads between these several points were projected some years ago; but, on account of the failures in the crops, abandoned for the time. Mr. Eugene Le Hardy, Civil Engineer, has recently called attention to the subject, in a lengthy and able communication to the *Rome (Ga.) Commercial Advertiser*. The writer urges strongly the importance of these works from the central position of this part of the State—it being about equidistant between the Atlantic, the Mississippi, and the Gulf; from the general elevation, healthiness, and productiveness of these valleys; from the water-courses they contain, and the manufacturing power which these can furnish; from the benefits already derived from railroad construction; &c.—These two lines, he contends, though short, will prove of great importance in the national railroad system. From the South-east, lines of roads are already in operation between Charleston, S. C., and Rome, Ga. Also, from the North-east, roads will soon be completed from Washington, D. C., to Dalton, Ga. By running a short line down from Dalton, by way of Rome, and thence to Jacksonville, this communication could be extended to Selma, Ala. Again, a line from Rome to Gadsden, in connection with one now in progress from the latter point to Guntersville, would furnish a more direct route between Charleston and Memphis than any other completed or in progress. The distance between Washington and Mobile, by way of Atlanta and Montgomery, is 1,206 miles; while by way of Dalton, Rome, Jacksonville, and Selma, it would be only 1,015½ miles; showing a saving of 180 miles, or nine hours' travel. As to the Charleston route, the distance between that place and Decatur, where they all intersect, by way of the projected line, would be 534 miles; while by Stephenson, Chattanooga, and Kingston, it would be 568 miles, or 34 miles farther. If again, a line is taken by way of Cleveland, Knoxville, Anderson, &c., over the East Tennessee and Georgia and the Blue Ridge roads, the total length would be 651 miles, showing a distance of 117 miles in favor of the projected work. The routes are represented as universally favorable for railroad construction. No tunnels are required; no heavy cuttings or bridging; no grades at any point exceeding 40 ft. per mile; while the greater part of their lengths will be but 10 feet or under. Such a circumstance will cut off all competition, even if a shorter route

can be obtained; as in such a case extensive cutting and tunnelling will be required.

Evansville, Indianapolis, and Cleveland Railroad.

The second annual report of this company, being for the year ending May 1st, 1856, shows their whole assets to be \$3,585,493; their cash receipts, \$61,543; and their disbursements, \$350,057. The first consists of \$200,000 bonds subscribed by the city of Evansville; \$50,000 by the city of Lamasco; \$251,492 real estate in trust deed; \$160,040 in real estate conveyed, not in trust deed; \$153,241 real estate subscribed, but not conveyed; \$158,954 cash subscriptions; \$309,500 cost of graduation; \$750,000 subscriptions payable in construction; and \$1,550,000 iron bonds, to be taken at par by contractors. Of the receipts \$35,479 have been derived from stock subscriptions; \$13,245 from instalments on sales of lands; and the remainder from interest and profit and loss. Of the disbursements \$100,000 were Evansville city bonds; \$25,000 Lamasco do.; and \$180,000 real estate bonds. The total land sales have been \$41,131. The company's present liabilities are—\$8,600 time warrants on treasury, and \$7,396 floating debt, to which are to be added interest on \$180,000 real estate bonds. The amount in treasury is \$15,543, showing a balance against the treasury of \$452. The present number of stockholders is 654. We find no particulars given as to the progress of construction.

New Orleans, Jackson, and Great Northern Railroad Company.

The election for Directors of this road came off recently. In consequence of the newspaper controversy that has taken place between opposing parties connected with the road, an animated contest was anticipated; but such was not the case. The Ross ticket, as it may be called, from the circumstance that Mr. Ross heads the ticket, was elected without opposition, and by a majority of votes representing the entire stock of the Company. The following gentlemen were elected:—

For Louisiana Directors:—James Robb, Christian Reselien, George Jonas, James H. Caldwell, Charles Pride, E. P. Simpson, A. M. Holbrook, Cornelius Fellowes, Alfred Penn, N. C. Foiger, John Calhoun, William Henderson.

For Mississippi Directors:—W. R. Cunningham, William McWillie, T. C. Tupper, C. C. Shackelford, Wirt Adams, E. D. Brower, Christian Hoover.

Lexington and Big Sandy Railroad.

The *Mt. Sterling Whig* states that the prospects of that work are very flattering, and that not over \$120,000 will be needed to prepare the first 50 miles east of Lexington for the rails. A considerable quantity of these have been detained in New Orleans since December last, by the river being frozen in the first place, and the unusually high rates demanded for transportation in the second. A contract has been made for one first class locomotive at the Taunton Works—to be delivered at Wellsville, early this present month. In addition to the above, arrangements have been effected for the delivery of 4,000 tons of rails, by the 1st of September next, at New York, Baltimore, or New Orleans. The city of Lexington and county of Fayette have made subscriptions on behalf of the work; but these have not yet been paid over to the company.

Milwaukee and Watertown Railroad.

We learn that the Milwaukee and Watertown railroad company have just let the contract for the building of their road to Columbus, Columbia county, by the 1st of November next. They have also contracted with Martin & Rugee to build a bridge across the Rock at Watertown to be completed in sixty days, and for piling Mud Lake, one mile in length, to be finished by July 1st. This will enable the company to have their road in operation to Lowell, ten miles west of Watertown, by the 1st of August next. The President, W. B. Hibbard, Esq., leaves for New York this morning to purchase 2,000 tons of railroad iron, to lay the track from Watertown to Columbus.

The new management have taken hold of this enterprise with great earnestness and vigor. They have secured the additional Milwaukee city bonds (\$125,000) and have obtained a further cash subscription of \$62,000, and \$25,000 in town bonds. With these increased means they will be able to push their road ahead rapidly and every mile added to it, west of Watertown, must yield more than a proportionate increase to the travel and traffic over this important thoroughfare.

Much of the credit for the improved prospects of this enterprise rightly belongs to the new President, Wm. B. Hibbard, Esq., who never does anything by halves. The road traverses a remarkably fine region of the State, and touches a number of important points. It is very straight, of easy grades, well stocked for business, under good management, and with every prospect of paying handsomely. The new Superintendent, Mr. O. F. Blount, seconds the President in his energetic labors, and is putting the road in excellent shape.—*Milwaukee Sentinel.*

Alabama and Mississippi Railroad.

The annual meeting of the stockholders of the Alabama and Mississippi rivers railroad company, was held at Uniontown on Monday last. There was a large majority of the stock represented, and we learn a better representation of the stock has not been had since the road was commenced. The following Directory was elected:

President—Col. J. L. Price.

Directors—Col. P. J. Weaver, Col. J. W. Lapley, W. T. Moore, Richard H. Adams, J. R. John, A. C. Davidson.

Col. David A. Boyd, re-elected Secretary and Treasurer.

We are happy to learn there was a firm determination evinced on the part of the stockholders to have the work completed to Uniontown right away; which determination the Directors we have no doubt will see fully carried out. The entire work, grading, masonry, bridging and track-laying, is now under contract to be completed by the 1st day of April, 1857. Col. J. S. R. Lenord, who is known to most of our citizens as a most energetic and reliable contractor, has taken the work, and when Col. Lenord says he will do a thing in railroad it will be done. He is now already at work on the road with a very fair force, and as he can, he will increase it.

This looks like doing something. There is no road in the South offering a more profitable investment than this, and it has been a matter of mystery to us why the stockholders have been so lukewarm in the enterprise. The road could have been completed to Uniontown this very moment as well as twelve months hence. But the late action shows that they have thrown off their lethargy and are now going to do what should have been done some time ago—complete the road to Uniontown.—*Selma Reporter.*

Virginia Central Railroad.

The Central Railroad of Virginia is now laid with heavy rail throughout the whole line. The last piece of flat rail was taken up between Cobham and Lindsay's, in Albemarle county, a week since. The workmen are now engaged in finishing the road west of Staunton, and by the time the spring travel commences the road will be completed to Millboro', in Bath county.

Alabama and Tennessee Railroad.

The *Selma Sentinel* learns that Mr. Sanford, the contractor, will reach, with the track-laying, Columbiana Depot, in a few days, to which it is intended to run the cars immediately. This will make 77 miles completed. The *Sentinel* believes that when it gets finished to the 100 mile station, the road will not only sustain itself, but the proceeds will finish it to Gadsden in less than three years. The Coosa bridge is now ready for the iron; and the grading and cross-ties ready for the rails on the next 23 miles. Iron is now in Mobile, and can be had sufficient to lay it, on nine, twelve, or eighteen months' credit, if proper means are used. The *Sentinel* makes a strong appeal to the people of Talladega to come up and put their shoulders to the wheel in good earnest.

Pensacola and Montgomery Railroad.

The ceremony of breaking ground in this road took place at Pensacola, on the 26th ult. On the character and prospects of the work, the *Mobile Advertiser* says:—

This road is designed to develop the numerous agricultural and mineral resources of South Alabama, furnish her people with a long-wished-for direct transit to the Gulf, and powerfully help to build up Pensacola by adding to the population and commercial interest of that city, and to make her what her beautiful position and magnificent bay and harbor entitle her to be—a first class city, and one of the brightest gems on the borders of the Gulf.

It is expected, we are told, that ten miles of the road will be in operation at Pensacola next Jan'y, and perhaps thirty miles of it at the other end—say from Montgomery to Greenville; the entire road from Pensacola to Montgomery—160 miles—to be completed in about two years. After the completion of this work, the next important step to advance her prosperity will be an easy and direct communication with New Orleans, the great depot of Western and South-western commerce. The idea is suggestive, and deserves a thought from mercantile enterprise.

Mobile and Ohio Railroad.

We understand that this road is now in operation to Schoober, 170 miles from Mobile; and that the work of track-laying is progressing at the rate of two miles per week. The grading is nearly completed to Kentucky City on the Mississippi, and all that is wanted is the iron to lay the track.

The Pacific Railroad.

At a meeting of the Board of Directors of the Pacific Railroad Company, Mr. Edward Miller, late President of the North Pennsylvania Railroad, was elected Chief Engineer of the Pacific Railroad, to supply the vacancy, hitherto only temporarily filled, caused by the death of T. S. O'Sullivan. We have said that Mr. Miller was President of the North Pennsylvania Railroad, but he was also Chief Engineer, and it is in this capacity that he is best known. He accepted the office of President in order to rescue the Company from embarrassment, and in this he was eminently successful. As an Engineer, he is said to possess a reputation equal to that of any man in the country. It is presumed, that he will enter upon his duties immediately.—*St. Louis Republican.*

Baltimore and Ohio Railroad.

The Baltimore and Ohio, and Central Ohio railroad companies have entered into an arrangement by which the Baltimore company agrees, after the first of June next, to place all freights coming to Bellair from the East, on the top of the bank on the Ohio side, and to take from the Ohio bank all freights going East. This will be a great advantage to the Central road, and will make the arrangements for the transshipment of freight there certain and permanent.—*Wheeling Times.*

The Brunswick and Florida Railroad has been completed to the Santilla river, says the *Columbus Sun*, with the exception of a few slight breaks which will be connected by the middle of May, when the cars will run a distance of 82 miles. It will no doubt be pushed forward energetically to the neighborhood of Waresboro', at or near which place it will connect with the "Main Trunk." The Savannah and Gulf Railroad is also making headway towards the same point.

Electric Clock.

Silliman's Journal says: "The city of Mar-seilles has undertaken to establish a complete system of electric clocks. One hundred clocks will be set up by the first of May. The arrangements require the laying of 40,000 meters of conducting wire. The clocks will be placed in the street gas lamps, so that the hour may be read by night as well as by day. The whole will cost only 22,000 francs, and the care and supply of them per year 2,000 francs."

Marietta and Cincinnati Railroad.

This road was opened to Athens on the 29th ult., and it is expected that in a few days the cars will make regular trips to this point. The section between Athens and Marietta is expected to be completed early in the ensuing fall. The road is said to be one of the most substantially built works in the West. Being part of the great line between the cities of Baltimore and Cincinnati, it will doubtless have a large business drawn to it at an early day.

Atlantic and Gulf Railroad.

Books of subscription to this work are to be opened on the 12th inst., in Milledgeville, Augusta, Savannah, Columbus, Thomasville, Albany, Trouville, Waresboro', Bainbridge, Brunswick, Magnolia, Macon, Newton, Fort Gaines, and some other places.

Cincinnati, Union and Ft. Wayne Railroad.

This is the direct line connecting Cincinnati and Fort Wayne, as Union lies immediately between those cities. This can be seen by looking at any correct map. It is only 66 miles long, extending from Union to Fort Wayne. The line is finished from Cincinnati to Union, and the cars have been running on it for three years. Nineteen miles more, from Union to Portland, the county seat of Jay county, are ready for the iron, which it is contemplated to put down this summer, and also to push the grading on the next general section to Decatur, the county seat of Adams county. When completed to Fort Wayne, the valuable connections it will have there will throw a large business upon the line.

Pacific (Mo.) Railroad.

The *Missouri Republican*, speaking of the condition of this road observes—

A large number of passengers daily pass over this road, and much of the apprehension created by the only real accident that ever happened upon it—the disaster at the Gasconade Bridge—is giving way to the excellent management of the road, and the conviction that it is now as safe as any in the Union. The travel between St. Louis and Hermann is quite rapid enough, but between Hermann and Jefferson City, the progress is much impeded by the want of ballast on the road, and the prudence which is observed in passing over it.—The bridges over all the principal streams, it is now admitted, are excellent and most complete structures, and it will be a long while before any of the timbers give way.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	67	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscog. & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	29,296	15	15	South Western	92	1,097,496	465,500	1,024,920	263,506	141,368	8	---
Androscog.	20	91,192	232,193	343,317	29,296	12,807	10	10	Tennessee and Alabama	30	246,486	---	679,906	In progr.			
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	---	---	---	---	Tennessee and Mississ.	---	170,931	---	175,840	In progr.			
Port. Saco. & Port. M'th.	51	1,367,000	119,237	1,486,237	259,330	124,038	6	88	Memphis and Charleston	288	2,103,177	958,275	3,663,362	176,484	102,016		
Boston, Concord & Montreal.	93	1,808,093	1,059,512	2,771,310	233,234	120,834	---	---	Mobile and Ohio	153	2,568,555	1,902,921	4,596,412	199,932	109,236		
Cheshire.	53	2,085,925	999,313	3,170,687	330,221	143,565	2	---	Miss. Central.	188	642,534	---	628,303	In progr.			
Concord.	35	1,485,000	---	1,412,576	329,744	158,632	82	---	N.O. Opelousas & G.W.	55	2,930,425	671,545	2,657,565	In progr.			
Northern, N. H.	82	2,768,400	---	3,016,633	370,529	138,299	2 1/2	41 1/2	Vicksburg, Shreveport & Tex.	---	111,750	---	107,895	In progr.			
Court & Passumps. Riv.	61	1,048,145	787,608	1,780,062	162,697	55,173	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Rutland & Burlington.	120	2,233,376	2,662,396	6,378,428	394,971	214,793	---	---	East Tennessee and Va.	16	625,425	988,939	1,033,781	In progr.			
Vermont Central.	117	5,000,000	3,550,236	8,463,366	820,119	214,793	---	---	Nash. and Chattanooga.	251	2,819,330	1,497,081	3,843,694	316,090	112,177	---	
Boston and Lowell.	27	1,830,000	325,635	2,188,595	489,754	140,377	6	68	Covington & Lexington	98	1,302,504	2,235,939	3,738,753	264,973	138,094	---	15
Boston and Maine.	88	4,076,974	150,000	4,179,535	854,426	339,000	6	32 1/2	Lexington and Frankfort	29	431,091	159,299	635,363	90,930	34,864		
Boston and N.Y. Central.	74	2,240,300	1,618,671	3,463,418	59,917	8,740	---	---	Lexington & Big Sandy	---	---	---	428,057	In progr.			
Boston and Providence.	55	3,160,000	359,132	3,677,154	558,971	219,689	---	---	Lexington and Danville	---	540,117	61,525	570,463	In progr.			
Boston and Worcester.	68	4,500,000	655,428	4,865,419	1,008,004	404,461	0 1/2	86 1/2	Louisville and Frankfort	65	698,236	609,001	1,589,506	244,014	96,902	6	---
Cape Cod.	47	881,690	280,598	997,252	119,221	65,527	3	29 1/2	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.			
Connecticut River.	52	1,691,110	273,241	1,862,244	286,563	103,787	5 1/2	45	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,862,692	298,293	140,928	---	---
Eastern, Mass.	60	2,685,400	2,947,737	4,621,016	647,281	305,908	---	---	Clev. Col. and Cincin.	141	4,473,721	374,127	4,546,133	1,162,601	567,906	9	102
Fitchburg.	107	3,540,000	158,700	3,785,998	681,163	225,071	---	---	Cleveland and Toledo	200	2,675,425	2,689,301	6,124,629	736,272	398,986	10	75
Nashua and Lowell.	14	600,000	16,000	654,603	191,867	55,877	8	80	Clev. and Mahoning	103	---	---	628,533	In progr.			
N. Bedford and Taunton.	21	500,000	---	533,953	198,491	64,533	6 1/2	---	Clev. and Pittsburg	133	2,780,744	3,048,992	5,537,406	681,577	309,518	---	63 1/2
Old Colony and Fall River.	87	3,015,100	292,650	3,362,949	569,499	296,738	6	80 1/2	Cin. Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	488,620	---	---	64
Vermont and Mass.	77	2,232,541	1,035,670	3,269,727	254,726	87,313	---	9 1/2	Cin. Wilm. & Zanesville	131	1,120,450	1,131,265	2,326,459	In progr.			15
Western, Mass.	156	5,150,000	6,966,420	10,495,905	1,829,673	633,013	7	90 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,733	356,368	187,518	10	85
Worcester and Nashua.	46	1,141,000	205,565	1,351,271	240,780	75,760	2	42	Dayton, Xen. & Belpre	63	437,538	422,658	860,496	In progr.			---
Providence and Worcester.	43	1,510,020	338,461	1,866,696	811,430	138,057	---	73	Dayton and Michigan	140	1,076,602	393,011	1,186,826	In progr.			---
Hartford and N. Haven.	72	2,356,000	939,000	3,313,932	730,612	352,799	10	120 1/2	Dayton and Western	35	310,000	500,000	733,769	---	---	---	18
Hart'd, Prov. and Fitchburg.	123	1,845,610	2,090,124	4,060,869	286,085	119,611	---	---	Eaton and Hamilton	42	454,690	904,439	1,156,136	171,929	65,000	---	23 1/2
Housatonic.	110	2,000,000	474,177	2,429,066	330,792	18,351	---	---	Little Miami	65	2,963,921	1,171,785	3,648,172	681,562	336,708	---	92 1/2
Naugatuck.	67	1,031,800	673,995	1,677,167	338,266	---	---	---	Mad River and L. Erie	205	2,451,650	2,672,932	4,446,661	---	---	---	16
N. York and N. Haven.	62	2,992,450	2,264,656	4,906,784	986,025	341,667	---	26	Central Ohio	138	1,520,927	3,486,078	4,283,443	Recently opened.	---	---	12 1/2
N. Haven and N. London.	50	738,258	735,165	1,450,318	88,007	30,318	---	---	Ohio and Penn.	187	2,451,700	3,570,000	5,670,700	1,111,626	602,117	9	---
N. London, W. & Palmer.	66	509,200	1,073,673	1,594,383	124,044	66,331	---	---	Pittsburg, Mayv. & Cin.	50	371,350	81,000	390,933	---	---	---	---
Norwich and Worcester.	66	1,122,300	873,489	2,597,153	304,236	88,458	2 1/2	35	Sand'y, Manaf. & Newk.	127	1,350,000	2,206,357	3,552,387	328,958	164,479	---	---
Albany Northern.	32	439,005	1,623,098	1,840,695	117,718	9,904	---	---	Scioto & Hocking Valley	135	403,975	509,050	888,858	In progr.			---
Black River and Utica.	35	643,330	317,859	974,323	In progr.	---	---	---	Spring Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.			---
Buffalo, Corn. and N. Y.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	---	---	Tol. Washash & St. Louis	242	2,500,000	4,530,000	---	In progr.			---
Buffalo and N. Y. City.	92	798,439	2,587,849	3,401,868	288,392	31,896	---	---	Cin. Log. and Chicago	256	4,196,679	1,006,125	2,080,433	In progr.			5 1/2
Buffalo and St. Line.	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,552	---	---
Canandaigua and Elmira.	47	434,111	922,393	1,275,796	174,089	69,506	---	---	Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	366,012	193,142	7	59
Canandaigua & Niagara F.R.	91	1,315,000	2,279,854	3,495,832	1,812,087	603,946	---	34 1/2	Indiana Central.	66	611,400	1,261,179	1,907,911	350,176	134,376	---	48
Cayuga & Susquehanna.	85	687,000	606,889	1,187,562	135,433	48,649	---	---	Ind. Clev. & Pittsburg	83	834,167	1,101,971	1,671,544	---	---	---	20
Hudson River.	144	3,758,466	9,250,362	12,737,898	1,812,087	603,946	---	30	Jeffersonville.	87	1,014,252	604,000	206,544	94,318	---	---	---
Long Island.	95	1,875,148	668,949	2,555,986	301,793	116,462	---	80 1/2	Madison and Indianapolis.	67	1,647,700	1,336,816	1,205,000	286,146	112,880	---	---
New York Central.	534	24,154,860	14,462,742	25,523,913	6,663,581	3,162,126	---	91 1/2	New Albany and Salem	288	2,535,121	6,281,448	6,643,189	645,827	371,402	---	10
New York and Erie.	404	10,123,958	25,126,669	33,439,431	5,488,993	2,627,118	---	66 1/2	Peru and Indianapolis	73	---	688,814	150,000	90,000	---	---	17
New York and Harlem.	138	5,717,110	4,069,769	8,758,203	1,636,577	234,126	---	17	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	96
Northern, N. Y.	118	1,633,022	4,406,874	6,470,714	520,153	138,754	---	---	Chicago and Rock Is'd	182	3,141,600	2,387,155	6,214,152	In progr.			91
Oswego and Syracuse.	35	399,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and St. Louis	220	---	---	1,077,312	---	---	---	---
Pottsdam and Watertown.	29	467,200	204,180	749,683	In progr.	---	---	---	Chicago, Burl. and Quincy	135	1,475,300	1,811,557	2,761,429	722,580	379,821	20	---
Rensselaer & Saratoga.	25	610,000	140,000	890,423	241,149	82,600	---	---	Chic. St. Paul & F'd du Lac	178	2,900,000	1,325,000	3,625,000	In progr.			---
Saratoga and Whitehall.	48	500,000	395,000	719,000	171,909	21,089	---	---	Galena and Chicago.	298	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	111 1/2
Syracuse & Binghamton.	80	768,369	1,578,504	2,272,777	169,484	22,503	---	---	Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	---	99 1/2
Troy and Boston.	27	437,850	737,079	1,109,822	156,363	55,184	---	---	Peoria and Oquawka	93	569,889	818,454	1,388,342	In progr.			---
Watertown and Rome.	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	70	Ohio & Miss. (West. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---
Belvidere Delaware.	64	1,000,000	1,619,000	2,619,000	161,365	75,534	---	---	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.			---
Camden and Amboy.	94	8,000,000	11,407,200	8,636,523	2,017,127	961,941	12	---	Detroit and Milwaukee	185	638,000	1,128,964	1,966,969	---	---	---	---
Camden and Atlantic.	60	369,320	1,522,131	1,729,642	122,417	50,880	---	---	Mich. Central	282	6,021,916	6,142,023	10,300,147	2,215,283	879,556	---	95
New Jersey.	30	3,482,850	690,000	4,310,011	861,514	500,747	10	121 1/2	Green South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96
New Jersey Central.	63	2,000,000	2,266,178	6,883,149	398,728	171,603	---	---	Mich. Bay, M.L. & Ch.	155	764,075	442,726	1,193,766	In progr.			---
Morris and Essex.	53	1,157,895	375,000	1,636,560	225,893	102,474	6	---	Milwaukee and Miss.	106	1,826,428	2,487,889	3,578,757	991,843	417,443	17	83
Allegany Valley.	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee & Watert'n	72	354,861	133,000	514,238	In progr.			---
Cataw. W.L. & Erie.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Milwaukee and Horicon	15	554,200	---	354,109	In progr.			---
Cumberland Valley.	56	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Milwaukee & La Crosse	51	1,351,632	532,181	1,883,993	In progr.			---
Del. Lack. & Western.	10																

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	96	98
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	91	93
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1859		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	86
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	76
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	87 1/2	95
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	94	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	95
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	73	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	86 1/2	89
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	23
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	90 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		80
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	95	97 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	89	89 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	89	91
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		75
Indiana Central	600,000	Do. do.	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	83	
Indianap. & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	87	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	83	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	8	Feb'y, August	"	1865	73	75
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	80	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	98
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	96 1/2	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	80 1/2	90 1/2
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	97
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	96	97 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77 1/2	80
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96	97
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	83	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77	78 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	75	76

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	84
Do. do.	1,123,500	Do. do.	6	Jan'y, July	Balt.	1875	86	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95 1/2	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	102	105
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	96 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	93	94
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	90 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83	83 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	15 June, 15 Dec.	"	1860	59	90
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67 1/2	71 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87	87 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	92 1/2	93
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	90	
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	82	83
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-69	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83 1/2	84
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	87 1/2	88
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	108 1/2	105
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	103 1/2	105
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	93	94
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	82 1/2	83

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES.	Int't payable.	Off'd	Asked
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	87	89
Do. 5 do. 1858-60	May,	94	97	New Orleans, 6 per ct. ep. R.R. X	Do.	75	80
Do. 5 do. 1870-75	August,	93	95 1/2	N. Orleans, 6 per ct. ep. municipal X	Jan'y, July	80	83
Do. 5 do. 1890	November,	93	95	Philadelphia, 6 per ct. 1876-98	Jan'y, July	91 1/2	91 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	98	98	Pittsburgh, 6 per ct. coup. X	Divers	75 1/2	76
Albany, 6 per ct. coup. 1871-81 X	Jan'y, July	74	76	Quincy, 8 per ct. coup. 1868 X	Jan'y, July		
Baltimore, 6 per ct. 1879-90	Quarterly	97	99	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	84	85
Boston, 5 per ct. coup. X	April, October	97	98	Rochester, 6 per cent. coup. X	Divers	95	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	78 1/2	79 1/2
Clev'nd, 7 per ct. ep. W.W. 1879 X	Do. do.	101 1/2	101 1/2	Do. do. Municipal X	Do.	79 1/2	80 1/2
Chic'ago, 6 per ct. coup. X	Divers	89 1/2	90	Sacramento, 10 p. ct. ep. 1862-74 X	Do.	80	80 1/2
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	90 1/2	S. Francisco, 7 p. ct. ep. 1865, pay. N.Y. X	May, Novemb.	80	
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. ep. 1871 X	Do. do.	96	97
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August,	101	102 1/2	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	104	106
Dubuque, 8 per ct. ep. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	60 1/2	61 1/2
Jersey City, 6 p. ct. ep. W.W. 1877 X	Jan'y, July	94	95	Wheeling, 6 per ct. coup. X	Divers	87 1/2	
Louisville, 6 per ct. ep. 1880-83 X	Divers	70	79 1/2	Do. 6 p. ct. ep. Mna. 1874 X	March, Sept.	81	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	66	70	Zanesville, 7 do. X	April, October	97 1/2	

Cincinnati Stock Sales.

By HEWSON & HOLMES.
For the week ending April 30th, 1856.

BONDS.	
\$5,000 Cov'g & Lex., 7 per ct. 2nd Mortgage	65
2,000 Little Miami, 6 per ct., 1st Mortg.	82
3,500 Cov. and Lex., 10 per ct. Income	60
3,000 Ohio & Miss., 7 per ct. 2nd Mortg.	45
7,000 Cin. Ham. and Dayt., 7 per ct. 2d Mortg.	33
1,350 Ind. & Cin. 7 per ct. Dividend	70
10,000 Cin. Wilm. and Zanesv. 7 per ct. 2nd Mortg.	55
425 Little Miami, Divid. Scrip new issue	82
150 Cin. Hamilton and Dayton, Divid. Scrip.	102
1,000 Virginia, 6 per cent.	94

STOCKS.

237 Shares Ohio & Mississippi (60 days)	7 1/2
" " " "	8
" " " "	7 1/2
Cincinnati, Hamilton, & Dayton	65
Peru and Indianapolis	15
Cin. & Chicago	5 1/2
Little Miami	23
Covington and Lexington	15
Hillsborough and Cincinnati	14
Central Ohio	12 1/2
Cin. Wilm. and Zanesv.	15
Cin. Ham. and Dayton	65
Eaton & Hamilton	22

By KIRK & CHEEVER.

For the week ending April 29th, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	81
Covington & Lexington, 2nd Mort. 7 per ct.	65
Ohio & Mississippi, 2nd Mort. 7 per ct.	45
Marietta & Cincinnati, 7 per ct. 1st Mort.	65
Indianap. & Cin., 2nd Mort. 7 per ct.	70
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Cin. Ham. and Dayton, 2nd Mort. 7 per ct.	85
Cin. Wilm. & Zanesv. 2d Mort. 7 per ct.	56
Covington & Lexington, 10 per ct. Income	57
Indianapolis and Cincinnati Dividend	70

STOCKS.

Cin. Wilm. and Zanesv. 15.—Cin. Ham. and Dayton, 65.—	
Col. & Xenia, 86 1/2.—Cincinnati & Chic., 5 1/2.—Central Ohio, 10.	
—Covington and Lexington, 15.—Dayton and Western, 18.—	
Eaton and Hamilton, 23 1/2.—Fort Wayne and Southern, none.	
Indiana Central, 4 1/2.—Indianapolis and Cincinnati, 59.—Little	
Miami, 93.—Mad River & Lake Erie, 15.—Marietta & Cin.,	
14.—Ohio and Mississippi, 7 1/2.—Hillsboro' and Cincinnati, 14.	
—Peru and Indianapolis, 17 1/2.	

Extract from De Coppet & Co.'s Money
Circular for the European Steamer of the
7th Inst.

[TRANSLATED.]

New York, Monday, May 5th, 1856.

There has been much agitation in our Stock market since our advices of the 29th of April. The large shipments of specie during the week, and the withdrawal of some of the country balances, have caused our Banks to reduce their lines of discount and loans, at a moment when speculation had awakened to more activity. This measure on the part of the Banks has caused among operators a want of money, which compelled forced sales, resulting in a heavy fall on most of the railroad stocks, and especially on those which had been the object of speculation. This depression was followed by a reaction—nevertheless, our subjoined table of daily quotations shows a general decline on last week's prices. State stocks have been but little affected by the above movement. Securities for permanent investment remain generally very quiet, principally railroad bonds. The late non-payment of the Interest Coupons on the Bonds of the company which we name in another paragraph has thrown some discredit on this class of securities. In State stocks there has been a moderate degree of activity in Indiana Fives, at 1/4 advance; and in Virginia Sixes and Missouri Sixes, at a slight decline; some Louisiana Sixes have been done at 1 per cent. advance. In City and County bonds the business was most limited. In railroad bonds in those transacted at private sale we have nothing of note to report; at the Stock Exchange the business was small, with the exception of Illinois Central Construction, which have declined 3/8 per cent.; there have been a few sales of Erie Sevens, 1871, without any variations, and of Terre Haute and Alton Second Mortgage at a slight decline. In railroad stocks fluctuations have been large and sudden, resulting in a general fall. The most active ones have been Erie, Reading, Chicago and Rock Island, Cleveland and Toledo, Cleveland and Pittsburgh, Michigan Southern and Central, and New York Central. The two first ones were pretty steady; the others fluctuated largely. Panama, which had fallen the previous

week, on the news of damage caused by a riot, has again advanced. Money has been in active demand, at 7 per cent. on call. Rates for business paper tend upwards; we still quote them at 8410 per cent. Exchanges on Europe are not quite so firm as last week; London, 109 $\frac{3}{4}$ @110; Paris, 5.16 $\frac{1}{4}$ @5.17 $\frac{1}{2}$.
DE COPPET & CO.

Marie & Kanz' Money Circular for the European Steamer of the 7th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, May 5th, 1856.

The downward movement referred to in our last advices, went on increasing until the morning of the 2nd inst., when it assumed almost the appearance of a panic; but the movement having been much exaggerated, there was at the afternoon session a marked reaction. The quotations of to-day are, however, below those quoted in our last circular. The market is again weak at the close. The immediate cause of this decline is the greater demand for money, occasioned by the calling in loans by the banks. This step has been prompted by the heavy specie shipments now expected to prevail, added to apprehensions of the unfavorable influence on the money market to result from the excessive imports of merchandise during the past four months. State stocks weak, with moderate sales—Missouri, $\frac{1}{4}$ per cent. lower; Tennessee, 1; Virginia, $\frac{1}{2}$; Louisianas have advanced 2 $\frac{1}{2}$ per cent. City and County Bonds—No transactions of any importance. Railroad Bonds lower—sales trifling—Erie 1st Mortgage, Hudson River, 3rd Mortgage, Harlem 1st Mortgage, New York Central 6 per cent. are quoted, coupons off. Erie, 1875, down $\frac{1}{4}$; Erie, 1871, $\frac{1}{4}$; Illinois Central Construction Bonds, 1; Freeland Bonds, 1; Northern Indiana Goshen Branch, 1 per cent. Bonds not dealt in at the Stock Exchange—no sales to note. Railroad Shares—Wide fluctuations; closing at a decline. The business has been very large, especially in Western Railroad Shares. Chicago and Rock Island declined 3 per cent., recovering 2; Cleveland and Pittsburg fell off 3 $\frac{1}{2}$; Cleveland and Toledo 5, recovering 2; Erie 1 $\frac{1}{4}$, recovering $\frac{1}{4}$; Galena and Chicago 2; Harlem 1 $\frac{1}{4}$; Michigan Central 3, recovering 1 $\frac{1}{2}$; New York Central 2 $\frac{1}{4}$, recovering 1; Panama $\frac{1}{2}$, recovering 1; Reading 1 $\frac{1}{2}$, recovering $\frac{1}{2}$ per cent. Money rates have generally advanced, and the demand has been very active, more particularly for Stock loans. Loans on call, 7 per cent. First class paper, 849 per cent. Names less current, 10@12. Differences for Stock contracts on time, equivalent to 10@15 per cent.

MARIE & KANZ.

Statistics of Immigration for 1855.

From the report of the State Department, presented to Congress, we learn that the total arrivals of passengers at our ports in 1855, were 230,476, of whom 140,181, were males, and 90,233 females. Of the aggregate, we find that 166,562, or over two-thirds, arrived in the ports of this State. Next to this port stands New Orleans, the arrivals there being 20,388. In Massachusetts they were 17,978; in Pennsylvania, 7,581; in Maryland, 6,880; in California, 4,750; in Maine, 2,996; and in Texas, 2,122. In no other State did the number reach 1,000. As to the countries where they were born, we find 29,599 were natives of this country, leaving 200,877 as aliens. Of these, Germany furnishes the largest number; next comes Ireland; then England, British America, France, Prussia, Scotland, Switzerland, Holland, Belgium, whose respective quotas are 66,219, 49,627, 38,871, 7,761, 6,044, 5,609, 5,275, 4,433, 2,588, and 1,506. Wales furnished 1,176, Italy, 1,024, and other countries various numbers below 1,000. Of the ages of the immigrants, 19,936 were under five years, and 25,155 were forty years old or upward. The greater number arriving we find to have been

between 20 and 25, the number being 39,567. Nearly one-half were between 15 and 30 years old. with regard to occupation, 29,586 males, and 87,402 females belong to the "Not Stated," making fully one-half the aggregate; 42,580 males were laborers; 34,693 farmers; 14,997 mechanics; and 14,997 were merchants. The deaths on the voyage hither were 403, of whom 332 were bound to New York.

The total arrivals of passengers in the United States from September 30th, 1843, to December 31st, 1855, have been—males, 1,805,055; females, 1,195,775; not stated, 404,041; making a grand total of 3,402,871.

American Railroad Journal.

Saturday, May 10, 1856.

Long Dock Company of New Jersey.

The difficulties under which the Erie Company have labored, in order to secure sufficient accommodations at their principal eastern terminus, are well known. At Jersey City, the space allowed them has been confined to that formerly required by the Paterson and Hudson River road. This placed them under the necessity of bringing all their heavy freight by way of Piermont, which is completely blocked up by ice for some months every winter. As the company's construction account has been closed, the only resource left was the construction by an independent corporation of a new line through Bergen Heights. This work is to be undertaken by the Long Dock Company, whose circular we publish below. They design to construct a magnificent tunnel through the hill, and fill up that large space between Jersey City and Hoboken, giving the Erie Company a river frontage of nearly three-quarters of a mile, and over 100 acres of depot grounds, if required. This will form one of the most valuable improvements to the commerce of New York, which has been undertaken for some years. The liberal terms held out to capitalists will doubtless secure the necessary means for its completion at an early day:

NOTICE—Is hereby given that books will be open for subscription for \$300,000, the residue of the capital stock of "THE LONG DOCK COMPANY," chartered by the Legislature of New Jersey, at the Office of the New York and Erie Railroad Company, No. 42 Wall street, New York, on Wednesday the 28th of May, instant, from 12 to 1 o'clock of said day, and an installment of one dollar on each share will be required to be paid at the time of subscription, and future installments of 20 per cent. each will be called for as the work proceeds, twenty day's previous notice being given.

By order of the directors.

HOMER RAMSDALL, President.

J. LANSING ZABRISKIE, Secretary.

JERSEY CITY, May 1, 1856.

CIRCULAR.

The Long Dock Company, recently chartered by the State of New Jersey, has been organized by persons deeply interested in promoting the prosperity of the New York and Erie Railroad Company, and for the sole purpose of securing to the said Railroad Company a direct and independent approach to the City, and an ample terminus upon the harbor of New York. Five hundred thousand dollars have been subscribed to its capital stock, and by the above advertisement it will be seen that a further subscription of three hundred thousand dollars is proposed, which will complete the amount allowed by law to be issued by that Company.

The objects and necessities of enlarging the depot accommodations at Jersey City, and a description of the property purchased for that purpose, with the extent thereof, have been fully set forth to the stockholders of this Company in the late report of the President.

The charter of the Long Dock Company is perpetual—limited to a capital of \$800,000—with power to issue mortgage bonds, to purchase, sell, and hold lands; to tunnel Bergen Hill, and construct a lateral or branch railroad to intersect, within the limits of Jersey or Hudson cities, any other railroad authorized by law; to build docks, piers, warehouses, or other structures necessary for commercial or other purposes, and to establish a ferry, or ferries, at New York.

The exclusive use and possession of the property and privileges acquired, and to be acquired, by the Long Dock Company, will be rented to the N. Y. and Erie R. R. Co. on a perpetual lease on the following conditions:

1. The New York and Erie Railroad Company to pay to the Long Dock Company \$80,000 per annum, and the interest which the Long Dock Co. may have to pay for any and all moneys borrowed to make improvements under the direction of the N. Y. and Erie Co.; also to pay all taxes levied on said property.

2. The Long Dock Company to sell any of the property held by it, whenever the New York and Erie Railroad Company shall request it to be done, and the proceeds of the land sold to be placed in the hands of trustees to form a sinking fund for the redemption of all indebtedness of the Long Dock Company, which may be created by direction of the N. Y. and Erie R. R. Co.

The New York and Erie Railroad Company to have the right to purchase at any time, the entire property of the Long Dock Company, upon tendering to the Long Dock Company, after six months' notice, the sum of \$800,000, and assuming the payment of all indebtedness which shall be a charge upon the property leased to the N. Y. and E. R. R. Co.

In making this arrangement, the interests of the New York and Erie Railroad Company only have been consulted. The rental yields, it is true, a handsome income to the shareholders of the Long Dock Company, but not more than has been deemed necessary to attract capital to this investment.

Such arrangements have been made, and this is intended as a notice thereof, that each shareholder in the New York and Erie Railroad Company, shall be entitled to a *pro rata* amount of stock, in the Long Dock Company, so that no injustice shall be done to any one, and the right is reserved, as before stated, to return the amount paid by the Long Dock Company, and assume the property in their own right whenever more favorable terms can be obtained.

By this arrangement it is thought that the New York and Erie Railroad Company will secure the necessary capital to complete the improvements without permanent sacrifice, other than the three per cent. extra interest proposed to be paid by its own stockholders annually.

Whatever may be the total outlay required to furnish the accommodations contemplated, it is evident that on their completion the net revenue of the New York and Erie Railroad will be increased thereby, at least two, and probably four-fold, over and above the annual amount thus imposed.

These accommodations, with those now at Piermont and Newburg, will enable the New York and Erie Railroad Company to fully develop the trade in lumber, coal and other heavy and bulky articles, to the great advantage of the districts of country traversed by the Railroad, not only, but to the large increase of the Company's revenue.

The object of this communication is to call the attention of the Stockholders of the New York and Erie Railroad Company to the notice of the opening of the Books by the Long Dock Company, on the 28th instant, for subscription to their Capital Stock. Stockholders of the New York and Erie Railroad Company who subscribe for shares of

the Long Dock Company will have the preference in the distribution of those shares. All shares not applied for by the Stockholders of the New York and Erie Railroad Company will at once be taken by other parties.

By order of the Board,
HOMER RAMSDELL, *President*.
OFFICE N. Y. & E. R. R. Co., May 1, 1886.

Mineral Resources of the Illinois Central Railroad.

Below we give the Report of Mr. G. W. FOSTER upon the mineral resources of the country traversed by the Illinois Central Railroad, prepared at the request of the Company. Mr. Foster is a gentleman thoroughly qualified for the duty assigned him, and full confidence is undoubtedly to be placed in his statements. They are well calculated to give increased confidence in the prospective business of the road, in showing the vast resources it has at command, and which in a very short time will become available.

Report to WM. H. OSBORN Esq., *President of the Illinois Central Railroad Company*.

SIR:—At your request I have traversed the greater portion of the country contiguous to the Illinois Central railroad and the Chicago branch, with a view of collecting information with regard to the economic geology of the region. These examinations have been made hastily, at an inclement season of the year, and under circumstances which precluded detailed explorations.

In passing over this road, I have been struck with the magnitude of the enterprise; the skill and rapidity with which it has been constructed; and the variety and extent of the resources which it is destined to develop. Stretching with its main trunk and branches for more than seven hundred miles, through a region of unexampled fertility, and rich in mineral products, with one terminus at Chicago,—already the grain market of the United States,—and the other at Cairo, which, dyked about as it is, must become the key to the traffic of the upper tributaries of the Mississippi, it requires no far-seeing sagacity to appreciate the value of this work, and its importance as a connecting link between the commerce of the two great valleys of North America.

FACE OF THE COUNTRY.

The profile of the country does not present one uniform dead level, but a succession of gentle undulations and depressions which have been not inaptly compared to the swells of the ocean. The culminating points attain an elevation of about 300 feet above the level of Lake Michigan. The valleys are valleys of denudation, cutting through the superficial deposits, and occasionally exposing the rocky strata beneath; while from the main channels start numerous ravines, like the intervals between the fingers when the hand is extended. These are everywhere bordered with timber, and occasional isolated clumps are seen, known in the language of the country as groves; while the plains are clothed with a luxuriant growth of prairie grass. The Chicago branch, so far as completed—200 miles in length—runs through the Grand Prairie, which, with the exception of two or three groves a mile and a half in width, presents an almost interminable plain, of which the natural product is prairie grass. Here the similitude of the ocean becomes more striking. The timber belts resemble wooded shores, while the clumps may be likened to islands rising up from a wide expanse of waving green.

The country everywhere exhibits traces of powerful and wide spread denudation, which first abraded the rocks and then covered them with transported materials to the depth, in places of two hundred feet.

These superficial materials consist of yellow clay and blue clay, the latter always subordinate, sand and pebbles, rudely stratified, with occasional boulders of granite, hornblende, gneiss, and syenite, reposing upon the surface; but the Drift

phenomena are by no means so conspicuously displayed as in Wisconsin, and disappear altogether before reaching the Ohio river.

The swales, or sloughs, as well as the more level portions of prairie, contain a dark sandy soil, intermixed with much organic matter; while along the streams and ravines the soil is a light yellow loam. These distinctive differences are well understood by every settler, and the term "prairie soil" to him conveys a precise meaning.—It is a popular but mistaken belief that this region was once densely covered with trees, and that their disappearance is to be ascribed to the annual fires that swept over it long before it became known to the whites, consuming every form of vegetation, except where it was protected by the streams and ravines. There is no evidence that, in the previous physical history of this region, the arboreal vegetation was more extended than it is now. The prairies result from the character of the soil, and their origin is no more of a mystery than that of the steppes of Northern Asia, the pampas of Brazil, or the llanos of Caraccas. In the rich black mould of the plains the prairie-grass finds its appropriate nourishment to the exclusion of other forms of vegetation; but this in its turn is supplanted by many of the tame grasses. On the other hand, the yellow soil along the ravines and alluvial bottoms gives the sustenance to a growth of trees, the commonest of which are burr, jack and white oak, hickory, black walnut, linden and beech. The black-prairie soil contains a large amount of organic matter, and is admirably adapted to the cultivation of corn. Repeated crops may be taken from it without requiring the application of manures. In fertility it is unsurpassed, and ere long these prairies will prove the granaries of the United States. Those portions which are destitute of this black-mould covering are well adapted to the growth of wheat.

There is no better wheat region in the West, than the northern and southern portions of Illinois. The soil contains less organic matter than that of the interior, and perhaps a larger admixture of calcareous materials. The Drift in the northern part is made up of coarse materials, which admit of ready drainage; while in the southern part, the clays are intermixed with sufficient sand to destroy their tenacity, and prevent their heaving.—The wheat grown upon this soil has a plump, fair berry, containing little water and a large percentage of gluten.

While the general surface of the country is made up of materials such as I have described, there are to be found along the valleys of the principal streams, forming the ancient terraces, stratified beds of sand, gravel and pebbles, known as Valley Drift. Deposits of this kind exist in the valleys of the Illinois, the Wabash, and Rock rivers, but their southern limit is about latitude 30° N.—These materials are of great economical value for ballasting roads; and while the northern portion of the State contains them in considerable abundance, the southern portion is destitute.

GEOLOGY.

The Illinois Central railroad passes over all those system of rocks which are included between the Lower Silurian and Upper Carboniferous. For more than two-thirds of the distance, the underlying rocks consist of shales, sandstones, and limestones, belonging to the Coal Measures. Whether they constitute an unbroken assemblage of strata dipping towards a common centre, or are arranged like the Appalachian coal-field in a series of undulations, is a problem yet to be solved. The idea has been advanced by recent explorers that the productive coal-seams are arranged in basins of limited extent, which are not of necessity of contemporaneous origin. To these views I cannot subscribe. The continuity of the coal has been found in one or two instances to be interrupted by the interposition of the older rocks; but if we were to suppose that the coal-bearing strata had been at one time arranged in a series of corrugations or waves, and that their crests had subsequently been abraded so as to expose the subjacent rocks, they would exhibit all the phenomena which

It is now sought to explain by a resort to limited basins and local upheavals.

Geological Structure of the Southern Division.

The strata of the southern division of the State, adjacent to the road, may be arranged for convenience of description in three groups, in the ascending order, thus:

- Group I.—Alternations of blue compact limestone containing the fossil, *Archimedes*.
Black slates
Fine-grained sandstones, with traces of hydrated brown iron-ores: also, a belt of white o-olitic limestone.
- Group II.—Conglomerate, (pebbles rare and small.)
Millstone and grindstone grits.
Sandstones, grey, yellow and red.
- Group III.—Alternations of buff and dove-colored shales with vegetable impressions.
Fire-clays, impure limestones.
Sandstones with seams of coal, and traces of carbonate of iron.

The relations of these groups will be more clearly understood by reference to the section appended to this report.

Limestones.—Commencing at the terminus of the road at Cairo, and proceeding north to Union—a distance of twenty miles—the country is low, flat, and subject to overflow; and the soil consists of the alluvial deposits of the Ohio and Mississippi rivers. Between this station and Union, on the banks of Mill creek, (S's 12 and 14, T. 14, R. 1.) west of the road, the blue limestone rises in cliffs from twenty to sixty feet in height. It is tough and compact, and can be quarried in blocks of any size.* This rock is exposed at short intervals along the road above Jonesboro', to the southern limit of Town 11. It is somewhat variable in character, some portions weather admirably, while others crumble. It quarries readily in cuboidal blocks, with good natural faces, and will prove a valuable material for building, paving, Macadamizing, and ballasting. Some portions of it take a good polish, when it assumes the character of a black marble. It lies along the track,—in fact, some of the cuts are through it; it is therefore readily available.

About one-half a mile east of Jonesboro' is seen the o-olitic limestone exposed in a ledge fifteen or twenty feet in thickness. It appears to be a compact mass, exhibiting few marks of stratification, or divisional seams, the absence of which increases the expense of quarrying. It burns readily into a white strong lime, cuts easily, withstands the weather, and takes a good polish; but it lacks the clearness and translucency essential to a highly prized marble. The o-olitic limestone is composed of globular particles united by a calcareous cement. This character, so far from being accidental, is quite persistent in the Carboniferous limestones of the Mississippi valley. This belt will probably be found to be continuous throughout the southern portion of the State.

Iron Ores.—Three miles west of the road, along the southern boundary of Town 11, the surface of the hills is strewn with fragments of hematitic iron ore. Explorers have not succeeded in tracing them to their source, which probably will be found to be associated with the blue limestone. I was not able to visit the locality. Farther east, along the borders of the Coal Measures, and particularly in Kentucky, on the Cumberland river, these ores are found in this association, in sufficient quantities to render them highly valuable.

Sandstones—Shales.—Two or three miles east of Jonesboro', the thin-bedded sandstone is seen, according to Col. Ashley, and is of sufficient strength for flagging. About the same distance west, a bed of slate, twenty feet thick, is exposed.

The geological position of this group is near the base of the Carboniferous system.

*For very many of the local details relating to this portion of the State, I am indebted to Col. L. W. Ashley, who for many years was the Engineer in charge of this division of the road.

Freestones.—In the vicinity of Makanda, the rocks composing group No. II, are admirably developed in bold jutting cliffs from fifty to sixty ft. in height. The base of this series is composed of a softer material which disintegrates under the action of the weather, forming caves and grottoes; while the superior portions present sharp and well defined outlines. Thin seams of coal are intercalated with the sandstones, but they are of no economical value. Some of the sandstones exhibit vegetable markings, among which I recognize the *Lepidodendron aculeatum*. Four miles above this station, a valuable quarry has been opened which is connected with the track by a switch. The layers are variously tinged buff, yellow and red. The grains are sharp, and united by no visible cement. The rock when first extracted yields readily to the chisel, but hardens on exposure.

The red sandstone has all the beauty of the Portland freestone of the Connecticut valley, while in durability it surpasses it. These deposits will furnish an inexhaustible supply of stone for ashlers, underpinning, caps, lintels, &c., and at a cheaper rate than the cost of limestone. The purer portions will probably be found to answer for freestones. Altogether, I regard this as the best and cheapest material for construction that I have seen in the State.

The geological position of this group is at the base of the Coal Measures.

Coal.—After passing Makanda, we enter on the southern borders of the Coal Measures. On the Big Muddy river, at Murphysboro, six miles west of the road, and at other points, coal is extensively mined, and conveyed down the stream during the spring freshets in barges, and sold to the steamboats, or sent to the St. Louis market. It is of an excellent quality and sufficiently firm to bear repeated handling. There are two beds, about three feet each in thickness, separated by a thin parting of shale. Near Carbondale, on the line of the road, there is a seam nearly two feet in thickness, and of a good quality; and at Bainbridge, ten miles east, there is a seam said to be seven feet thick.

The boring at De Soto disclosed the existence of five distinct seams in a space of six hundred feet. The following is extracted from the record:

Bed No. 1.	Thick'n's	3 ft.	D'pth below surface	68 ft.
" 2.	"	2 "	"	93
" 3.	"	9 "	"	135
" 4.	"	2 "	"	165
" 5.	"	9 "	(coal and shale)	216

Specimens of the coal chippings should have been kept for analysis to determine their purity.

Du Quoin Coal.—A thick seam of coal is exposed in a ravine, a mile and a half north of Du Quoin. Col. Ashley has penetrated to it by a sloping shaft, near the railroad, and is now working it successfully. The coal here lies about seventy ft. below the surface. The following is a section of the strata passed through in sinking the shaft.

No. 1.	Yellow clay	18 feet.
2.	Clean sand	6
3.	Blue clay	6
4.	Shale	10
5.	Drab-colored limestone	3.75
6.	Shale (fire clay)	6
7.	Light-colored shale	1.75
8.	Bluish impure limestone	2.80
9.	Bituminous shale	6
10.	Light-colored shale	10
11.	Bituminous coal	6.50
12.	Fire clay	3
13.	Limestone	3
14.	Soft shale	—

82.80 ft.

The average thickness of the seam, as exposed in the workings, is six feet ten inches. The roof is composed of dark shale which contains numerous vegetable markings, among which I observed *Pecopteris*, *Asterophyllites*, and the decorticated trunks of *Sigillaria* of gigantic size. The dip of the strata is S. 10° W., at the rate of forty feet per mile, a deviation from the general strike of the

strata in the southern part of the State. The seam presents a remarkable uniformity in quality throughout,—the upper portion being apparently as pure as the lower. The coal, on cross fracture, is of glossy jet-black, does not soil the fingers, breaks in cuboidal blocks, and is thoroughly compacted. Along the lines of lamination, traces of mineral charcoal are apparent. It ignites rapidly, does not agglutinate, but preserves its form, yields a small amount of ash, and does not clinker.—Seven bushels of it, after combustion in an ordinary stove, yielded only seven pounds of ash. In its chemical composition, it is found to consist of 7 per cent. of water; 28.20 of volatile matter; 61.20 of fixed carbon; and 3.20 of ash; closely resembling the Brier Hill coal of Ohio, and the Ormsby coal of Pennsylvania, which hold the highest rank for steaming purposes of any in the Chicago market. It is now successfully coked in ovens near the mine. The coke exhibits a grey metallic lustre, with a cellular texture. This coal belongs to the variety known as *Splint*; and though less productive in volatile gases than some of the soft fat coals, it is successfully employed for the generation of burning gas at Dubuque.

This seam exhibits some traces of sulphuret of iron, but for the most part, it is concentrated in layers, which are readily assorted. In the joints are found traces of calcspar. This coal has many properties which place it in the front rank of western coals,—freedom from sulphur, a substance deleterious to gas, and which rapidly corrodes the flues of boilers,—cleanliness when employed as a domestic fuel,—firmness to bear distant transportation without *slacking*,—retention of form during combustion by which the air may permeate freely through the interstices,—absence of clinker, which obstructs the bars of the grate and causes them to burn out,—and readiness in coking, yielding a large per centage of fixed carbon. In its crude state it may be employed in driving the locomotives of freight trains, while the coke may be employed on passenger trains,—a result contemplated by the agents of the Company, when the wood along the line shall have been consumed.

At present there are forty miners employed, each one of whom ought to take down 100 bushels per day, making the aggregate of their stoping 50,000 tons per annum. This is about one-half of the annual demand at Cairo, and about one-half of what will be required along the road for local consumption. From this source alone the railroad ought to derive a traffic which shall yield them nearly \$200,000 per annum. The price of coal by the quantity at the mouth of the pit is \$1.50 per ton, and the cost of transportation for long distances 1 1/4 cents per ton per mile. The prime cost of this coal delivered at Chicago would be about \$6.50 per ton, where it will successfully compete with the best coals of Pennsylvania and Ohio, which are now brought to that market.

Under the management of Capt. Jack, the mine has been judiciously opened, and the workings are prosecuted with energy and skill. A stationary steam engine frees the mine from water and draws the laden cars up an inclined plane, on to a platform, whence the coal is transferred to the freight cars.

At Centralia, sandstone is observed which contains the leaves of *Palmacites*, characteristic of the Carboniferous flora. It is rather inferior for construction, although employed in culverts and foundations. Here the strata have been perforated to the depth of over 600 feet through the Coal Measures. At the depth of 225 feet a seam of coal, six feet in thickness, was struck, unmounted by a bed of limestone, seven feet in thickness. At the depth of 328.6 another bed of coal was intersected, three feet in thickness. After passing the sandstone near the surface, the course of the auger was through shale-beds, interstratified with three thin belts of limestone.

At Pana there is evidence of the existence of coal-bearing rocks. In the banks of Coal run, three miles east, a thin seam is observed, overlaid by heavy masses of shale. This coal has long been procured for local use by stripping, and it

has nowhere been observed to attain a greater thickness than eighteen or twenty inches. If a drift were driven into the bank until the solid strata were struck, it might result in the development of a good workable seam.

When we consider the increasing demand for this kind of fuel, and the facilities which exist at this point for its transportation, it is a matter of surprise that the owners of the land should have remained contented with such superficial explorations.

Danville Coal.—In the bluffs of the Vermillion, at Danville, three seams of coal are observed. The first or upper seam appears near the top of the plateau, on which the town is built, and is six feet in thickness. Next succeeds a bed of shale three feet, reposing on another seam of coal twenty inches in thickness. The lower seam is three feet thick. I saw this bed at one point only, and am unable to state the width of the intervening space, or the character of the strata, except that there is interposed a band of limestone four feet in thickness. The six feet seam, however, is the one which will prove of the most economical value.—The roof is shale, which is somewhat fragile. This coal, as compared with that of DeQuoin, is less brilliant and firm—being almost too brittle to bear distant transportation—and contains more surpler while the joints show traces of calc-spar. It is, however, a strong and valuable coal which does not agglutinate in burning. It contains more than one-half of its weight in fixed carbon, and yields an inconsiderable amount of ash.

The strata here dip to the southward at the rate of about 50 feet to the mile, although subject to irregularities. In following up the Salt fork of the Vermillion, this coal is exposed at numerous points in its banks, and is mined by stripping, for local use. It is here so much weathered and discolored by oxide of iron, as to conceal its true characters. Dr. Fithian has intersected this coal twelve feet below the surface, on Sec. 32, T. 19, R. 13, but has not determined its thickness. This point is about a mile north of the Great Western railroad, and about eighteen miles east of the Chicago branch of the Illinois Central. Evidences of the existence of this seam have also been observed on the Lander farm, four miles farther west, approaching within fourteen miles of Urbana. Unless the continuity of the strata is interrupted, of which the configuration of the country affords no evidence, there is a strong probability that the six-foot seam may be struck at an inconsiderable depth to the north of Urbana, in the vicinity of Pera or Rantoul; and recommend to the agents of the company to institute borings at those points. If this seam is struck at a great depth at any given point so that the cost of lifting to the surface would become expensive, it would be advisable to search for it farther to the northward, since the strata rise in that direction.

The opening of the Great Western road will render the Danville deposits tributary to the Chicago branch of the Illinois Central, and the city of Chicago will become its appropriate market. The prime cost of this coal delivered there would be about \$4.50 per ton. If this seam can be intersected on the Chicago branch, the cost need not exceed \$3.60 per ton.

Should these experiments prove abortive, still I regard this seam, as at present developed, of great economical value, and as forming an important adjunct to the Chicago branch. In another part of this report I have adverted to the character of the country along its route. Although the soil is of unsurpassed fertility, yet the tide of settlement has been diverted from this region in consequence of the scarcity of timber. When the fact becomes thoroughly understood that Chicago is one of the best lumber marts in the United States, and that fuel can be delivered at every man's door as cheaply as though his house was in the midst of a forest, these lands will be eagerly sought for. The cost of clearing wooded lands is from \$8.00 to \$10.00 per acre, and years must elapse before the stumps disappear from the fields; but the prairies

are already prepared for cultivation, and, the first season, yield a remunerative crop. The cost of cutting a cord of wood, four feet in length, is, throughout the West, about \$1.00, and an expenditure of another dollar is required to work it up for stove use. Twelve bushels of coal furnish a greater amount of heat than a cord of wood, and can be delivered at any point on the Chicago branch at a cost of \$1.50, if found on the line; or \$2.00 if brought from the valley of the Vermillion. Thus the fuel for a family in ordinary circumstances, in the prairie region, need not exceed \$30 per annum.

On the Northern Division an extensive coal field has been found at LaSalle. This is found cropping out on the banks of the Illinois and Vermillion rivers, the former of which are 200 feet in height. Three seams are found here, the lowest from 3.6 to 4 ft. thick. Between that and the middle seam there is an interval of 176 feet composed of alternations of shale and lime-stones, with thin bands of sand-stones. The middle seam is six feet thick, and the upper seam, 53 feet above, is nearly four feet thick. These seams all dip to the south-west at a rate intermediate between five and ten degrees. Most of LaSalle county contains coal deposits, and these are also known to extend in Livingston county. From the prevalent dip of this series, the coal ought to be found emerging to the surface in the line of the Chicago Branch further north, and under circumstances favorable to mining. These coals belong to the dry and not very adhesive class. They are firm, communicate little crack in handling, show some evidences of sulphur, and the joints are occasionally filled with sulphate of lime. By an analysis of these taken from the Rockwell mine, the upper, middle, and lower seams gave respectively the following constituents—

Water.	Volatile Matter.	Fixed Carbon.	Ash.
12.0	25.0	60.0	3.0
12.0	29.0	54.0	5.0
10.4	26.6	48.6	11.4

All these contain a fair proportion of carbon; and, except in the lower, the ashy matter is not in excess. The amount of water causes them to decrepitate when burning. The presence of sulphur is also sufficiently large to unfit them for gas or steam purposes; and the presence of sulphate of lime causes them to slack. They do not rank with those of Danville or Du Quoin. The present weekly product of these mines is about 1,000 tons. Miners take out about a ton a day. The price of coal at the mines is \$2.25. The demand for them is said to be brisk; and the traffic derived to the road therefrom is already considerable. As it is the most northerly deposit in the State they are shipped to all points on the Galena Branch, as far as Dunleith on the Mississippi.

There are already known, adjacent to the road, three centres of distribution, where coal exists in exhaustless quantities, and can be mined under the most favorable circumstances. If from these centres we describe circles with a radius of one hundred miles, we shall find that they nearly insculcate, and bring within their lines the extremities of the State. When the facilities for production and distribution are fully systematized, cheap fuel will be at the command of every one; and undoubtedly each year will reveal new sources of supply.

The nearest coals to Cleveland are forty miles distant, while a very considerable portion of them are transported one hundred miles. They are then shipped eight hundred or a thousand miles to the Chicago market, where they enjoy almost a mono-

poly. They are not essentially better than the coals of southern and central Illinois; but, at present, they occur under circumstances more favorable to mining and transportation.

In an accompanying table the Ormsby and Brier Hill coals only are found to excel the Du Quoin. The first has 64.4 of carbon, and 2.4 of ash; the second has 61.24 of carbon, and 2.79 of ash; while the third contains 61.2 of carbon, and but 3.2 of ashy matter. The Danville coal ranks a shade lower; but is quite equal to the Chippewa or Diamond Hill. The Morris and Ottawa come lower, on account of the water and sulphur contained in them. The rates of mining in Illinois are from 20 to 30 per cent. higher than they are in Ohio and Pennsylvania. At Du Quoin the total expense per ton for wages, royalty, and outside expenses, is \$1.23; and at La Salle, \$1.93. At the former a good miner can take out 100 bushels per day; and at the latter about 30. At the Tallmadge mines; in Ohio, the general average is about 90 bushels; and the total mining expense \$0.95 per ton, or nearly \$1 less than at La Salle. The rates of transportation vary between five cts. per ton per mile, for short distances, and $1\frac{3}{4}$ cts. for the largest. The rate on the Ohio road, two years ago, was $1\frac{1}{4}$ cents per ton per mile; but it is believed that this would have to be raised. On the Ohio canal, this figure ranges from $1\frac{3}{4}$ to 2 cents per mile. The lake transportation, from 700 to 1,000 miles, costs from \$1.15 to \$2.00 per ton. This brings the total cost of Ohio coal delivered at Chicago to \$4.95 per ton. The prime cost of Du Quoin coal is \$1.23, to which adding \$5 for transportation, makes a total of \$6.23. The total cost of La Salle coal, delivered at the same point, will be \$3.97 per ton. These estimates, however, are based upon a limited business, and the existing relation of affairs; but with an increasing demand the rates of transportation could be modified. The La Salle coal cannot be used to any great extent for manufacturing, but will be in great demand for domestic purposes through the northern section of the State, along the line of the Galena Branch. If the Danville coal can be as cheaply mined as those on the Ohio river, it can be delivered on the completion of the Western railroad, at \$3.96 per ton. It has been estimated that Illinois contains a larger amount of available coal than any other State. The consumption of this article last year at Chicago was 100,000 tons of which only one-eleventh was furnished within the State. At present Chicago is, in this respect, like what Cleveland was 15 or 20 years ago. At the latter place, the receipt of coal from the interior was but 200 tons in 1830, and 6,000 tons in 1840. At present this reaches 250,000 tons annually. The great obstacle to the growth of Chicago as a manufacturing city is the high price of fuel. At Pittsburg its cost is 16 per cent. less; and at Cleveland nearly 9 per cent. The development of the Danville region, and a reduction in the cost of mining and transportation to the standard of Ohio and Pennsylvania, would go far to equalize the difference between prices in these two cities. To supply the Chicago demand would require the labor of 100 miners, each turning 90 bushels per day, or 9,000 bushels in all. To the mining proprietor and the railroad company new sources of income are presented; but these must be obtained by moderate profits arising from an

extended business, rather than the exorbitant profits of a small one.

The report concludes thus:

Illinois is among the most favored of States; in geographical position, in climate, in fertility of soil, in mineral resources, and in facilities for intercommunication. During the past month, I have travelled more than a thousand miles within her borders, without having seen hardly an acre of sterile, or irreclaimable land. The greater portion of her territory is in a state of nature. Here and there only has the plow turned up the sod to the light of the sun, or the miner's pick revealed the treasure hidden beneath. Her population is spare, but immigration is now setting in this direction at the rate of nearly 200,000 souls a year. Her capacity for production is unbounded, and her present means for transportation will soon be tasked to the utmost to convey her surplus products to market.

In that work I fully believe the Illinois Central Railroad is destined to have an ample share.

Baltimore and Ohio Railroad.

In accordance with a resolution adopted by the Board, on the 9th ult., a report from the Finance Committee for the six months ending March 31st, was submitted to the last monthly meeting. By a comparison with a statement of Sept. 30th, 1855, we learn that the following amounts have been paid, during the last six months:

In liquidation of the loan No. 1, (bonds of 1854)	\$31,332 17
In liquidation of the loan No. 3, (Iron bonds due Jan'y 1, 1856)	113,333 35
In liquidation of bills payable, (maturing that period)	335,736 64
In liquidation of debt to Ross Winans. 71,346 43	

\$551,748 59

The company has earned during that period, from the transportation of passengers, mails, and merchandise.....\$1,852,964 45

—being an increase of \$95,705 24 over the earnings of the corresponding months of last year.

The total disbursements under the head of expenses, (including extraordinary repairs to locomotives, exceeding the average of the previous year upwards of \$36,000,) have been.....1,086,798 77

Showing the net earnings to have been.....\$766,165 68

Notwithstanding the unusual cost of passing the trains over the Kingwood Tunnel, and the excessive rigor of the winter, involving unprecedented difficulties in the transportation department for about three months, the working expenses thus prove to be but 58.65 per cent.

According to the Treasurer's exhibit, the profit and loss, for the same period, after deducting interest and ground-rents, was \$398,309 06, and the discount on bonds of the city of Baltimore, \$8,945 57, showing the clear net earnings of the company for the six months to be \$405,743 05— or upwards of four per cent. on the aggregate capital stock.

Since the 1st instant, the company has disbursed—

For interest payable in Baltimore, and remittance for interest on loan No. 3, and on the preferred stock of the State, due in London, on the 1st of July next.....	\$106,579 62
For payment of the floating debt.....	140,247 81
For amount due Ross Winans	12,000 00

\$258,826 83

—Thus in effect finally liquidating the floating debt, as the amount unpaid is now but the insignificant sum of \$4,500, and the last instalment

due Ross Winans, (\$12,800,) which matures and will be paid on 1st prox.

Only \$168,007 14 of the 1854 one million loan remains unpaid, the parties holding which generally desire its continuance.

The committee have pleasure in stating that since the first of October last not a single promissory note of the company has been given for purchases or otherwise, and that all purchases of materials and supplies are now being made for cash.

After the large payments for interest during the present month, including all maturing prior to the 1st of July next, there is now in the treasury of the company \$382,879 83.

Before presenting their conclusions regarding the propriety of a dividend, the committee have felt it due to the importance of the subject to present thus fully the financial position of the company.

No dividend has been declared since April 1st, 1853, the entire net earnings from that date to October 1st, 1855, amounting to the large sum of \$1,981,397 81, have been added to the capital of the company.

It is a source of great gratification to find the net profit, as well as the present and prospective financial condition of the company, such as not only to authorize, but as an act of justice to the great interests involved, to demand the payment of a cash dividend. The committee, therefore, congratulate the Board and the community, so deeply interested in the success of this great work, when expressing their confident conviction that, whilst the road will continue to pour in increased volume millions of trade and prosperity into the lap of Baltimore and the State of Maryland, it now enters upon an era, when, with judicious management, with its improving revenues, and reduced comparative expenditures, regular semi-annual cash dividends may be reasonably anticipated and relied upon by tax payers and stockholders, whose hopes and expectations have been so long postponed.

The committee recommend the adoption of the following resolution:

Resolved, That a cash dividend of three per ct. on the stock of the main stem be declared from the net earnings for the half fiscal year ending 31st March last; that the books for transfer be closed on the fifth proximo, and that the dividend be paid on the 15th proximo, at the office of the company.

The resolution passed by a vote of 19 to 7, four Directors not voting.

Alabama and Mississippi Railroad.

The fourth annual report of the Treasurer of this company shows their total receipts from the organization to the 1st of April, 1856, to have been—

On Stock subscriptions.....	\$154,901
From State of Alabama.....	100,000
Bills payable.....	5,000
Profit and loss.....	1,437
Freight and passengers.....	494
Total.....	\$261,832

EXPENDITURES.

For graduation, masonry, building, track-laying, &c.,.....	\$93,381
Rails, chairs, spikes, &c.,.....	97,584
Transportation of materials.....	7,853
Rolling stock.....	12,580
Engineering, right of way, depot grounds, &c.....	20,342
Salaries, commissions, &c.,.....	8,344
Bills receivable—advanced to contractors.....	14,280
Miscellaneous.....	7,518
Total.....	\$261,832

The total stock subscribed is \$236,500, leaving \$81,599 yet to be received. If we add to this the cash and bills receivable, the entire available means will be \$97,412, of which \$74,412 are reliable, or not contingent.

Grand Trunk Railway.

At a meeting of the Directors of the above company, held at Toronto, on the 13th of March last, it was resolved to appoint a Committee to draw up a memorial to the Governor General, asking for additional aid to the company, in order to complete the main line from Stratford to Sarnia, with a branch to London, to secure the Canada traffic to the Grand Trunk line; together with the Victoria Bridge; and that the Province should forego its prior claim on the receipts of the road. We have not space to copy it entire. The memorial sets out with a statement of the advantages of such a work to Canada; that under the authority of the Provincial Legislature, the several links composing this great work were consolidated; that in the prospectus inviting the aid of English capitalists to take hold of the enterprise, the Premier and several of the principal officers of the Provincial Executive appeared as Directors; and that the Legislature further gave their recognition to the attempt to borrow money abroad, by granting Provincial aid to the amount of £2,000,000 sterling. It is not intended to impugn the motives of those who held out such tempting inducements to the British public. On the contrary, it is believed that the prospects held out will all be realized, if only the original plan can be fully carried out. But, it should be understood that in all these representations the Province, as such, assumed a large share of the responsibility towards those who supplied means for building the road. At the time, public attention was first turned towards it, peace reigned, and money was abundant at low rates, while a large emigration was settling out annually to the westward. The memorialists have continued to prosecute the work, through all the subsequent changes and depressions, and have thereby earned a title to additional consideration. To this day the Canadian Government, though deriving all the advantage, has not been called upon for a single shilling as aid. The great advances in the prices of property of all kinds has enriched the country both collectively and individually, though the thing as yet has been productive of disappointment only to those whose means have been embarked in the undertaking.

Your memorialists now lay before the Government a statement of the amount of private funds which have been embarked in the Grand Trunk Railway, up to the 31st of December last, as follows—

Amount raised on Grand Trunk Debentures proper, including advances from Company's Bankers.....	£2,441,875
Amount paid on Grand Trunk shares proper:—A issued.....	1,741,758
B issued.....	325,762
Amount of capital paid up on and after date of amalgamation on shares with St. Lawrence and Atlantic, Quebec and Richmond, and Toronto and Guelph Companies.....	755,631
Amount raised on the Debentures of the above-named Companies prior to date of amalgamation.....	406,166
Currency.....	£5,670,695
—Equal to £4,680,845 sterling.	

The memorialists are prepared to complete the road between Montreal and Stratford, during the present year; but with the completion of that section their means will be totally exhausted; leaving the Victoria Bridge, the line west of Stratford, and other works to the eastward unfinished.

Were means furnished to finish these, the whole line would reap the advantage, in a largely increased business. On the other hand, without assistance they see no means from which the interest on their own and the Provincial bonds can be paid, and the company's credit maintained. Such a failure would lead to the worst consequences to all parties.

Under these circumstances, your memorialists lay their case before the Legislature and Government of Canada, and expressing the belief that they are entitled to regard the Province as participants with them in this undertaking, your memorialists respectfully suggest, as a means whereby present difficulty may be avoided for the future success of the whole work best ensured:—

First. That the Province do consent to waive its rights as mortgagees, and accept the stock of the company in lieu thereof;

And secondly. That the Province do grant such aid for the construction of the lines west of Stratford to London and Sarnia, and for the Victoria Bridge, as may be considered proper, conditional on the company making provision to a like amount to the satisfaction of the Government.

In regard to the first proposal, your memorialists would earnestly pray that the Province, who have originated and officially recommended this undertaking, should, under the circumstances, rank with the ordinary stockholders, until the completion of the whole railway system shall have made it remunerative to all. While on the second point it is equally consistent with equity that new works, which are undertaken for the common benefit of the Company and the Province, should be supported in equal proportions by both.

New London Railroad.

The annual meeting of the stockholders of the New Haven and New London Railroad, was held in New Haven on Tuesday. The reports of the Board of Directors and the Treasurer were read. These reports show the receipts for the year ending March 31, 1855, to be \$88,007; expenditures, \$57,688; profits, \$30,318. Paid interest on bonds and floating debts, \$10,618. Floating debts now due, \$24,491; interest on warrants past due, \$41,971; total, \$66,452. Assets, \$76,601. Whole number of passengers for the year, 117,276.

The New Haven Journal, from which paper we copy the above figures, says, Judge Boardman, Hon. C. J. McCurdy, Sylvanus Butler, B. Neyes, James F. Babcock and other gentlemen, spoke in favor of the effort to extend the road, and expressed great confidence as to the benefits to be derived from the extension.

The Committee to whom was referred the duty of getting subscriptions for this purpose, report that \$100,000 has been pledged towards the extension of the road to Stonington. The following Board of Directors was elected: C. Buckingham, M. G. Elliot, Willis Bristol, New Haven; E. C. Scranton, A. O. Wilcox, Madison; G. F. Ward, Saybrook; Charles J. McCurdy, Lyme; A. F. Prentiss, New London; Willis Blackstone, New York.—*Hartford Times*.

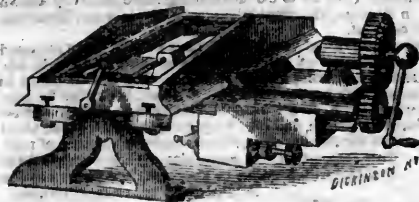
Bridge at St. Louis.

A Washington correspondent of the St. Louis Republican understands that Mr. Kennet contemplates urging upon Congress the propriety and actual necessity for a bridge over the Mississippi at St. Louis, to be constructed on arches sixty feet above high water, and sufficiently wide for four railroad tracks, two wagon tracks, and two footways. This bridge would avoid the present outrageous annoyance and delay experienced by persons approaching or leaving St. Louis. The delay now at the Mississippi is one-third of the time required to reach Chicago.

Ellwood Morris,

Engineer; Dauphin and Susquehanna Railroad.
Allentown Railroad.
HARRISBURG, PENNA.

VALVE SEAT PLANERS,



FOR Planing Valve Seats; without detaching the cylinders from the engine. This Machine is now ready.
For sale by **BRIDGES & BROTHER,**
64 Courtlandt st., N. Y.

Railroad Track, Locomotive and Car Jacks.

FOR sale by **BRIDGES & BROTHER,**
64 Courtlandt st., N. Y.

Cast Steel Boiler Plates.

SHORTRIDGE, HOWELL, & JESSOP,
STEEL MANUFACTURERS.

ARE now prepared to execute orders for CAST STEEL BOILER PLATES, and invite the public to inspect a sample Plate weighing 573 lbs; 13 feet by 2 feet of their make. This Malleable Cast Steel is entirely a new article, and possesses all the ductile properties of iron, whilst from its great strength, a saving in weight of about 50 per cent. may safely be obtained as compared with Boilers constructed of iron, thus securing many important advantages in Marine and Locomotive work. Apply to

DUNCAN LITTLEJOHN, Agent,
24 Cliff street, NEW YORK.

To Civil Engineers.

WHITE'S PATENT SILVER FOUNTAIN PEN CASE is particularly recommended to Engineers engaged in field work.

This is the only fountain pen we know of, that will not leak in the pocket, or feed too fast in use. The feed of this is perfectly under the control of the writer, who may use it without danger from blot or discoloration of the clothes. Price \$3.

They are adapted to all styles of pen. They will be sent by mail to any address upon the receipt of the price.

Address **N. DAVIDSON & CO.,**
Sole Agents for the Manufacturer and Patentee,
4m19 9 Spruce st., N. Y.

FULTON CAR WORKS,
CINCINNATI, OHIO.

RAILROAD COMPANIES, CONTRACTORS, and others in want of any description of RAILROAD CARS, are respectfully invited to call on, or correspond with the undersigned, before purchasing or contracting for their Cars.

We are prepared, with every facility, to manufacture, of seasoned lumber, and deliver, on short notice, Passenger, Baggage, Freight, Platform, and Gravel Cars, also Hand Cars and Trucks, and Railroad work generally.

CAR WHEELS!!

We are also manufacturing the Washburn and other patterns of Wheels, which we sell at less than Eastern prices, adding transportation. We warrant our wheels to be equal to any manufactured in the country. Castings for Railroad work, Bridges, &c., furnished on favorable terms.

Our establishment is the oldest of the kind in the West.
KECK & HUBBARD,
CINCINNATI, May 1st, 1858.

To Railroad Bridge Builders.

OFFICE OF THE CATASAUQUA AND FOGELSVILLE R. R.
Catasauqua, Lehigh Co., Pa.

PLANS and proposals will be received at this office until the 22nd of May inst. for building an Iron Bridge over the Jordan Valley of about 11,000 feet long and 80 feet high on the line of the Catasauqua and Fogelsville Railroad in Lehigh Co., Pa.
2119 **DAVID THOMAS, Pres't.**

H. STANLEY & CO.,

MANUFACTURERS OF

RAILROAD CAR WHEELS.

—ALSO—

DRIVING WHEELS, HORSE AND HAND CAR WHEELS, WHEELS ON AXLES, BUMPERS, JAWS, and BOXES fitted complete, and OTHER RAILROAD CASTINGS.

HENRY STANLEY, } No. 274 River st.,
JOEL MALLARY, }
HIRAM B. INGALLS, } **TROY, N. Y.**

Passenger and Freight Cars
FOR SALE.

4 FIRST CLASS (60 seats) PASSENGER CARS
36 BOX FREIGHT CARS, 28 ft. long.
11 PLATFORM

The above are for a 4 ft. 8 1/2 in. gauge, and are well and thoroughly made.
WILLIAMS & PAGE,
44 Water st., Boston, Mass.

PHILADELPHIA RAILWAY AGENCY,

AND GENERAL SUPPLY DEPOT OF ALL ARTICLES USED BY RAILROAD COMPANIES.

No. 12 and 14 Walnut st., PHILADELPHIA.

THOMAS M. CASH, Agent.

THE following list of Railroad Supplies, purchased to order, or in Store on Consignment:

RAILROAD IRON.—Railroad Bars, Railroad Chairs, Bar Iron, Spikes, Pig Iron, Castings.

AXLES.—American Hammered, English Hammered, American Rolled, English Rolled.

CAR WHEELS.—In rough or on axes.

OILS.—Sperm, Whale, Lard, Bleached Whale, Solar, Machinery.

CAR GREASE.—Tallow, Yellow, Soft White, Stiff White.

LANTERNS AND LAMPS.—Locomotive Head Lights; Wray's 23 inch Reflector, 21 do. do.; Olcott's 23 do. do., 21 do. do.; Porter's 21 do. do., 17 do. do.; Miller's 22 do. do., 20 do. do.; Arm Lanters, Breast Lanters, Hand Lanters.

PATENT OIL CANS.—Brass, 3 pints, 1 quart, 1 pint; Tin, 3 pints, 1 quart, 1 pint.

PLAIN OIL CANS.—Brass, 3 pints, 1 quart, 1 pint.

PUMPS.—For Water Stations.

MACHINIST'S TOOLS.—Lathes, Planing Machines, Drills, etc.

TURN TABLES.—Of Cast Iron, with Parry's Anti-Friction Box.

SIGNAL LANTERNS.—Large Square, 10 inch Reflector,

Red; Medium Square, 10 inch Reflector, Red; Small Square, 8 inch Bull's Eye, Red; Large Round Fresnel Lens, Red; Common Square, Large, Red; Common Square, Small, Red; Brass Globes, Red; Brass Globes, Green; Brass Globes, Blue; Common Tinned Japanese Lantern; Engine Lanters; Large Square Signal Lantern for Stations, Bridges, Switches, etc., etc.

LOCKS, WHISTLES, etc.—Car Locks, Switch Locks, Oil Cups, Cylinder Cocks, Gauge Cocks, Heater Cocks, Jack Screws, Steam Whistles, Spring Balances, Locomotive Bells, Signal Bells, Steam Gauges, Wrenches, Bolts, Nuts, Washers.

INDIA RUBBER.—India Rubber Hose; India Rubber Springs; India Rubber Packing.

CAR FINDINGS.—Push, Enamelled Head Lintins, Hair Cloth, Demasks, Curled Hair, Cotton Duck, Brass and Bronze Hat Hooks.

BRUSHES, etc.—Paints, Paint Brushes, Lined Oil, Varnish Brushes, Varnish, Glue Brushes, Glue, Glue Kettles, Conductor's Badges, Baggage Checks, Engineer's Stationery, Hardware of all kinds, Spafford's Self Adjusting Safety Signals for Draw Bridges.

LOWMOOR TIRES.

SCOTCH IRON.

PIG IRON, Bars, Boiler Plates, Sheets, Hoops, Railroad Bars, Tyres, &c.

CALEDONIAN PATENT LAP-WELDED TUBES
PATENT CAST IRON PIPES—made from best Scotch pig iron—cast vertically and drill easily.

WILLIAM ROY, Agent,
6m13 74 Broadway, NEW YORK.

RAILROAD NOTICE.

NOTICE is hereby given, that there will be a Stockholders' meeting of the Dubuque and Pacific Railroad Company, at the office of the Company, in the City of Dubuque, Iowa, on the third Monday in May next, at two o'clock, p. m. for the purpose of amending the Articles of Incorporation, among other things, so as to increase the number of the Directors to thirteen, and to transact such other business as may be legally done at a Stockholders' meeting. And further notice is hereby given, that, on the first Monday in June next, the annual meeting of the stockholders, for the election of Directors, will be held at the office of the Company, in said city.

H. P. LEACH, Secy D & P. R. R. Co.

MEMPHIS & OHIO RAILROAD.



Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R.
Memphis, Tenn., April 11, 1858.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and cleaning, gradation, masonry and bridging of forty miles of the North to division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.

The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for handling.

The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.

It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1858. Good reference will be required of Contractors as to ability to carry out their contract.

Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET,
Engineer M. and O. R. R.

6c17

NOTICE

IS hereby given, that books will be open for subscriptions for \$300,000, the residue of the capital stock of "The Loxo Dock Company," chartered by the Legislature of New Jersey, at the office of the New York and Erie Railroad Company, 45 WALL STREET, New York, on Wednesday, the 29th day of May, instant, from twelve to one o'clock of said day.

By order of the Directors.

J. LANSING ZABRISKIE, **HOMER RAMSDALL,**
Secretary. President.

Dated, May 1st, 1858.

The whole capital stock of the above Company is \$800,000. Arrangements have been made with the New York and Erie Railroad Company by which the property purchased for the Loxo Dock Company in New Jersey, to be paid for by their capital stock, will be leased at a rent of 10 per cent. on its cost, with privilege of purchase; and such shareholders of the New York and Erie Railroad as desire it, and subscribe therefor, will receive a proportionate share of the stock of the Loxo Dock Company.

3c19

TO CONTRACTORS.

PETTESS' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

N. DAVIDSON, 9 Spruce st., N. Y.

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
No. 31 Pine street, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 60 lbs. to the yard, for which proposals are invited.

3c1

A. WILKINS.

New York and Erie R. R.

On and after Monday, Dec. 31st, 1855, and until further notice

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 7 a. m., for Buffalo direct, without change of baggage or cars. At Hornellsville this train connects with a Way Train for Dunkirk and all stations on the Western Division.

MAIL, at 8 1/4 a. m. for Dunkirk and Buffalo, and intermediate stations. — Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p. m., for Newburgh direct, without change of cars.

ROCKLAND PASSENGER, at 4 p. m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p. m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p. m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p. m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk, with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

Lt. **D. O. McCALLUM,** General Sup't.

Philadelphia, Wilmington &
Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE
SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 60
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	6 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 60
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	19 00

An extra charge will be made for meals and state rooms on board the boat.
GEORGE A. PARKER, Sup't.

TALBOTT & BROTHER, SHOCKOE FOUNDRY

MACHINE SHOPS,

CARY STREET, RICHMOND, VIRGINIA,
MANUFACTURERS OF

PORTABLE STEAM ENGINES, of all sizes, from 4 to 40 horse power.
STATIONARY STEAM ENGINES of all sizes.
CIRCULAR SAW MILLS, complete.

TOBACCO PRESSES and SCREWS.
FLATTENING MILLS, LEVERS, SINKERS, &c.
WROUGHT AND CAST IRON WORK, for VERTICAL SAW and GRIST MILLS.

Brass and Iron Castings and Wrought Iron Work of every description, made to order with dispatch, and on reasonable terms.

CHARLES TALBOTT. JAMES M. TALBOTT.

T. & B. are also Sole Manufacturers and Agents in this city of

LEAVITT'S

"Young America Corn and Cob Crusher."

IRON BRIDGES

FOR RAILROAD AND OTHER PURPOSES.

**Bolts and Nuts for Bridges,
AND FROGS OF ALL ANGLES,**

MANUFACTURED TO ORDER.

**JOHN HUTCHINSON,
TROY, N. Y.**

NOVA SCOTIA RAILWAY OFFICE.
Halifax, March 22nd, 1856.

**Extension of Trunk Line to
Nelson's, Shubenacadie.**



TENDERS FOR GRADING, CONSTRUCTION, &c.

TENDERS will be received at this office, until SATURDAY, the 10th day of May next, at 12 o'clock, noon, for the Construction and Finish of that portion of the Railway extending from the end of Contract No. 7, to Nelson's, Shubenacadie river, or the Eastern Road leading to Truro, including road alterations—the distance being about ten miles.

The Board will furnish Rails, Chairs, Spikes and Side Keys. The work to be completed by the 30th day of June, 1857.

Plans, specifications and quantities may be seen on the ground, on Thursday the 1st day of May, and afterwards at the Engineer's Office.

An Engineer will attend persons desirous of Tendering, and meet them where the line crosses the Nine Mile River Road, at 10 o'clock A.M.

Tenders to be accompanied by the address of parties tendering, and the names of their Bondsmen.

6114

JOSEPH HOWE, Chairman.

To Bridge Contractors.

PROPOSALS will be received at the office of the EDGEFIELD AND KENTUCKY RAILROAD COMPANY, at Nashville, Tenn., until the 20th day of May next, to build the Bridge across Cumberland river, for the joint use of the LOUISVILLE & NASHVILLE and the EDGEFIELD & KENTUCKY RAILROADS, according to the provisions of the Act of the late General Assembly, appropriating two hundred thousand dollars for its construction. The superstructure will be about seven hundred feet long, including a draw with one hundred feet opening. The piers will be from sixty to eighty feet high, in water from twelve to eighteen feet deep at its lowest stage, and the foundations will be upon piles, or put in with coffer dams, or otherwise, as the nature of the river bottom renders expedient.

Bridge Contractors are invited to send plans and specifications for superstructure, of both wood and iron, for spans of from one hundred and sixty to two hundred feet long, and when of wood, with a proposal for preserving and rendering it fire proof.

Propositions may be made for the entire structure, or for the foundations, masonry, or superstructure, separately. The foundation must be bid for per pier, the masonry per perch of twenty-five cubic feet, and the superstructure per lineal foot. Any further information can be obtained by addressing the Chief Engineer of the Edgefield and Kentucky Railroad at Nashville.

The following is a copy of the Act of the General Assembly referred to:

"Be it enacted, That the Edgefield and Kentucky Railroad and the Louisville and Nashville Railroad are entitled to the sum of one hundred thousand dollars each, to construct a Bridge across the Cumberland river at Nashville, and that they are hereby consolidated for that purpose, and shall be entitled, upon application, to the sum of two hundred thousand dollars, for which the Governor shall issue Coupon Bonds of the State, at six per cent. at thirty years, to be issued as twenty thousand dollars of the work shall be done, from time to time."

JNO. L. HELW, President

Louisville and Nashville Railroad Company.

EDWARD S. CHEATHAM, Pres't

Edgefield and Kentucky Railroad Company.

NASHVILLE, April 18th, 1856.

BUSINESS CARDS.

H. H. GOODMAN & CO.,
No. 7 WALL ST., NEW YORK,
Dealers in Railway, City, County, and State
BONDS,
RAILS, LOCOMOTIVES, &c.

We have on hand and for sale, of County Bonds—
Hardin County (Ky.), 6 per cts. Davidson City (Tenn.), 6 p.cts.
Carter, Bath, and Montgomery (Ky.), 6 per cts. Iowa County (Wis.), 8 per cts.
Mineral Point do. do.
Also a variety of CITY, COUNTY, and RAILWAY
SECURITIES in smaller lots.
April 30th, 1856.

PHILADELPHIA AGENCY

OF
M. & J. WING,
MANUFACTURERS OF
STEEL, FILES, SAWS, &c.
JERICHO WORKS,
**SHEFFIELD,
ENGLAND.**

An assortment of the above articles kept constantly on hand, and for sale by

**THOS. M. CASH,
12 WALNUT STREET.**

H. M. SMYTH
COMMISSION MERCHANT

AND
MANUFACTURERS' AGENT,
No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axes, wrought Iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

ELLIOTT & CO.,
NO. 4 WILLIAM STREET, NEW YORK.
(ONE DOOR SOUTH OF BEAVER STREET.)

**RAILROAD AGENTS
AND
COMMISSION MERCHANTS,**
PURCHASE AND SELL ON COMMISSION
FOR RAILROAD COMPANIES.

RAILROAD IRON—They contract upon the most favorable terms for the delivery of Rails either on board ship in England or in the United States.

LOCOMOTIVES & CARS—Having connection with some of the best builders, they furnish the best at the lowest rates for cash or good paper.

WHEELS & AXLES—They are Agents for two of the best Forges, and one of the first Wheel Makers, and can supply orders with promptness and to give satisfaction.

CHAIRES & SPIKES—They are authorized to sell wrought and cast iron chairs and spikes from the best known makers at the lowest rates.

All orders will be promptly filled and at the lowest market prices.

CAR FINDINGS in variety.

Railroad Secretaries are particularly requested to forward by mail copies of their Reports from the first

ELLIOTT & CO.,
No. 4 William st., N. Y.

Rollins & Haviland,
STOCK BROKERS,
38 Exchange Place NEW YORK.
JOHN T. ROLLINS. WALTER HAVILAND.

Lord & Wright,
Counsellors at Law, Cincinnati, Ohio. 161

ELLERY & GIBBONS,
No. 10 WALL ST.,

**BANKERS, DEALERS IN DOMESTIC AND FOREIGN
EXCHANGE, &c.,** are prepared to negotiate Stocks, Bonds and Financial Securities in general.

REFERENCES.

D. R. MARTIN, Pres't Oc'n Bk, N. Y.
SILAS K. EVERETT, of Everett & Brown, N. Y.
WELLS, FARGO & Co. 181
CORNELIUS W. LAWRENCE, Esq., N. Y.
DREXEL & Co., Bank'rs Philad.
SAMUEL WILLETS, Pres't of Am. Exchange Bank, N. Y.

London Agency for Sale of Bonds, &c.

MESSRS. LANCE & CO. are making more generally known in England, the great advantages of American Securities for investment.

During the present year Messrs. Lance & Co. have disposed of a large amount of American and Canadian Railway Bonds, and are fast extending their connection, they will be happy to correspond with parties having good Amer. Securities for sale.

Messrs. LANCE & CO. have had experience in the purchase and shipment of iron, and offer their co-operation to those about to negotiate for the disposal of bonds and the purchase of rails.

r.s.—Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published.

LONDON, Oct. 1855.

10 Regent st., WATERLOO PLACE. 6m46

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.
REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

ENGINEERING WORKS.

LYONS' TABLES.

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.

SHEET NO.	SHEET NO.
1. General Table for all Bases and all Slopes.	13. For Base 18ft. Slope. 1½ to 1
2. For Side Hill Cuts and Fills 14. " 20 " 1½ to 1	
3. Base 12 ft. Slopes 1½ to 1.16. " 24 " 1½ to 1	
4. " 14 " 1½ to 1.17. " 25 " 1½ to 1	
5. " 15 " 1½ to 1.18. " 26 " 1½ to 1	
6. " 15 " 1 to 1.19. " 28 " 1½ to 1	
7. " 15 " 1½ to 1.20. " 30 " 1½ to 1	
8. " 16 " 1½ to 1.21. " 30 " 1½ to 1	
9. " 16 " 1 to 1.22. " 30 " 1½ to 1	
10. " 18 " 1½ to 1.23. " 32 " 1½ to 1	
11. " 18 " 1½ to 1.24. " 32 " 1½ to 1	
12. " 18 " 1 to 1. " 32 " 1½ to 1	

The Tables are printed in clear, bold type on tinted paper; sheets 25x16 inches. They may be used by candle-light without injuring the eye-sight. Each sheet is complete in itself, and embraces all that is wanted in connection with the Base or Slope designated, whether on level or side hill cross section.

Sold in separate sheets, at 25c. each, or the whole handsomely bound in cloth in one volume for \$7.50, by JOSEPH HUPP, 139 Chestnut st., Phila.; WM. MINNIE, Baltimore, Md.; ENTWISTLE & SON, Alexandria, Va.; McCLEAN & Co., Toronto, C. W.; also

For sale at the office of this paper.

SCIENTIFIC WORKS,

PUBLISHED BY

D. APPLETON & CO.,

346 and 348 BROADWAY, NEW YORK.

Appleton's Dictionary of Mechanics, Machines, Engine Work, and Engineering, 2 vols. 8vo.	\$12.00
Bourne's Catechism of the Steam Engine, Bourne's Treatise on the Screw Propeller, 4to	\$9.00
Gillespie's Treatise on Surveying, 8vo.	\$2.00
Griffiths on Marine Architecture	\$10.00
Henck's Field Book for Railroad Engineers	\$1.75
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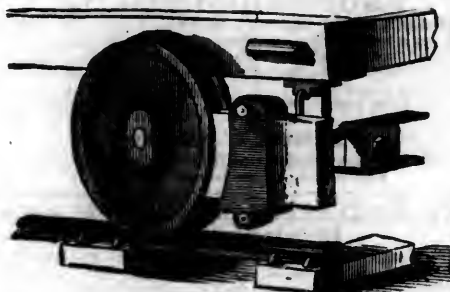
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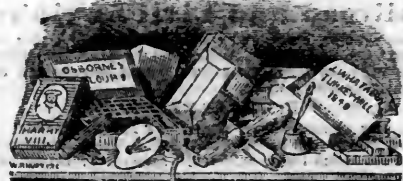
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May 15, 1856

To Railroad Contractors.



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The Company reserve the right to reject any proposals, and to require bidders to give satisfactory security for the faithful execution, according to contract, of the work they may undertake.

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WALTER GWYN,
Chief Engineer B. R. R. in S. C.

NOTICE TO Contractors and Capitalists.



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SEALED PROPOSALS will be received by the undersigned in New York City from April 10th, until May 10th, 1856, for the construction and equipment entire of the SAN FRANCISCO AND SACRAMENTO RAILROAD, California, from the City of Sacramento to the City of Benicia, a distance of 53 miles.

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Maps, profiles, and specifications can be seen and every information obtained upon application to the undersigned Room No. 7, Metropolitan Bank Building, cor. Broadway and Pine st., New York.

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New York, April 7th, 1856.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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SECOND QUARTO SERIES, VOL. XII., No. 20.]

SATURDAY, MAY 17, 1856.

[WHOLE No. 1,048, VOL. XXIX.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, May 17, 1856.

Improvements in the South Western States.

We give below a series of letters addressed by James Robb, Esq., to the Hon. Robt. C. Wickliffe, Governor of Louisiana, upon the subject of Internal Improvement in the South-Western States.—Mr. Robb is well known as an enterprising and successful Banker in New Orleans, and for his untiring efforts to secure for the South-Western States a system of public improvements suited to their wants, and calculated to promote their highest advantage. It was mainly through his instrumentality that the constitution of the State of Louisiana was so amended as to allow her to aid in the construction of the system of railroads of which he may be said to be the founder. Mr. Robb was for some time at the head of the New Orleans, Jackson and Great Northern Railroad. After a brief retirement, he has again entered the directory for the purpose of securing, if possible, the completion of the road to Jackson, by which means a connection will be formed with the Mississippi Central, and through this with the railroad system of the whole country.

(1)

NEW ORLEANS, February 1, 1856.

To His Excellency ROBERT C. WICKLIFFE,
Governor of the State of Louisiana:

SIR—As you were pleased to express, in a late interview, your concurrence in the views I submitted, concerning our internal improvements; and your partiality extended permission to address you on that important subject, I avail myself of your kindness, but not without diffidence and distrust of my ability to treat it properly; and were I less free from apprehension and anxiety for the future of the public works commenced in this State, owing to the apathy and indifference with which they are regarded, I would decline the honor of addressing to you this and other letters, which will form a continuation of the subject, under appropriate divisions.

The progress made in the construction of public works in the States east of the Ohio and Mississippi rivers, with the benefits which every day's experience proves will be conferred on Louisiana by their early completion, renders the subject, now more than ever, the one of chief importance in our public policy. If we do not shrink from a vigorous inquiry into the causes of our own inactivity amidst the general progress of the nation, nor from a just contemplation of our own necessities, we have gained half the victory. We need reputation, not only for enterprise, but for prudent foresight practically displayed, to give us solid claims to the respect, confidence and co-operation of those whose alliance it is our interest to cultivate.

It is much the habit of every day life, to endeavor to be satisfied with things as we find them; and propositions to perform anything new and untried, are entertained with doubt and regarded with suspicion. The discoveries that have proved most useful to society, when first made known, have not in general, secured their authors against neglect, poverty, envy and persecution; and as conceptions that possess solid merit, are generally distinguished by their simplicity, they seldom enlist eager attention. Whatever can be made so plain as to reach the common understanding, lacks the charm of novelty. These reflections are suggested by the task I have undertaken, and I feel that as I cannot invest my subject with novelty, it may fail to interest the public as much as its importance deserves.

In consequence of the failure and abandonment of the Nashville Railroad, commenced in 1830, and, indeed, of every undertaking in the State, which had the misfortune to come into existence at that period of inflation and speculation, the public mind seemed to have settled down, as by common consent, in the belief that we never would possess the capacity or means to undertake and complete any public work of importance; and that this sen-

timent was not only general, but had actually become intolerant towards enterprise, is fully exposed in the Constitution of 1845. That instrument divested the Legislature of the power to confer chartered privileges, and yet while carrying out the restrictive intention of its framers, in their hostility to "Banking Institutions," by a strange inconsistency actually constituted those that survived the disasters of 1842, the most exclusive monopoly of privileges ever known or tolerated among a free people. It was decided that we should have no more banks, but the enjoyment of exclusive privileges was reserved for those then in existence; which policy, if still continued, would have subjected our whole commerce to be controlled by the caprice and interest of three or four powerful combinations.

In April, 1851, our first Railroad Convention was held in this city. Preceding its organization, none was more doubtful of its success than I; and I consented with the greatest reluctance, to share in its deliberations. A committee of ways and means was named, composed of our most intelligent citizens; and their report and resolutions enunciated the policy of taxation on real estate for the purpose of building railroads, which was approved with the greatest unanimity by the Convention. This unexpected manifestation of an awakened public sentiment inspired the great mass of our citizens with high expectations, and was a fair index of their determination to commence a fresh career of progress, and redeem the State from the apathy which had nearly reduced it to the rank of an inferior member of the confederacy; the barrier of inactivity seemed fairly broken down. At the election in November, 1851, members of the Legislature were selected in reference to the promotion of those reforms in legislation, which were not only demanded by our circumstances, but sanctioned by unequivocal expressions of the public will.

These reforms contemplated nothing short of an entire change in our organic law—the consolidation of the municipalities—the restoration of public credit by funding and guaranteeing the punctual payment of the interest on our debt—the granting of "special charters," and the contribution of State aid by subscription to the stocks of the Companies engaged in the construction of works of public utility. The success of these measures of reform, repeatedly ratified by the public voice, is now a portion of our history. The Legislature of the State of Mississippi, in a spirit of great liberality, at the same time promptly responded, by conceding the right of way through her territory, to the New Orleans, Jackson and Great Northern Railroad Company.

The considerations that prevailed in favor of a resort to taxation on real estate, to construct public works, were numerous. The policy had al-

ready been in successful practice in other States and cities, and its legality had received the sanction of the highest Courts of Appeal. None could pretend to deny that landed property, whether rural or urban, would perpetually enjoy the benefits resulting from the construction of railroads and canals; and as it constituted the great bulk of our basis of taxation, it was provided that a majority of its proprietors should alone decide upon the subscriptions it would have to bear. The measure was sustained by a vote of more than five to one in its favor, in the city, and was carried by considerable majorities in many of the parishes of the State. Reliance was not placed in mere voluntary aid, as it was well known, from the proverbial hostility of a few large proprietors to all progress and improvement, and the absence of others who resided abroad, without any sympathy with our institutions, that the whole burthen of our undertakings would in that case have to be borne by the industrious and enterprising classes of citizens who were the tenants of those whose property their very enterprise would be most certain to benefit. In addition to other weighty and just arguments in favor of taxation, it came recommended by the suggestions of economy, as being a cash, instead of a credit system, sometimes inconvenient, and, in most cases, fatal to the value of the shares of the stockholders.

Encouraged by every plausible calculation of success, I consented to serve as the first President of the New Orleans, Jackson and Great Northern Railroad Company; and left the State for Havana in March, 1852, with every confidence that there would be no departure from an available taxation to build the road. During my absence the proposition for a subscription of two millions of dollars from the City was brought before the City Council, which, yielding to the feeble counsels of expediency, unfortunately stipulated in the ordinance that the installments should cover six years—the first not collectible until May, 1853. This was the beginning of misfortune, and up to this day our undertakings, commenced under the most encouraging auspices, have languished under the accumulated evils of a credit system, which, if not overcome by substantial aid, may in the end result in the sacrifice of the shares of the individual stockholders. If the subscription by taxation had been granted as originally proposed, viz: two and a half millions of dollars—one half per cent. in 1852, and one per cent. per annum in 1853-4-5, and which would have equally received the support of the friends of the road, this sum, with the State and individual subscriptions, would have secured to the Company nearly four millions of dollars in cash, without borrowing a dollar. Other important aids, which so large a basis would have called to the assistance of the road, would have ensured its completion to Canton, within the last year.

The manifest advantages of such an achievement would have strengthened and confirmed the confidence of the friends of progress, and destroyed the hopes of its adversaries. The business of two hundred and six miles of road, penetrating a rich and populous district, would have rapidly grown into importance; and on a reasonable calculation its net revenues would have yielded four hundred thousand dollars annually, which would have proved an unfailing resource to the Company in carrying the extension of its works to the Tennessee river, and maintained the value of its shares on a solid basis, thereby preventing the depreciation which now gives them but a nominal quotation. Besides, the tax payer would have held an equivalent for his taxes, and ultimately reaped the advantages which all similar undertakings elsewhere have conferred on real property.

The consequences of the unfortunate turn given to the affairs of this Company, and those of the Opelousas Company, by surrendering a position of strength for one of weakness, I will make the subject of my next letter.

And am, yours, faithfully,

JAMES ROSS.

(2)

NEW ORLEANS, Feb'y 4, 1856.

To His Excellency ROBT. C. WICKLIFFE,
Governor of the State of Louisiana:

SIR—My previous letter concluded with the promise to review the disastrous effects upon our railroads, of surrendering to the suggestions of expediency, a cash system for one of credit with its contingencies, which has inflicted great injury, not only upon our own interests, but on those of every undertaking identified with ours. Our inactivity has operated as a check on the Mississippi Central, Memphis and Charleston, Vicksburg and Shreveport, and Tennessee and Alabama railroads. If we had prospered and gone ahead, the inhabitants on the lines of those important roads would have been stimulated to fresh exertions in their behalf, which would have greatly accelerated and promoted their progress. The ordinance for taxation, as it passed the Council, was advocated on the ground that if approved by the property-holders, it would be a basis for credit; and that its ratification, if submitted in any other form, would be hazardous. This conclusion was as unwise as the judgment was at fault, that contrived the scheme of borrowing when we might have had the money without lenders' conditions. The property-holder voted for the tax, not according to its amount, but to aid effectually in the speedy completion of our projected roads; he neither expected nor required a postponement of his contributions, provided this object was attained, knowing that the great enhancement in the value of his possessions, and the augmentation of our local trade, would redound, if we had railroads as other cities had them, to his certain and unfailing advantage. Besides, we had a precedent in the noble example of Mobile, to challenge our imitation and admiration, where, in addition to liberal individual subscriptions, ten per cent. had been voted by the property-holders as a tax on their real estate, to assist in the building of the Mobile and Ohio road.

The tax ordinance being approved by the property-holders, with the first installment postponed until May, 1853, we had before us every prospect of inactivity for nearly a year, owing to the want of means; besides, the question of the tax was not so entirely free from doubt, as not to leave it in some degree of uncertainty, until a judicial decision regarding the constitutional right to tax real estate to build railroads could be had, as it was well known it would be contested by a few discontented citizens. There was reason to believe that at this time any hesitation in commencing active operations, would disappoint public expectations. It was deemed wise and politic not to allow discouragement to happen when it was possible to avoid it, and an appeal to the counties and inhabitants on the line of the road in Mississippi, was presumed best calculated to keep alive public favor and secure considerable assistance. We had already been put back so much by the causes assigned, that no plan which promised aid was to be overlooked or neglected. I proposed to spend a year in the interior, in my capacity as President, and visit in person every landed proprietor on the line of the road between New Orleans and Nashville; and by personal explanation of the policy of the undertaking, seek to enlist their sympathy and support. Unfortunately, in the beginning of my mission, which commenced with every encouragement, I was arrested in its prosecution, by severe illness brought on by exposure in Mississippi, which compelled me to relinquish further personal attention to the affairs of the company, until January, 1853. Subsequently, the official employments of the company, during my connection with it, interfered to prevent my renewing the effort, which I am now more than ever convinced would have been crowned with success. The Directors of the company have since engaged in various efforts to obtain the assistance and co-operation of the country, but the means employed have failed, either from misdirected efforts or from the indifference which prevails, owing to disappointment in the progress of the road, and the

want of an intelligent understanding of its affairs.

The unexpected and favorable sale by the city, of two millions of dollars of its bonds, in July, '52, inspired confidence that our credit would be as good on every fresh occasion; and the Directors of the Great Northern railroad, yielding to the current of public opinion, and relying upon taxation as an efficient basis of credit, entered into contracts, in November, 1852, for the building of eighty-seven miles of the road from the city to the State line, and for supplying the iron to the contractors, in time to complete it by the 1st of Oct., 1853. A contract was also entered into, to finish twenty-three miles of road between Jackson and Canton, on or before the 1st of November, 1854.—These engagements, with the cost of depot grounds, equipment, engineering and superintendence, amounted to over two and a half millions of dollars, two millions of which would have to be provided by credit, over and above the actual receipts, which the company could then rely on as available from its own resources, inclusive of the tax installment due in May, 1853.

This was the condition of the company when I resumed my official duties in January, 1853. It was at once apparent that it would soon have engagements pressing upon it, without means or credit to meet them; and unfortunately for my own interests and tranquility of mind, I undertook to meet these deficiencies by large advances made in times of great financial distrust, and not without sacrifices; which advances malignancy has made the subject of base but harmless invective. The triumph, or the total defeat of our internal improvement policy, was nothing more nor less than the grand issue at stake. It has had its struggles since, and has them now; and although it may to-day, appear in a condition weak and enfeebled, it has gained form and proportions that will expand, in time, to gigantic dimensions. The charters and liberal aid of the State since obtained were then only in perspective. Would any proposition have been entertained in favor of either, if failure had occurred before completing a mile of road? Never was a question of such mighty importance to the welfare of a State in such peril. Failure then would have been the death-blow to public works in Louisiana; and not in the day or generation of any man now living, would any combinations have sprung up to assure public confidence and root out the deep distrust that would have prevailed, of our capacity ever to undertake, or carry out successfully, any public enterprise.

As the engagements of the company would still need large sums, the next step suggested was the appointment of commissioners to negotiate a mortgage loan, but by the time preparation could be made to make the trial, unusual causes suddenly appeared to disturb the money markets of Europe, which at once imposed a violent check upon the operations of all enterprises depending on the facilities of credit; and since 1853, occurrences serious and unexpected (a European war and deficient harvests) have contributed to increase the difficulties.

After the return of the commissioners, whose report was unfavorable to the hope of contracting a foreign loan, the Directors of the Great Northern and Opelousas companies, in view of their wants, and the ascertained insufficiency of their Real Estate Tax Bonds to realize money, either by sale or otherwise, mutually agreed to petition the Legislature to pass an act authorising a commutation of the real estate tax subscription for one to be made in behalf of the city in its corporate capacity, payable in its bonds bearing six per cent. interest, and having twenty years to run. This measure has proved advantageous, and in some respects fulfilled the object of its projectors. The taxation to pay the interest on these bonds cannot be regarded as very onerous to property; neither can their issue be viewed as impairing good faith. It brought no increase of the liabilities of property, over what it had assumed in 1852, before the negotiation of the two millions of consolidated

bonds. It relieved the railroad companies from a large annual payment of interest on their issues of real estate tax bonds, which were surrendered by the holders for the bonds of the city at par. It made the subscription of the State available for a large sum, without which the failure and prostration of both companies could not have been averted. But although these aids essentially contributed to overcome the serious embarrassments that threatened our undertakings, and enabled the companies to retrieve, in part, the prestige of early confidence, they would have been still more beneficial, but for a new and unexpected scheme to build a railroad from New Orleans to Mobile, which was at that time put forward, its projectors claiming the aid of the city, in its bonds, to the extent of one and a half millions of dollars. The scheme, unfortunately, received the sanction of the City Council, and by the practice of unparalleled frauds was carried at the ballot box, entailing upon the city a loss of credit, and the loss of at least two hundred thousand dollars of its bonds, with the interest thereon at six per cent. for thirty years. Considerable as this sum may appear, it is insignificant in comparison with the sacrifices imposed on the Great Northern and the Opelousas companies, and the forfeit, at home and abroad, of confidence in our own discretion and foresight.

Navigation between this city and Mobile is unsurpassed—never interrupted by season, climate or low water; and it will, for all time to come, serve to supply a cheaper transportation than a railroad, which, even had it been a scheme of merit, it was not wise to commence, when we had already undertakings on hand, beyond our present means. It seems almost incredible that a scheme shrouded in imposture, from its conception until its disastrous termination, could have found advocates where any intelligence prevailed. Much as we have to deplore its mischievous effects, it is to be hoped that the lesson will prove one of caution against the follies of inexperience and the schemes of visionary projectors.

Having sought to give an impartial narration of the past history of our railroad companies, with the hope of dissipating objections which need only the assisting hand of truth to remove them, and of restoring in some degree, the zeal and support which were displayed in so conspicuous a manner in the outset of our undertakings, I will devote my next letter to the plan of further aid and assistance to prosecute them to completion.

Very faithfully, yours,

JAMES ROBB.

(3)

NEW ORLEANS, February 6, 1856.

To His Excellency ROBERT C. WICKLIFFE,
Governor of the State of Louisiana.

SIR—My second letter was an exposition of the financial difficulties that surrounded the management of our two chief railroads: This, I hope, may possess more attractions, which it can borrow from the anticipation of success founded upon adequate and valuable aid, rather than any merit shown in its discussion.

The amount expended in the construction of the Great Northern and Opelousas railroads is \$6,297,853.55, of which the State has invested \$1,364,000, and the City \$3,500,000, the residue having been derived from taxation and individual subscriptions. This large sum may now be considered dead capital, neither road having advanced sufficiently to perform the agency of developing or improving any important or valuable section of country. It is therefore a question which is now invested with strong claims on the vigilance and support of the government of the State and the City, with a view of assuring the results which both roads promise if carried to completion. You will naturally be led to inquire how the State can extend its aid, when it has already been given as far as the limits of the Constitution will permit. By using its great political and moral influence with our sister State of Mississippi, and exhorting it to co-operate on a scale commensurate with its immense resources in aid of a policy already rati-

fied by the popular voice, and which only needs the acquiescence of enlightened and liberal legislation to lay the foundation of a solid and liberal support, alike honorable to the people and their representatives, and to which all may point with pride, as an imperishable monument of the glory of the State.

The city can issue no more bonds, and it would answer no good purpose if it did, as the market for the sale of its securities is a restricted one; and of all descriptions of aid there is in my opinion none more objectionable on grounds of interest and policy. Instead of relying on bonds or credit, why not fall back on taxation to a moderate extent? I have already explained, and, I think, convincingly, that had we adhered to this policy, our roads would now be giving some return on their cost, and be in part fulfilling their great mission; and if I read aright the sentiments of the bulk of the sensible and patriotic of our citizens, there is not one out of four that would interpose serious objections, provided guarantees existed that aid thus granted would be faithfully and judiciously applied. Our two railroad companies have nearly the whole of their unsold City bonds pledged, with large margins to the lender, for the loans needed to carry their floating indebtedness, and every day lessens their resources by the payment of fourteen and sixteen per cent. premium for money when they receive six per cent. on the City bonds, which is paid by taxation and comes out of the pocket of the citizen. How long would a merchant or planter continue solvent, with such a pressure upon his means? We are oppressively taxed already, and the loudest complaints prevail, but there is no remedy for this evil, unless men of capacity and integrity can be prevailed on to superintend the expenditure of the city. If the reduction of taxes is to be alone kept in view, we may soon find ourselves in the condition of being without streets over which a dray could pass; and if we taxed cotton, sugar, and western produce as much to transport them to our presses and warehouses as it costs to bring them hither, our trade will diminish and our stores and houses become vacant. This is a digression, but not without more or less application in the illustration of my subject. But to return to the plan of City aid. That the City Council shall submit to the proprietors of real estate an ordinance to subscribe one million of dollars by taxation, to be divided in the proportion of \$600,000 to the Great Northern, and \$400,000 to the Opelousas Company. That the tax shall be collected in one instalment, and the tax-payer entitled to receive shares of stock in each Company on presentation of his tax receipt. That in proportion as the tax is collected by the Treasurer of the City and paid to each Company, he shall be entitled to receive back on behalf of the City, an equal amount of its bonds, which shall forthwith be cancelled by the Mayor.

The practical operation of the adoption of this recommendation will be the withdrawal of our railroad companies from the market as borrowers for one million of dollars, and to reduce our public debt for a like amount—to enhance the value of those unsold and lessen objections to them as a security, besides liberating those companies for an inconvenient debt, which is consuming their substance and destroying the value of their shares.—Instead of the progress we have made in the construction of our railroads being unattended with any future advantage, as everything now seems to indicate, we shall regain life and vigor, under the nourishing support to be derived from a policy sanctioned by the plainest dictates of self-interest and common sense. Our companies will then compete for capital, (which we have in abundance) on an equality with other sound and productive securities. There is now invested in our two roads not much short of one million of dollars, derived from taxation on real estate, nearly half of which is represented by shares, the remainder being applied to the payment of interest on the bonds of the city. This sum is dead capital, or rather what represents it has only a nominal value; and how are we to give life and value to this dead mass if

we neglect to apply the remedies which the disease demands? Our condition is not unlike that of the proprietor of thousands of fertile acres which he cannot employ without capital and labor to improve and cultivate, and who consents to surrender a share to others who will furnish him these aids, rather than submit to privation and want, when his concessions will secure him luxury and plenty. The additional million of dollars proposed to be raised by taxation, and to cancel a like amount of the public debt, could not prove a serious inconvenience to property; and Mobile may be justly cited as an example, where the current tax for railroad purposes is two per cent., and has not been less for the last three years. I think it will appear clear to you that the tax-payer will be the gainer—1st, by giving value to shares already acquired—2d, by accelerating the completion of our railroads, which, wherever they have been built, have more than doubled and quadrupled the value of real estate, and by augmenting population have enhanced the rents of houses in like proportion.

The Governor of Mississippi, who has evinced the most laudable degree of zeal in behalf of works of internal improvement, has been pleased to recommend, in his late message, in strong terms, the Great Northern road to the favorable consideration of the Legislature, and has suggested an increase of revenue to aid the different railroads running through the State. There is great merit in the recommendation of Gov. McRae, and it is only to be regretted he did not name a higher figure than two hundred thousand dollars, as the amount of annual aid. I am not insensible of the small importance or weight attached to counsels that are gratuitously extended, and I should not venture to express publicly any opinion as to what the State of Mississippi might do in aid of railroad improvements, if I had not received encouragement to do so from a number of its principal and most influential and respectable citizens—besides, my reluctance is in some degree overcome by the recollection of their hospitable reception, and the attention I received when I visited the State in 1852, and had the honor to address the Legislature in compliance with the resolutions of both branches. At that time I had only in view the obtaining of the right of way, and plainly stated that I did not come to invite assistance on the part of the State. That the weight of any claim now set up for its fostering aid should not be impaired, it is only necessary to institute an inquiry into the causes that have occurred to invite it.—This has been partly done in this and my preceding letters, without referring to the altered prospects of railroad undertakings which have since taken place, owing to the great enhancement in the wages of labor, and the doubling of the cost of railroad iron. In 1851-2, the building of 409 miles of the Great Northern railroad, from New Orleans to the Tennessee river, could be reasonably estimated to cost not exceeding eight millions of dollars, on the scale of prices then current for wages, and all the materials needed in its construction. Provision for this expenditure was clearly within our reach at that time, if the ordinance for taxation on real estate had not been perverted from the original design. Our own resources would have reached five millions of dollars on the following calculation, viz:

Real estate subscription in New Or-	
leans.....	\$2,500,000
Private do. do.....	500,000
State do. 1-5th of \$5,000,000.....	1,000,000
Subscription in Mississippi.....	1,000,000
\$5,000,000	

The remaining three millions of dollars could have been obtained by negotiation, in spite of the adverse circumstances of the times; and this declaration I am warranted in making, by being in possession of a personal knowledge of the facts.—The operation of untoward events, in so many ways, has inverted the circumstances of our railroads; and instead of the Great Northern being supported on the basis of independence, flowing

from the legitimate aids first contemplated, it has been a distressed supplicant for help in any shape to meet expenditure; which, with delays, increase of the price of labor and materials, will swell the sum required to complete it to the Tennessee river, to \$12,000,000.

It is with unfeigned reluctance that I have to allow myself to be intruded in the discussion now under consideration, but I am sure you will acquit me of egotism. Some observations, made in my speech to the Legislature of Mississippi, in Feb'y, 1852, have since, and not without effect, been repeatedly cited against State aid. I admit the correctness of the allegation; but this does not alter the claims of new circumstances, or oppose any serious objections to the recommendations of Gov. McRae's message.

My letter has already attained greater length than I intended, and I will postpone the discussion of aid from Mississippi, and make it the subject of my next.

Faithfully yours,
JAMES ROBB.

North-Eastern (S. C.) Railroad.

The company constructing this work have had a succession of serious difficulties to contend against. In May, 1852, they were organized. Preliminary surveys were commenced in June; but owing to the unhealthiness of the country at that season, these operations had to be deferred till December following. The first advertisements for contracts were made in January, 1853. It was expected that proposals would have been made by planters along the line; but none such have been received. It was then attempted to build the road with white labor under the charge of a Superintendent. This also failed, and had to be abandoned. In February, 1854, an agreement was made with a party of contractors from New York. Work was to have been commenced by these, in November following; but owing to the financial embarrassments which then visited the country, the large monthly requisitions for payment could not be met. This occasioned delays, and prevented operations being commenced till February, 1855. The approach of summer again compelled these parties to disband their force. Much complaint is made as to the difficulty of procuring labor, the parties most deeply interested in the work showing little disposition to further its construction. Exorbitant charges have often been made for right of way. In spite of these obstacles, however, the last report, made up to March 1st, shows that in May, 1855, fifteen miles were opened; and since then fifteen more, making thirty in all, have been put in operation. If no unexpected interruption occurs, it is expected to reach the Santee river by July next. A temporary crossing will here be provided until the completion of the bridge, now under way. Beyond this point a strong desire to carry on the work has been shown by the inhabitants.

The total expenditure to date has been \$924,791. The gross receipts have been \$12,220. To complete the road to the north side of the Santee river, including the bridge and about three miles of trestling, will require \$150,000; and to finish it thence to the terminus at the junction with the Cheraw and Darlington railroad, \$460,000 additional; to which are to be added, say, \$150,000 for outfit, as workshops, tools, rolling stock, &c., making a total of \$1,671,570.

The trains have been run so far without any fatal accident, except that of a negro who was killed by jumping on the cars while in motion.

Over 10,000 passengers have been carried. On crossing the Santee, a much more productive section of country will be reached, and one furnishing materials for construction of a much better character than can be found on the sea coast.

The first 20 miles are in good order; the remainder, in consequence of the swampy character of the country and an unusually wet season, is more or less uneven. The company have on hand iron sufficient to lay the road 60 miles.

An issue of bonds to the amount of \$700,000 has been prepared and is now offered for sale.

The road will connect with the Wilmington and Manchester, securing all the Charleston and North-eastern travel. By its junction with the Cheraw and Darlington line one of the most fertile and wealthy sections of the State will be reached. The usual effects of enhancing the value of lands, and calling into existence new branches of industry, have already taken place. A strong feeling among the residents of the coal regions of North Carolina, in favor of a connection with this road, has been manifested.

GENERAL ACCOUNT.

Bonds issued for real estate	\$43,730
Bonds issued to contractors and others	92,825
Installments on stock	800,242
Bills payable	89,030
Gross receipts for transportation	13,221

Total	\$1,039,048
Construction of roadway	\$367,453
Iron	294,153
Real estate and right of way	103,138
Engineering, salaries, &c.	74,181
Property, machinery, &c.	104,750
Interest, discount, expenses of operating, &c.	24,895
Assets on hand	70,527

Total

The principal officers are—T. P. Huger, President and Chief Engineer; J. L. Branch, Resident Engineer; and John G. Chalk, Secretary and Treasurer. The last annual meeting was held in Charleston, on the 2nd of April.

Cleveland, Columbus and Cincinnati R. R.

DIRECTORS' REPORT.

The Board of Directors have the pleasure of laying before you their Fifth Annual Report.

The operations of your road during the past year have been quite satisfactory. Trains have been run with great regularity, and without any serious accident.

There has been earned during the year ending December, 31st	\$1,290,295.92
The expenses for operating the road during the same time have been ..	558,239.61

Showing net earnings of

There has been a decrease in the receipts from passengers, as compared with the previous year, of \$37,944.91, which is mainly to be attributed to the unprecedented high stage of water in the Ohio river during the entire year. While there has been a decrease in the receipts from passengers, it is gratifying to be able to state that during the same period there has been an increase in the receipts from freight of \$106,094.73, showing conclusively that the area of territory contributing to the support of the road is constantly increasing, and will require increased equipment for this branch of service.

During the year, connected lines of road have been formed to St. Louis, via Indianapolis, by the completion of the Ohio and Mississippi road between Vincennes and St. Louis, and the Terre Haute and Alton road between Terre Haute and St. Louis. As these connections form much the

shortest line between Cleveland and the last named place, it is reasonable to anticipate a profitable addition to the business of your road from this source.

The contract entered into between this and the Cleveland, Painesville and Ashtabula company, for operating the two roads jointly, under the charge of one Superintendent, and the complexity of the accounts between the companies, was terminated on the first day of April last, and in place thereof, arrangements were made, forming a connecting line of the two roads, whereby the cars of either could pass on to and over the road of the other; thus securing all the advantages that could be derived from a joint management, without its complication. This has operated to the satisfaction of both companies.

There has been expended during the year, and charged to the account of construction—

For constructing 2d track	\$54,017.99
Graveling tracks	36,915.92
Fencing	3,608.37
New locomotives	13,074.46
Real estate	7,817.04
Right of way	8,179.00
New station buildings	5,497.77

Total

Eight miles of second track, between Crestline and Shelby, has been completed this year. This, with that previously constructed, makes in all, 87 miles of double track completed and now in use, viz: Twenty-five miles between Cleveland and Grafton, and twelve miles between Shelby and Grafton; all of which is laid with compound rail. This rail, either from the quality of material used in its construction, or the principle upon which it is constructed, proves less serviceable than the ordinary T rail. Appearances indicate that it will mostly have to be renewed within the next three years.

Ballasting is only obtained at each end of the road, and on the Ohio and Indiana road, about 3 miles from Crestline. This pit is now opened and being vigorously worked, and the gravel is of excellent quality. The extreme distance which gravel has to be hauled is $83\frac{3}{4}$ miles. Average distance, 17 miles. Twenty-six and a quarter miles have been graveled this year, and sixty-four and a half miles in former years, making in all ninety and three quarter miles, and leaving forty-three and three quarter miles yet to be completed. Every exertion should be made to complete the remaining distance at as early a day as possible. When completed, the road will rank, in all respects, among the very first class roads in the country.

The equipment for ballasting consists of two ten wheel locomotives, seventy-four large eight wheel and forty small four wheel dumping cars; an engine house and smith shop for repairs near Crestline; and shovels, picks, &c., to equip 60 men.

The fencing of the track has been completed this year, and the road is now enclosed throughout with a good substantial fence, and cattle guards at all road crossings. Much benefit is derived from this improvement, in the regularity and safety with which trains can be run.

In 1854, two shops were erected for the repairs of rails. During the past year, 7850 (equal to 13 miles) of fractured rails have been repaired and laid in the main line. The cost of such repairs has averaged about one dollar per rail. The expense of re-rolling the same, at the lowest estimate, would have been four dollars each, showing a saving of full three dollars on each rail. The rail, when thus repaired, is considered of but little less value than a new one.

The track has been maintained in as good condition as could reasonably be expected, when the nature of the soil upon which it is laid, and the large quantity of rain which has fallen during the year, are considered. Experience proves that no amount of labor can make a smooth and even track on a road-bed composed of clay and loam. The expense of keeping a road, laid on such materials, is double that of keeping it in perfect order when well graveled.

Owing to the liberal expenditure in 1854, for rails, ties, fuel, &c., less has been paid out for such materials this year than otherwise would have been required. All materials purchased in former years, and used this, for repairs and operating the road, have been charged to the current expenses of the year.

The assets and liabilities of the company, as shown by its books, on the 31st Dec., were as follows:

ASSETS.	
Construction of road and depots.....	\$3,994,298.14
Equipment, cars and engines.....	619,424.74
Madison Co. bonds.....	1,500.00
Advances to Mahoning road, to elevate its track over C. C. and C. track, subject to future adjustment.	24,000.00
Interest in steamers "Crescent City" and "Queen of the West".....	55,171.00
Telegraph stock.....	3,000.00
Columbus and Xenia R. R. stock.....	5,300.00
Bellefontaine and Indiana R. R. stock.....	60,000.00
Delaware Co. bonds.....	6,000.00
Indianapolis and Bellefontaine R. R. stock.....	70,000.00
Buffalo Mutual Insurance scrip.....	310.00
Real estate not required for roads and depot grounds.....	12,000.00
Proportion of assets due joint acct of C. C. & C. and P. & A. Co's....	41,092.60
Bills receivable.....	48,115.69
Materials on hand in repair shops.....	26,173.89
Fuel on hand.....	18,754.75
Am't due from other companies and agents.....	163,081.80
Cash in hands of Treasurer.....	288,592.62
	\$5,436,815.32
Expenses operat'g the road 12 m'ths.....	558,239.61
Net earnings of the road for 12 m'ths.....	732,066.31
	\$6,727,111.24

LIABILITIES.	
To stockholders, capital stock.....	\$4,547,020.00
Mort. bonds.....	45,000.00
Non-con'tible bonds.....	3,400.00
Franklin Co. bonds, paym't assum'd by this Co.....	50,000.00
Bills payable.....	14,018.00
Dividends unpaid.....	13,249.38
Div'd No. 9, payable on and after Jan'y 1st, 1856.....	227,701.21
Due other Co.'s and individuals.....	110,439.89
Surplus earnings undivided.....	425,986.84
	\$5,436,815.32
Gross earnings for 12 mos.....	1,290,295.92
Total.....	\$6,727,111.24

One hundred thousand dollars of its own stock, owned by the company, has been cancelled, and the capital stock reduced that amount. All debts considered bad, and \$100,000 to cover depreciation on equipment, has been charged to surplus account. The balance of this account, reserving sufficient to cover depreciation in the value of stocks owned by this company in other companies, and in steamboats, and to cover the depreciation of its own track, is justly due the stockholders in stock.

Much credit is due to the heads of the different departments, for the able and efficient manner in which they have discharged their duties.

For a more detailed statement of the operations of the road and condition of its equipment, you are referred to the accompanying report of the Superintendent.

The Superintendent's report shows the earnings for the year, in detail, to have been derived from—

Passengers.....	\$501,256.90
Freight.....	730,965.98
Mail and express.....	55,332.50
Rents.....	2,740.54
Total.....	\$1,290,295.92

—or an increase of \$66,731.01 over those of 1854. Considering the short crop of 1854 to be transported in the early part of last year, the almost total suspension for over a month of freighting, from the burning of the bridge over the Grand river at Painesville, and the unusually favorable condition of the Ohio river—the above result is considered as very satisfactory. The number of miles run by passenger trains was 298,590; and by freight, 304,138; making a total of 603,088. The income per mile for passenger trains, including mail and express, was \$1.86. The same per mile for freight trains was \$2.40½. The earnings of freight per ton per mile was 2.76 cents, against 2.66 cents in 1854. The mileage of passenger trains has been somewhat decreased, owing to a reduction of trains on the Cleveland and Toledo road between Cleveland and Grafton. There has also been a large increase to the mileage of freight trains.—The working expenses were 43¼ per cent. of gross earnings.

EQUIPMENT.

In the division of rolling stock with the Cleveland, Painesville and Ashtabula railroad company, April 1st, 1855, this company were entitled to and received for their proportion, 39 locomotives, classed as follows:

- 13 Passenger Locomotives.
- 19 Freight Locomotives.
- 4 Light Class Locomotives, not adapted for the present business.
- 3 Pony or Switching Locomotives.

One of the four light engines has since been sold, and it will be good policy to dispose of the remaining three as soon as possible, as they cannot be of profitable service in any department of the business of the road.

A contract has been made with the Cuyahoga Steam Furnace Co., of Cleveland, for three additional locomotives, in accordance with the resolution of the Board of Directors, and they will probably be delivered during the months of January and February of the coming year. This will probably give the company sufficient power for the business of the year.

The remaining equipment consists of 27 first and 5 second class passenger cars, 4 baggage, 2 mail and express, 232 eight wheeled box, and 175 box, stock, and platform cars;—making a total of 445 cars. The rolling stock is said to be in good order. One additional baggage and some freight cars are needed; also more side-track room at Cleveland and New London stations. The passenger trains have been run with great regularity. Two passengers were injured from a collision between two trains, while standing on the platform contrary to rules. Two employees were killed by falling from trains. Four persons were killed by trains in motion, while trespassing on the track. Two of them were intoxicated at the time. No blame was attached to the company in any of these fatal cases.

Railroad Ticket Agents.

A convention of railroad ticket agents, comprising some sixty delegates, representing the important Western roads, as well as many of the Eastern, was held in Boston on Wednesday and Thursday last, the desire being to establish such a system as would, on the whole, conduce to the benefit both of the railroads and the passengers. Some interesting reports were made respecting the settlement of cash balances, and other matters pertaining to extra baggage, which latter was as follows, viz: that each passenger be allowed 100 lb. over the various lines of road, and that 50 cents be the charge for every 100 lb. extra for each 100 miles. The amount now generally allowed is 80 lb. The convention adjourned to meet at St. Louis on the 19th of November next.

Atlantic and North Carolina Railroad.

We are pleased to have it in our power to state that the work on the Atlantic and North Carolina railroad is now progressing vigorously, and the officers of the company and contractors along the line are using every exertion to complete it at an early day from Beaufort to Goldsboro. The force employed is upwards of 600 men and 130 horses; and it is expected to open the road from this place to Goldsboro by the 1st of January next, or early in the following spring. Mr. G. P. Evans has charge of Gov. Morehead's contract, and will render a good account of his stewardship—he will commence laying track at the Point in a month or two.

Mr. C. B. Wood is driving his work with energy, and already has a considerable portion of the grade ready for the superstructure. Mr. Stanly has about five miles of the track laid out from Newbern towards Kinston, and is laying now about 1,000 feet per day. As nearly all the iron for his contract is at this place, he will doubtless go on with the track-laying without interruption.

Mr. J. C. Washington has cleared the track from Bachelor's Creek to within about five miles of Kinston, and from Kinston nearly to Goldsboro; as he has a very large clearing force, the entire line will soon be clear. He has upwards of one-fourth the grading completed on his contract, and as the weather is now fine for work, with his force he will in a few months finish, if not all, many miles of the grading.

Messrs. Stone & McDowell have a large force framing the Trent river bridge, and Mr. Murdock is making preparations to commence the masonry for the superstructure; he will, in a few days, put his steam pile driver to work to get ready the foundation.

Col. H. J. B. Clark has, we understand, contracted to furnish Mr. Stanly the necessary number of brick for the masonry on his contract, and has in operation near Bachelor's, on the road, a steam brick machine. Mr. Johnston Bryan, we notice, is "piling" up the Sills, at the depot in Newbern. Messrs. Hancock & Roberson are striking hard and fast on the wharf, while Mr. Brown, the intelligent and efficient locomotive engineer, with the assistance of the "Gov. Bragg," manages to keep everything moving with locomotive velocity around them.

We are glad to see that this company has not adopted the "penny wise and pound foolish" system of buying cheap materials for their road, and employing cheap (as a matter of course) inefficient officers on their works. They pay the best prices for both men and materials, and when they do not come up to the standard they are rejected without regard to fear or favor. We approve of this course, however much we have to sympathize with a "clever fellow" occasionally, who has been notified that space vacant is preferable to space occupied, or who has read a "billet doux," as one of our friends termed it, when asked why he was not on the road, for sleeping rather later in the morning than the company desired. Well, we say again this is right, for railroad men generally get well paid, and they should be made to labor for it. *Newbern News.*

Detroit and Toledo Railroad.

At a meeting of the Detroit and Toledo railroad company, held a few days since in Detroit, it was determined to let the contract for the whole work within thirty days, and to complete the road, at farthest, by the 1st of Jan'y next.

Michigan Central Railroad.

The Michigan Central R. R. Co. are now engaged in erecting a substantial telegraph connection between Detroit and Chicago. The cost of maintaining this line will be about \$2,000 per month, which of course they intend to save, in freedom from accident, delays, &c. Every train will carry an instrument, which can be connected with the line at a moment's notice, by which the situation and direction of every train upon the whole road can be known at once.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par value of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,073,700	6,019,920	476,647	90,797	6	65	Brunswick and Florida, Ga.	92	300,000	300,000	550,000	In progr.	141,168	8	.....
Androscoggin & Kennebec.	55	642,343	1,473,080	2,245,020	190,605	12,807	1	10	South Western	92	1,067,496	465,500	1,624,920	253,306	141,168	8	.....
Androscoggin	20	91,192	232,193	343,317	29,396	12,807	1	10	Tennessee and Alabama	30	246,486	.....	679,906	In progr.	.....	.....	.....
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	259,380	124,038	6	95	Tennessee and Missis.	268	170,931	.....	175,740	In progr.	.....	.....	.....
Portl., Saco, & Portm'th	51	1,367,000	119,237	1,486,327	233,234	120,834	6	.....	Memphis and Charles'tn	268	2,108,177	.....	3,563,362	176,484	102,016	.....	.....
Boston, Concord, & Montreal	83	1,808,093	1,069,512	2,771,310	850,221	143,665	2	.....	Mobile and Ohio	163	2,608,555	1,802,921	4,536,412	169,932	109,236	.....	.....
Queshore	53	1,085,925	899,313	3,170,687	854,426	158,432	8	80	N. O. Central	188	64,534	.....	628,808	In progr.	.....	.....	.....
Concord	35	1,486,000	none	1,412,576	329,744	188,299	2 1/2	43	M. A., Opelousa & G.W.	56	2,930,425	671,645	2,657,565	In progr.	.....	.....	.....
Northern, N. H.	82	2,768,400	none	3,016,433	370,629	188,299	2 1/2	43	Vicksburg, Shreveport & Tex.	.....	111,775	.....	107,896	In progr.	.....	.....	.....
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	162,887	56,173	none	.....	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	.....	.....	.....
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	394,917	.....	.....	.....	East Tennessee and Va.	10	625,426	158,593	1,033,781	In progr.	.....	.....	.....
Vermont Central	117	5,000,000	3,550,236	8,468,366	820,119	214,708	none	.....	Nash. and Chattanooga	181	2,319,330	1,467,081	3,843,694	316,090	112,177	none	.....
Boston and Lowell	27	1,820,000	325,685	2,138,595	489,754	140,377	6	.....	Covington & Lexington	58	1,302,804	2,235,839	3,738,753	284,973	133,694	15	.....
Boston and Maine	83	4,076,974	150,000	4,179,535	854,426	330,000	8	33 1/2	Lexington and Frankfort	29	481,091	159,299	638,363	90,930	84,864	.....	.....
Boston and N.Y. Central	71	2,240,300	1,618,671	3,463,18	69,917	8,740	none	.....	Lexington & Big Sandy	.....	.....	.....	428,057	In progr.	.....	.....	.....
Boston and Providence	55	8,160,000	359,132	3,677,154	558,671	219,689	none	.....	Lexington and Danville	.....	.....	.....	570,443	In progr.	.....	.....	.....
Boston and Worcester	58	4,500,000	655,428	4,855,4	1,008,004	404,461	6 1/2	.....	Louisville and Frankfort	68	698,236	609,051	1,589,666	244,014	95,902	6	.....
Cape Cod	47	681,690	290,598	997,252	119,221	65,527	3	.....	Atlantic & Gt. Western	264	896,939	77,294	613,231	In progr.	.....	.....	.....
Connecticut River	52	1,501,110	273,241	1,802,244	286,653	103,787	5 1/2	.....	Belmont and Ind.	118	1,831,655	2,025,925	2,862,522	298,238	140,828	none	42
Eastern, Mass.	60	2,653,400	2,917,737	4,621,016	647,281	305,998	.....	.....	Clev. Col. and Cin.	141	4,473,421	374,127	4,646,133	1,162,601	567,906	9	102
Fitchburg	14	600,000	16,000	654,603	681,163	225,071	72	.....	Cleveland and Toledo	200	2,676,425	2,689,341	5,124,629	736,272	296,936	10	76 1/2
Nashua and Lowell	21	500,000	none	533,953	194,491	56,533	6 1/2	.....	Clev. and Mahoning	103	640,117	61,525	628,633	In progr.	.....	.....	.....
N. Bedford and Taunton	87	3,015,100	292,550	3,362,490	683,499	295,738	6	87	Clev. and Pittsburg	133	2,750,744	3,048,092	5,857,466	581,677	309,518	.....	63
Old North and Fall River	77	2,232,541	1,063,670	3,299,727	254,736	87,313	none	.....	Cin. Hamilton & Dayton	60	2,100,000	1,464,364	2,601,978	483,690	.....	.....	68 1/2
Vermont and Mass.	155	6,150,000	5,966,420	10,495,905	1,869,673	683,013	7	91	Cin. Wm. & Zanesville	131	1,120,450	1,181,255	2,326,456	In progr.	.....	.....	12 1/2
Western, Mass.	46	1,141,000	205,565	1,511,271	294,760	75,760	2	.....	Columbus and Xenia	55	1,484,580	149,000	1,481,733	356,866	187,518	10	84
Worcester and Nashua	43	1,510,000	335,461	1,806,096	381,480	138,057	.....	.....	Dayton, Xen. & Belpre	68	437,888	422,056	860,496	In progr.	.....	.....	10
Providence and Worcester	72	2,350,000	939,000	3,313,932	730,012	352,799	10	20 1/2	Dayton and Michigan	146	1,076,692	393,011	1,186,529	In progr.	.....	.....	17
Hartford and N. Haven	126	1,845,616	2,090,124	4,060,869	258,685	119,611	none	.....	Dayton and Western	85	310,000	500,000	738,769	In progr.	.....	.....	20
Hartford, Prov. and Fishkill	110	2,030,000	474,177	2,429,069	330,762	18,261	none	.....	Katon and Hamilton	42	454,090	904,469	1,156,136	171,929	65,000	.....	90 1/2
Housatonic	57	1,031,800	573,995	1,577,167	238,266	none	4	.....	Little Miami	55	2,903,921	1,171,786	3,648,172	681,562	336,708	.....	12 1/2
Naugatuck	62	2,992,450	2,264,658	4,906,748	936,025	341,667	none	.....	Mad River and L. Erie	206	2,481,550	2,672,832	4,446,661	Recently opened.	.....	.....	10
N. York and N. Haven	50	738,258	735,165	1,450,318	88,007	30,318	none	.....	Central Ohio	138	1,520,927	3,485,076	4,238,443	1,111,626	662,117	9	.....
N. Haven and N. London	66	500,000	1,073,673	1,594,383	124,044	66,331	none	.....	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	In progr.	.....	.....	.....
N. London, W. & Palmer	66	2,122,300	873,489	2,997,113	304,236	85,458	2 1/2	85	Pittsburg's Mayfield & Cin.	50	871,350	31,000	590,938	In progr.	.....	.....	.....
Norwich and Worcester	32	439,000	1,625,098	1,940,695	117,716	9,904	2 1/2	.....	Sand'y Manuf. & Newk't	127	1,350,000	2,206,357	3,652,357	328,938	164,479	none	.....
Albany Northern	35	643,330	317,859	974,328	In progr.	.....	.....	.....	Scioto & Hocking Valley	138	403,975	509,050	883,858	In progr.	.....	.....	10
Black River and Utica	100	1,487,871	1,601,183	2,819,098	172,476	66,333	none	.....	Springf., Mt. Vernon & P.	131	1,000,000	950,000	.....	In progr.	.....	.....	.....
Buffalo, Corn. and N. Y.	92	798,439	2,557,819	3,401,868	288,392	31,896	none	.....	Tol. Washash & St. Louis	242	2,500,000	4,530,000	.....	In progr.	.....	.....	.....
Buffalo and N. Y. City	69	1,300,000	1,040,000	2,494,364	679,750	85,763	10	.....	Cin. Log. and Chicago	266	4,196,679	1,096,125	2,080,483	In progr.	.....	.....	5
Buffalo and St. Line	47	434,111	922,303	1,276,796	174,089	69,506	.....	.....	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,552	.....	.....
Canandaigua and Elmira	98	1,815,000	2,279,854	3,496,832	135,438	48,649	none	.....	Ind. and Cincinnati	88	1,213,723	1,322,859	2,173,641	356,012	193,142	.....	58
Canandaigua & Niagara Fd	35	687,000	506,689	1,187,542	182,087	60,946	none	.....	Indiana Central	63	611,400	1,261,179	1,907,911	380,176	134,875	.....	45
Cayuga & Susquehanna	144	3,758,436	2,503,362	12,737,898	1,812,087	603,946	none	84	Ind. Clev. & Pittsburg	83	834,157	1,101,971	1,671,544	.....	.....	.....	22
Hudson River	95	1,876,148	6,680,949	2,555,998	301,793	116,462	none	30	Jeffersonville	60	1,014,262	694,000	208,544	94,318	.....	.....	.....
Long Island	534	24,154,860	14,462,742	28,622,913	3,568,581	1,622,126	8	90 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	288,146	112,880	.....	12 1/2
New York Central	464	10,023,958	25,126,689	33,439,431	4,388,963	2,627,118	none	50 1/2	New Albany and Salem	288	2,535,121	5,281,545	6,643,189	465,827	871,400	none	15 1/2
New York and Erie	133	5,717,100	4,069,789	8,758,208	1,635,677	324,126	none	17 1/2	Pertu and Indianapolis	73	.....	588,314	.....	.....	.....	.....	.....
New York and Harlem	118	1,633,022	4,409,874	5,470,714	590,153	135,754	none	.....	Terre Haute and Ind.	73	974,800	604,555	1,602,166	287,612	189,702	10	96
Northern, N. Y.	35	899,000	216,881	728,683	126,540	59,982	3 1/2	.....	Chicago and Rock Is'd	182	3,141,500	2,387,165	5,214,162	.....	.....	.....	90 1/2
Oswego and Syracuse	29	467,230	294,189	749,683	In progr.	.....	.....	.....	Chicago and St. Louis	220	.....	.....	1,077,812	In progr.	.....	.....	.....
Potomac and Watertown	23	810,000	140,000	896,423	241,149	82,600	7	.....	Chicago, Burl. and Quincy	138	1,475,800	1,511,557	2,761,426	722,680	679,821	20	.....
Saratoga & Saratoga	45	500,000	396,400	.....	71,909	21,089	none	.....	Chic. St. Paul & P'd du Lac	178	2,800,000	1,325,000	3,625,000	In progr.	.....	.....	110 1/2
Saratoga and Whitehall	60	768,389	1,678,804	2,272,777	159,484	22,503	none	.....	Galena and Chicago	298	4,334,890	1,189,304	5,969,268	1,560,710	942,251	17	100 1/2
Syracuse & Binghamton	27	437,830	737,079	1,109,422	166,363	55,184	.....	.....	Illinois Central	627	2,271,030	19,416,392	20,374,446	1,532,118	527,952	.....	99 1/2
Troy and Boston	97	1,370,373	700,979	2,068,063	404,374	172,474	8 1/2	70	Peoria and Oquawka	93	569,889	513,454	1,883,542	In progr.	.....	.....	.....
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,534	.....	.....	Ohio & Miss. (West. Div.)	147	1,760,295	3,292,403	4,570,856	Recently opened.	.....	.....	.....
Belvidere Delaware	94	9,000,000	11,407,500	8,636,523	2,017,127	961,941	12	.....	Terre Haute and Alton	173	2,281,420	1,256,000	3,637,424	In progr.	.....	.....	.....
Camden and Amboy	60	369,320	1,922,131	1,729,642	122,417	60,080	none	.....	Detroit and Milwaukee	185	838,000	1,128,934	1,967,969	In progr.	.....	.....	.....
Camden and Atlantic	30	3,432,550	690,000	4,310,011	851,514	500,747	10	121	Mich. Central	282	6,021,916	6,142,923	10,800,147	2,215,253	870,686	.....	84 1/2
New Jersey Central	33	2,000,000	2,296,176	3,683,149	393,728	171,003	.....	.....	Mich. South'd & N. Ind	476	6,228,900	6,319,224	11,646,208	2,410,000	875,000	10	95
Morris and Essex	53	1,167,805	375,000	1,656,550	225,899	102,474	6	.....	Green Bay, Mt. & Ch.	165	764,071	442,728	1,193,795	In progr.	.....	.....	.....
Albany Valley	44	1,637,967	342,564	1,988,317	Recently opened.	.....	.....	.....	Milwaukee and Miss.	106	1,826,428	4,467,859	5,575,757	691,543	417,443	17	83 1/2
Cataw. Vll. & Eri.	66	1,700,000	1,940,000	3,640,000	219,253	57,450	.....	.....	Milwaukee & Water'n	72	854,861	132,000	614,238	In progr.	.....	.....	.....
Cumberland Valley	104	3,054,622	3,884,702	6,022,667													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	96	98
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	91	94
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1850		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	80	86
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	82 1/2	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	40
Cleveland, Painesville, and Ashtabula	667,000	Do. convertible	7	Feb'y, August	"	1861	94	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	70	80
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	88 1/2	59
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	80	100
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	66	90
Deltaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90 1/2	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1865	7	Jan'y, July	"	1873	80	80
Gauna and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	95	97 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	89	89 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	91	91
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	82 1/2
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	87	87
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	83	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1850	7	Feb'y, August	"	1865	73	75
Little Miami	1,500,000	Do. inconv.	6 1/2	May, 2 Nov.	"	1863	80	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	98	98
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	97	97
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	89	90
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	97
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	80
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96	97
Racine and Mississippi	680,000	Do. conv. sink f'd	8	Feb'y, August	N.Y.	1875	85	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alten	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	78 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	75	76

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1865	83	84
Do. do.	1,125,500	Do. do.	6	Jan'y, July	Balt.	1875	86	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94	96 1/2
Erie Railroad	3,000,000	1st mortgage, conv. till 1858	7	May, Novemb.	"	1867	103 1/2	104 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	96 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	92	93
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	90 1/2
Do. do.	4,851,000	Convertible, Inscription	7	Feb'y, August	"	1871	83	83 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	100	101
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	90	90 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67	68
Illinois Central	17,000,000	1st mortgage, convertible	7	April, October	"	1875	86 1/2	87
Do. (Free Land)	3,000,000	M'tge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	92 1/2	93
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	92
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	81	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92	92
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83 1/2	84
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	87	87 1/2
Do. do.	3,000,000	No m'tge conv. from June 67-69	7	15 June, 15 Dec.	"	1864	102	102 1/2
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	104	105
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	104	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	93 1/2
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	82 1/2	83

CITY SECURITIES.	Int'at payable.	Off'd	Ask'd	CITY SECURITIES.	Int'at payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	75	80
Do. 5 do. 1858-60	May,	94	96	New Orleans, 6 per ct. ep. R.R. X	Do.	87	80
Do. 5 do. 1870-75	August,	95	96	N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	80	83
Do. 5 do. 1890	November,	94	95	Philadelphia, 6 per ct. 1870-98	Jan'y, July	92 1/2	92 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	98	98	Pittsburgh, 6 per ct. coup. X	Jan'y, July	75	76 1/2
Alleghany, 6 per ct. coup. X	Jan'y, July	74	76	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	81	85
Baltimore, 6 per ct. 1879-90	Quarterly	97	99	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	81	85
Boston, 5 per ct. coup. X	April, October	97	98	Rochester, 6 per cent. coup. X	Divers	95	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	78 1/2	79
Clev'nd, 7 per ct. ep. W. W. 1879 X	Do. do.	101 1/2	101 1/2	Do. do. Municipal. X	Do.	79	80 1/2
Cincinnati, 6 per ct. coup. X	Divers	89 1/2	90	Sacramento, 10 p. ct. ep. 1862-74 X	May, Novemb.	80	80
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	80	90 1/2	S. F. 10 p. ct. ep. 1865, pay N.Y. X	Do. do.	80	96
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. ep. 1871 X	Do. do.	80	96
Detroit, 7 per ct. ep. W. W. 1873-78 X	Feb'y, August,	101	102 1/2	Do. 10 do. pay N.Y. X	Jan'y, July	104	104
Dubuque, 8 per ct. ep. X	Long X	101	105	Do. 6 per ct. pay N.Y. 1878 X	Do. do.	60	61
Jersey City, 6 p. ct. ep. W. W. 1877 X	Jan'y, July	94	95	Wheeling, 6 per ct. coup. X	Divers	67 1/2	67 1/2
Louisville, 6 per ct. ep. 1880-83 X	Divers	79	79 1/2	Do. 6 p. ct. ep. Mun. 1874 X	March, Sept.	80	81
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70	70	Zanesville, 7 do. X	April, October	97 1/2	97 1/2

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending May 8th, 1886.

BONDS.	Offered.	Asked.
\$5,000 Cov'g & Lex., 7 per ct. 2nd Mortgage	85	
5,000 Cin., Wilm. and Zanev. 7 per ct. 2nd Mort.	65	(& int.)
2,000 Cin., Ham. and Dayt. 7 per ct. 2d Mort.	83	
1,500 Cov. and Lex., 10 per ct. Income	60	
3,000 Hamilton Co. Ohio, 6 per cent, due 1881	83	
1,000 Little Miami, 6 per ct., 1st Mort.	82	
7,000 Boyle Co., Ky., 6 per cent, due in 1883	70	
800 Columbus & Xenia, 7 per ct. Income	90	
2,000 Ohio & Miss. 7 per ct. 1st Mort.	65	
1,000 Port Lawrence Township, Ohio, 7 per cent. due in 1873	60	
STOCKS.	Offered.	Asked.
200 Shares Ohio & Mississippi	7 1/2	
100 " " "	7 1/2	
400 " " "	7 1/2	
139 " Cin. & Chicago	5 1/2	
20 " " "	6	
14 " Cin., Ham. and Dayton	65	
30 " New York Central	92	
100 " Bellefontaine & Indiana	45	
75 " Penn. and Indianapolis	16 1/2	
42 " Dayton and Michigan	10	
602 " Marietta and Cincinnati	14	
50 " Eaton & Hamilton	21 1/2	
50 " Little Miami	98	
26 " Cin., Wilm. and Zanev.	16	

Extract from the Circular of Robt. Benson
& Co., per America.

LONDON, April 25th, 1886.

Our money market is still unfavorably influenced by the continued drain of specie, which has not, as yet, been met by any corresponding return. The payment yesterday of the last instalment on the English loan caused a considerable demand for money, and the current rates of discount remain unchanged.

Fluctuations in prices of Securities during the week have not been great. Consols are rather lower. In our last circular we quoted them at 93 1/2 a 1/4 for money, and 93 1/2 a 1/4 for the account. They are to-day 93 1/2 a 1/4 for money, and 93 1/2 a 1/4 for the account. Public attention continues to be more particularly devoted to East Indian and to French and Belgian Railroad shares.

American Securities are much neglected, and prices generally are scarcely so firm. We have not heard of any transactions in State Stocks. In Railroad Securities, Michigan Central 8 per cent. Bonds of 1860 have been sold at 92. New York Central 6 per cent. at 82. Illinois Central 7 per cent. Construction Bonds have changed hands at 79 1/2 and 80. Freeland Bonds at 85 1/2 and 86, and the shares of the Company at 3 1/4 and 3 1/2 discount. Erie Bonds of 1862 have been dealt in at 82.

The Iron market remains firm, and makers of rails are well supplied with orders.

ROBT. BENSON.

Marie & Kam' Money Circular for the
European Steamer of the 14th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, May 13th, 1886.

Since our advices of the 5th inst., money has continued in active demand, and the stock market has shown a downward tendency. The amount of business has been restricted. Specie shipments continue large, and check the disposition to speculate; but they are not in excess of the exports of May, 1885. Orders for European account are very insignificant. State Stocks are slightly lower, with fair sales of Missouri and Virginias; Missouri 3 per cent. lower, City and County Bonds are without change; the New York City 5 per cent. Loan, due 1898, is selling at 95. Railroad Bonds are steady. Illinois Central Construction Bonds have declined 1/4; Erie, 1883s, 1; New York Central 6s, 1 per cent. Erie First Mortgage, Erie 1871, and Freeland Bonds are in demand at slightly former rates. Railroad Shares are in moderate speculation, with a general depression. Chicago and Rock Island is 2 per cent. lower; Cleveland and Pittsburgh, 1/2; Cleveland and Toledo, 2; Galena and Chicago, 1; Harlem, 3/4; Hudson River, 1; Michigan Central, 1; Michigan Southern, 1 1/2; New York Central, 2; Panama, 3/4; Reading, 2 per cent. Erie has fluctuated between 57 1/4 and 56, closing at 56 1/4. Illinois Central has

sold at 99½. Money is in active demand. Loans on call in demand at 7 per cent.; first-class paper, 8a9; names less current, 10a12; Stock contracts, 10a13. Exchanges are brisk, without marked change in quotations. London, 109¾a110; Paris, 5.15¼a5.17½.

MARIE & KANZ.

Extract from *De Coppet & Co's Money Circular for the European Steamer of the 14th Inst.*

[TRANSLATED.]

New York, Tuesday, May 13th, 1856.

Since our advices of the 5th inst., the character of our stock market has been less oscillating. The Banks have slackened their contraction.—Money nevertheless continuing in active request; speculation has materially decreased. Prices have been downward for nearly all classes of securities, but especially in the more speculative kinds. The advices from Liverpool to 30th April, which reached us yesterday, created a further depression on our already heavy market. European orders for American stocks are almost null; we notice, if anything, a disposition to sell some of the railroad bonds which, for the present, find no market.

State Stocks.—Transactions of some importance have taken place in Indiana 6s without change of prices, and in Missouri 6s and Virginia 6s at a decline of ¾ and ¼ per cent.

City and County Bonds are extremely quiet, prices being generally fairly sustained. Some N. York City 5s, 1,898, [new loan] have been sold at 95. San Francisco 10s and 6s have declined; on the other hand there has been a demand for New Orleans 6s at an advance of 2 per cent.

Railroad Bonds are without enquiry. At private sale there have been no transactions worth mentioning. At the Stock Exchange the only business of importance was in Illinois Central Convertibles at ¾ per cent. decline. Small amounts of New York Central 7s, Erie 7s, 1871, and Hudson 3d mort. changed hands at easier rates. Railroad stocks have declined, with barely one exception, as may be seen in our subjoined table of daily quotations. Besides Erie, Reading, New York Central, and Cleveland and Toledo, and Michigan Southern, there has been but little doing. Milwaukee and Mississippi have been in some demand, and have risen ¾ per cent. Money is in active demand at 7 per cent. for loans on call. Business paper from 8a10 per cent. Exchanges a little more offered. Principal transactions on London 109¾a109¾; on Paris, 5.16¼a5.17½.

DE COPPET & CO.

Pacific (Mo.) Railroad.

The *Republican* states that at a meeting of the Directors of this Company, recently, the President, JAMES H. LUCAS Esq., communicated his resignation of that office. Mr. Lucas has been induced to do so in consequence of his intention to leave home, on a tour to Europe, in a few days, and he rightly deemed it necessary that the President of so important a road should be on the ground and give it his personal supervision and attention. His resignation was accepted, and Col. ROBERT CAMPBELL was elected to fill his place as a Director of the Company.

The Board proceeded to fill the vacancy in the office of President, caused by the resignation of Mr. Lucas, and WILLIAM M. MCPHERSON Esq. was elected. Mr. CHARLES K. DICKSON was elected Vice President, the office previously filled by Mr. McPherson. The new President brings to the discharge of the duties of the office a familiarity with all its details, which is essential to success. He knows all about the road, has taken great interest in its completion, and has contributed as much as any other man, by his energy, industry, and sound judgment, to help it through its past difficulties. If supported by the new Board, as

we believe he will be, in such measures as may be necessary to push on the work, we anticipate the best results from his election to this office. He will find, we have no doubt, an excellent co-laborer in the Vice President, Mr. Dickson, who has always been a most efficient Director.

We learn that Mr. Edward Miller, formerly Engineer and President of the Pennsylvania railroad, has recently been elected Chief Engineer of this company in place of the late T. S. O'Sullivan. Mr. Miller is said to bring to this situation qualifications of a very high order.

American Railroad Journal.

Saturday, May 17, 1856.

Railroads—Their Political and Social Aspects Regarded.

The points of resemblance between a community such as the United States, and the human body, are neither few nor indistinct. What the animating spirit is in the one case, intelligence, patriotism, enterprise, are in the other. Legislation is Will. The Press performs the duties of the external senses—it sees, hears, smells, tastes and touches. It also *speaks*. Between the telegraph and the nervous system there is not merely an analogy—the one is now known to be but an imitation of the other. Great cities are the head and the heart—the centres of thought and of action. The rural districts, possessing greater strength and massiveness, bear a closer resemblance to the muscular system. States and Territories form the bones and the gristles, in their various situations, sizes and developments. The channels of intercommunication, as canals, railroads, &c., penetrating every section, and carrying along the population, productions and imports of each, the reader has already inferred, execute similar functions to blood-vessels in the animal economy. To crown the whole, the civilization of a country may be represented by the article of dress—often ragged or tawdry, sometimes misshapen or even positively unhealthy; but in all cases preferable to absolute nudity, as the lowest type of civilization is superior to savagism.

We omit further reference to others, and take up for the present railroads as the principal means of intercommunication—under the idea of the arterial and venous systems of the political body; passing from the heart to the extremities and *vice versa*; carrying along their great tides of wealth and population; removing what is foreign from this point; depositing what is called for at that. The philosophy of these great currents and counter-currents is apprehended by but few, just as the fact of the blood circulating has been discovered but yesterday. Nevertheless the great law has been operating silently, but incessantly and effectually since the origin of mankind.

As a means of protection against foreign aggression, the importance of the railroad has often enough been dilated upon. We introduce it here merely for the purpose of carrying out the analogy. When any part of the human system has received an injury, observe what an immediate action takes place. The nerves flash along to the brain instantaneous intelligence of the occurrence. A rush of warm, generous blood to the spot immediately follows. The pain experienced urges the necessity of carefulness till the crisis has passed.

What a close resemblance to the operations of the telegraph, the railroad, the army muster, the contest, and the expulsion of an invader!

But there are other purposes which, in a political sense, the railroad equally subverts. Looking at such a community as that to which we belong, we hold that, without the steam engine and the railroad, it would be an absolute impossibility to maintain our liberties for the next twenty years, and preserve a Federal Union of the States. Without some rapid means of communication, our Government would either become a despotism, the nation fly asunder in anarchy and confusion, or *both* results would take place. The reason is obvious. With every increase to our territorial possessions, new questions for legislation arise, new obligations are incurred, new privileges granted, and a corresponding addition made to that large class of dependants upon governmental patronage. From the want of proper intercourse, men's ideas being limited, their passions burning more intensely, and their interests appearing more diverse, an increased feeling of insubordination would arise, certain to be followed either by increased power in the central authority or separation. Witness in proof the troubles of the Mexican and South American Republics, in contrast with the tranquility of the Empires of Brazil and Russia. In the light of history, the thing is equally evident. Egypt was held together by its Nile, Assyria by its Euphrates, and Northern India by its Ganges. In all these States, however, the government was despotic. Rome required to have placed in her Senate and public officers additional power, just in proportion as her limits extended. Even with all, she never could permanently maintain countries more than about 100 miles distant from the sea coast. The Mediterranean and its inlets were canal and railroad to her. But for these she never could have attained to her full dimensions; and even with them she was unable to preserve her liberties under increased dominion.

In the case of this country, there is one point of difference from every other, whether ancient or modern,—we refer to the extraordinary rapidity of our national growth. The world has never witnessed such another instance of progress as that of a community increasing its population eight-fold in eighty years, extending its boundaries from the Alleghany mountains to the Pacific ocean. This has been in a great measure due to the steam engine, in the first place; but without the railroad the adhesion of the several parts would probably be diminished rather than augmented by such an extraordinary growth. At all events, we regard the proposition as *proved*, beyond all contradiction that to our rapid means of communication, second to no other influence, we owe the preservation of those liberties which have been handed down to us from the men of the past.

And this idea may serve to dissipate the fears of those who dread dissolution and a thousand other evils merely from the increasing extension of our limits. If England could hold together, with but very indifferent common roads, centuries ago, when a speed of twenty or thirty miles a day was, with difficulty attainable, how little in reality have we to fear, when we can travel 500 miles in the same time! With railroads and steamboats we are now nearer New Orleans and

Kansas and the Lake Superior country than Berwick or Land's End was to London, when the Declaration of Independence was signed. At the same time, by the telegraph, that glorious accompaniment to the railroad, intelligence of passing events can be flashed from one extremity of the Union to the other with almost the rapidity of thought itself.

There is still another view, and that perhaps the most important of all, to be taken of this subject. Railroads are destined to give us a new and higher type of civilization than any hitherto seen. If we take a momentary glance at the history of our species, we find man in a savage state a being of rural life exclusively. The huts or tents which he constructs for houses are moveable, not stationary. There are no cities, consequently no citizens, no civil duties or rights, and no civilization,—the whole being derived from one idea. This state passes away. It cannot be permanent. Soon succeeds the civilization of despotic rule, with its large cities, immense fortifications, commerce, luxury and refinement. With all its evils—and they are neither few nor small—this state is superior to the former, *for it subdues it*. It has this great political defect, however. The city is everything; the rural districts nothing. The civilization of ancient Greece and Rome, of the Italian Republics, of the Hanse towns, and other places, was essentially of this description. The city ruled; the country obeyed. The rural population were important only for purposes of war or taxation. They were valuable, just as the city suburbs were valuable.

If we contrast a city with a rural population, we find the former more acquisitive, the latter more retentive; the former more progressive, the latter more conservative; the former more intelligent, the latter more scrupulous and conscientious; the former physically more nervous, the latter more muscular. Art has done more for the one; Nature more for the other. Between elements so diverse it might be expected that the best of feelings would but seldom exist. Accordingly, we find in many European countries, more particularly France, an intense antagonism existing between the city and rural populations. Paris, progressive, literary, republican, sceptical, has repeatedly overturned dynasties within the last three-quarters of a century. The rural districts, ignorant, devotional, bigotted, have as often replaced these. What has been the cause? The two populations were not sufficiently mixed. They remained apart, and hated each other.

When the country gets emptied into the city, imparting to the latter its freshness, its health, its cheerfulness, its morality; and the latter in turn diffusing through the country the intelligence, the refinements, the proprieties of city life—then can both act politically towards the promotion of a common object, but not till then.

See how this is beginning to operate in the neighborhood of all our large cities. Already in Boston, New York, Philadelphia, Baltimore, &c., large numbers leave the city daily to enjoy the delicious shades, the fresh air, the beautiful scenery, the sweet music of the country. That these numbers will increase to an almost indefinite extent, there is not a shadow of doubt. Every railroad passenger, every commuter is therefore a messenger of "peace on earth and good will among

men." He mingles the refined enjoyments, the progressive ideas of the city with the robustness and the conservatism of rural life. The country then ceases to be a mere appendage of the city. It has a separate existence of its own. A dozen votes in an obscure village tell on general results as effectually as the same number inside corporation limits.

This we consider the highest type of civilization. It is not the migratory life of the barbarian; it is not the life of the city-zen of the ancient republics or those of the middle ages. It is a combination of the two. It contains the excellencies of both.

The steam engine and the railroad have been the authors of this.

Is there not something more than empty mummery, though not perhaps understood at the time, in the highest ecclesiastical dignitaries blessing the railroad, and consecrating the locomotive?

And do we not perceive in these great instruments of modern ingenuity, an imitation, only on a different scale, of that magnificent system of propelling powers and of distributing and collecting vessels by which the All Wise preserves the great current of life in perpetual motion, diffusing health and happiness from the centre to the farthest extremities of the human organism?

We have but touched upon one or two aspects of this subject—such as are apt to be forgotten, in the mere economic view of railroad matters. The effects of such works, in producing, not merely a similarity, but a unanimity in feelings, views, tastes, language, and habits, might have been more extensively treated of. At another time we may resume the subject, and try to do it better justice.

An Important Movement.—Consolidation of Ohio and Pennsylvania, Ohio and Indiana, and Fort Wayne and Chicago Railroads.

The people of Philadelphia have recently made a move which displays a degree of sagacity not often characteristic of them in railroad matters, and which is to accomplish vastly greater results than schemes upon which they have expended a vast deal of labor and capital—we mean the consolidation of the Ohio and Pennsylvania, Ohio and Indiana, and the Fort Wayne and Chicago railroads, with a view of using the great line thus formed, as their commercial avenue between their city and Chicago. It has for some time past been evident that Chicago is to be the great city of the North-west, and probably of the West, and the point of distribution to a larger area, and in time to a larger population, than any city, excepting the metropolis of the whole country. The extent of its trade is already enormous. No Atlantic city having any pretensions to rank as among our first class cities can long maintain such rank, without the means of rapid and economical communication with the rising metropolis of the West.

Philadelphia has now an admirable railroad to Pittsburgh, which by the completion of a double track, now in progress, will give to it almost any desired capacity. To Harrisburgh, there will soon be a choice of routes—one by the Columbia railroad, and another by the Reading and the Lebanon Valley railroads. Beyond Harrisburgh, the local business will be much less than between that city and Philadelphia, leaving the central portion of the road comparatively unincumbered for the

through, which is in fact to be the great business of the road.

From Pittsburgh, the next great point to be gained is Chicago. To secure the objects aimed at, it was necessary that the several links of which the line was to be composed should become one interest to be centered in Philadelphia. This has now been accomplished by the consolidation which has now just taken place. To Philadelphia, the new road will be second only in importance and value to the Pennsylvania R. R. Pittsburgh, instead of being the western limit of the Philadelphia system of railroads, will be only a point *in transitu*; a half-way house between Philadelphia and Chicago, as Buffalo is between New York and Chicago.

The consolidated line will, we learn, be placed in the most efficient condition and means provided for extending it at once to Chicago. When this is accomplished it will, in connection with the Pennsylvania road, form a much shorter route than any others between New York and Chicago, and will prove a powerful competitor to the other routes now used. In addition to its being much the shortest, it will have the advantage of taking Philadelphia in its route—a city which from its immense manufactures of domestic fabrics of all kinds, necessarily holds as intimate relations with all portions of the country, as New York, the entrepot of our foreign trade.

In conclusion we repeat that the movement recently consummated is a most important one for Philadelphia, and is of itself the forerunner and pledge of success. The degree of this success may be inferred from the fact that the earnings of the several lines connecting New York and Chicago exceed \$25,000,000 annually. We believe that the extent of the earnings of the Philadelphia line will be limited only by its capacity.

Richmond and Danville Railroad.

We learn that the cars crossed the bridge at Danville, on the 5th inst, for the first time. The occasion was one of very general rejoicing.

Morris Canal and Banking Company.

The report of this company, just published, shows their gross receipts for 1855 to have been \$278,638—an increase of more than \$32,000 over those of 1854. The current expenses, including repairs, were \$96,861. There have also been expended in permanent improvements \$63,543. The latter sum has been applied to the construction of two new improved planes, in building wharves, reclaiming submerged lands at Jersey City, and for other necessary purposes. When this work passed into the present company's possession, it was in a very dilapidated condition, and had only four feet of water. Its business capacity was less than one-fourth of what it now is, while its receipts were insufficient to pay the cost of repairs and interest on debt, by more than \$12,000 a year. Since then large sums have annually been expended on improvements—as rebuilding planes and aqueducts, deepening to five feet, improving the Delaware river ferry, and furnishing increased accommodations at Jersey City. Fifteen new planes have been constructed; and the remaining eight will also be as early as possible. The canal can now be navigated by boats of from 60 to 70 tons. Its present capacity is about 500,000 tons per annum; but this will shortly be increased to

1,000,000 tons. The cost of these various improvements to date has been \$819,799, of which \$143,532 have been drawn from net earnings, the remaining sum \$764,000, having been furnished for an issue of ten per cent. Preferred stock to that amount. Cash assets on hand at present, \$39,077. On the 1st of April last, the bonded debt, \$426,550, fell due and was paid from the proceeds of a new loan of \$500,000, at six per cent., secured by mortgage, and payable in 1876. The Jersey City improvements, when finished, will cost the company about \$35,000. They could be sold at present for \$80,000. The prospects of business the ensuing year are good.

Grand Trunk Railway.

From discussions going on in the Canada papers, we learn that the Hon. WM. NAPIER has arrived in Toronto, as an agent on behalf of the English stockholders. Messrs. BRASSEY & BETTS, the contractors, are also in the Province. It appears, from a statement made by Mr. Napier, that, at a meeting of the principal London shareholders, on the 7th of March last, for the purpose of arriving at some definite course of action to be pursued, a committee was appointed to digest a scheme of financial assistance. By this body, Mr. Napier has been deputed to proceed to Canada, and submit the propositions made to the Canadian Board of Directors, and the Canadian Government. He states that the capital required for the completion of the undertaking, including the Victoria Bridge and the Sarnia line, will be £1,560,000 sterling. It is proposed that the Province guarantee five per cent. on the stock, an amount being issued to the Province equal to any deficiencies which it may be called upon to pay. The average receipts during the next five years are calculated at £15 per mile per week on the Eastern, and £25 per mile per week on the Western section. The result arrived at, allowing 50 per cent. for working expenses, shows an annual balance available for dividends of 2.05 per cent., making the Provincial liability 2.95 per cent., for five years—this deficit being annually converted into capital also guaranteed.

Mr. Napier figures out his estimate thus:—

The following data are afforded by the actual experience of the Provinces:

The receipts of the Eastern Section of the Grand Trunk of 428 miles, averaged,—
During the summer months
of the year £18 per mile, per week.
During the winter months
of the past year 12 " "
Thus giving a general average of 15 " "

Without adding one pound sterling for the development of traffic reasonably to be expected during the first five years, (the receipts on the Eastern section are only calculated at the past experience of £15 per mile per week. As regards the Western line of 500 miles, on the section from Montreal to Brockville of 125 miles, passing through a district which is rather under the average of the whole, the receipts during the winter from the opening of the line on the 17th of Nov. last year, to the 1st of April, averaged £18 per mile per week, and were for the last week of that period £18 per mile per week. On the Toronto and Hamilton Line for 40 miles, opened on the 19th of November last, the receipts for passengers alone have averaged during the winter, \$30 per mile per week; the mean receipts, therefore, per mile per week, during the winter months, on the Eastern and Western extremities of the Western section have been £21.5 per mile per week. The

estimated average during the five years is only placed at £25 per mile per week, which circulation is thus subdivided:—

Passengers, say	£10 per mile per week.
Mails	3 " "
Goods	12 " "
	£25 " "

These are the reasonable data on which is calculated the maximum annual deficit of 2.95 per cent. on the share capital during the first five years, and which it is proposed for that time to convert into share capital under a like guarantee of 5 per cent. by the Provinces.

By reference to the estimate of traffic for the second period of five years, during which time the through traffic, and much subsidiary local traffic would be fairly developed, the receipts are modestly stated for the Eastern section at an increase to £20 per mile per week; for the Western section to £35 per mile per week, which will more than cover the guarantee of five per cent. on the share capital.

For the third period of five years, the receipts are placed, for the Eastern section at £25 per mile per week, for the Western section at £40 per mile per week, estimates, the correctness of which cannot reasonably be disputed, and which leave a surplus of 2.80 per cent. on the share capital.

Mr. Brassey has also addressed a lengthy communication to Hon. John Ross, dated at Toronto, April 25th, 1856, giving a history of the enterprise. He says that the position which the firm of Peto, Brassey, & Co. held towards the Province was this: The former were to complete the line from Toronto to Montreal, on receiving aid to the amount of £3,000 per mile. The cost of this, as per contract, was to be £3,000,000, less £1,035,000 of Provincial aid, leaving the firm to raise £1,965,000 in one form or other. There is an impression that the present difficulties have arisen from the failure on the part of the contractors to meet their engagements, instead of the introduction of other schemes, which were of importance to the Province, but yielded the contractors no advantage. Mr. Brassey says:

As we have already shown, the amount of private capital required for the original scheme, was £1,965,000, the amount raised has been £1,950,000, of which we now retain no less than £794,000. If, therefore, the Province have increased their aid by £900,000, or less than one-half of their original advance, we, with the other shareholders, have raised nearly three times the amount originally contemplated.

Under our original plan, we were to build 345 miles of railway. By the realized plan—there are completed, or will be this year, 40 miles below Quebec, and 445 miles from Montreal to Stratford, with a large expenditure on the Victoria Bridge, as well as an outlay of £960,000, upon the line from Montreal to Portland. So far, therefore, from there being any just charge against us of having failed to fulfil our promises to the Province, we may fairly take credit for very much more having been done than was originally intended; and if disappointment have ensued, we at least, equally share in it.

No relief from existing contracts is asked; but neither should charges of failure be made, unless such can be clearly shown. The total amount of Provincial aid granted the Grand Trunk company has been £3,111,500. There had previously, through Mr. Hincks, been granted to the St. Lawrence and Atlantic road £467,500, and to the Quebec and Richmond £250,000. The £900,000 granted last session was not for works in which Messrs. P., B., & Co. were in the slightest degree interested, but to replace capital originally intended for their works. In like manner the £291,-

000 guaranteed, by authority of an act passed in November last, which had been granted for their line to Trois Pistoles, was transferred to that from Toronto to Stratford, in which the contractors have no interest whatever. The amount of these sums is £1,908,500, which, if deducted from the amount granted, leaves only £1,203,000 of the entire aid provided by the Province really applicable to the following works embraced in our contracts and which entitled the Province to expect from us the completion of 40 miles below Quebec and the line from Montreal to Toronto. Of this amount of £1,203,000 no less than £546,000 was still in the hands of the Province at 1st April inst. Thus showing that while we had completed the 40 miles from Quebec to St. Thomas—expended about £320,000 on the Victoria Bridge and so far completed the Montreal and Toronto line that only about £300,000 of work remained to be done, the entire amount of Provincial aid which had been paid to the Grand Trunk Company, in respect of these works, was only £667,000. Surely under these circumstances we may boldly ask at the hands of the Canadian public consideration and candid discussion.

We claim so far as the Province of Canada is concerned, to have much more than fulfilled all we ever undertook towards it, and if reference be made to the great change in money matters in England, consequent on the war, as well as to the enormous advance in the price of labor, materials, and every necessary of life in Canada, the public may form some idea of the extent of the sacrifices we have made, to preserve intact our reputation for an honest fulfilment of our engagements.

After noticing the terms of the contract entered into, and the altered condition of the money market in Europe, in consequence of the war, Mr. Brassey proceeds:

The altered state of affairs so far affected even the stock already issued to the public, that without any particular respect to our wishes the London Directors, with our concurrence, determined to suspend a portion of the Grand Trunk works, in order to relieve the stockholders. And finding the works on the Montreal and Portland section had absorbed £900,000 of the money intended for our works, the Board applied to your Legislature for aid, which as before stated was obtained, to the extent of £900,000, not as an additional loan to us, but solely to enable the shareholders to fulfil their own engagements. The Company was then largely our debtors and we might have suspended our works, and thus relieved ourselves from much embarrassment had not other motives actuated us.

The effect of the terms of the Act, granting additional aid, passed in May, 1855, required a modification of our contracts with the Company, and this took place in London in July last, with the approval and aid of the Inspector General, who was then in England, with other members of the Canadian Cabinet. By this agreement, we pledged ourselves to proceed with and complete the Montreal and Toronto, and Quebec and St. Thomas sections, in all 385 miles, receiving as payment one-half in cash expected to be provided from the Provincial guarantee, one-quarter in B. Bonds of the company, and one-quarter in B. Shares.

Under that supplementary contract we have pushed forward the works nearly to completion, but we desire the public distinctly to know that since that date the company have never been able promptly to meet their engagements to us, and from whatever cause arising, very large sums have constantly been due to us, even from the half which was promised us in cash.

It is, we find, generally supposed that our firm had engaged to provide the interest on the Province Bonds, and had failed to do so. This impression we desire to correct. Our engagement was sold to the Company, and consisted in our pledge to pay six per cent. interest on all the capital expended on our works, reserving to the Company the right of retaining this interest from the

amounts due to us for work done. As the Company has generally been in arrears to us, it must be manifest, that we are in no way responsible for any difficulties on this head.—We have never as contractors received from the Province one single bond, our payments are promised us by the Company, in money, and in their own securities.

Another objection has been brought, that the firm is in fact *the company*, and consequently liable for any censure attachable to the latter. This is denied *in toto*. They have never had any control over the company's affairs. Great expenditures have been made in which the contractors have had no interest. In no respect do they differ from Messrs. Czowski & Co., except in the extent of engagements. From the large and increasing interests at stake their anxieties may readily be accounted for. Out of the £4,950,900 private capital, they hold, by the July agreement, £794,000.

The State of Maine adds:—

No application has yet been made to Parliament for aid, but we learn from private sources that the proposition of the English shareholders, as submitted by the Hon. Mr. Napier, will probably be urged by the company. As to its success in the present juncture of affairs, we offer no opinion.

Milwaukee and Beloit Railroad.

This is the name of a projected work to run from Milwaukee southwesterly to Elkhorn or Delavan, on the line of the Racine and Mississippi railroad. The later work, from Racine to these points, pursues a direction nearly due west; proceeding thence southwesterly to Beloit on the Illinois State line. Its course will be extended in the same general direction, by the Rockton and Freeport and the Freeport and Savannah roads, to Savannah on the Mississippi river. By striking the Racine road at some of the points above named, it is expected that much of the valuable traffic on the above line may be drawn to Milwaukee. This road would also furnish, with the above connections, the shortest route between Lake Michigan and the Mississippi. The required length will be only 46½ miles. The two connecting lines in Illinois, [now consolidated] have a subscription list of \$1,500,000. The total length from Milwaukee to Savannah will be but 136 miles. By way of the Detroit and Milwaukee road, in connection with a line of propellers across Lake Michigan, Buffalo is ninety miles nearer than by Chicago. A powerful appeal is made to the people of Milwaukee and others for the means necessary to execute this undertaking.

Baltimore and Ohio Railroad.

We are informed that the committee of construction and repairs of the Baltimore and Ohio Railroad Company, at a meeting on Wednesday afternoon, unanimously resolved to recommend the construction of thirty miles of double track, in addition to that already in progress. The measure requires the sanction of the Board of Directors, which it is probable will be given at the regular monthly meeting on Wednesday next. This double track will proceed under the special direction of the masters of road and machinery, at such times and at such rate, at particular points, as in their judgment may be found most convenient and desirable for the steady and most successful operation of the road. That portion of the city loan still in the hands of the register is subject to be drawn upon for covering the cost of this work. With the preparations involved, and the procuring of cross-ties, iron, &c., several months may expire before the whole of the construction contemplated can be carried out.—*Patriot*.

Wilmington and Manchester Railroad.

The receipts of the Wilmington and Manchester (N. C.) railroad, for the last six month, exceed those for the corresponding period of the previous year in the sum of \$12,447 94, while the expenses within the same period have decreased \$21,897 76.

Pittsburg, Fort Wayne and Chicago Railroad.

One of the most important railroad movements which has taken place for some time, both to the companies interested and the cities on the line of the road, as well as to Philadelphia, is the recent consolidation of the Ohio and Pennsylvania, the Ohio and Indiana, and the Ft. Wayne and Chicago railroad companies into a single corporation, to be known as the Pittsburg, Ft. Wayne and Chicago railroad company. The following are the terms of agreement:

1st. The stock in the several roads having been conceded to be of different values, the relative values were agreed upon as follows:

Ohio and Indiana stock.....	100
Ft. Wayne and Chicago stock.....	106
Ohio and Pennsylvania stock.....	120

2d. Interest in stock, on stock entitled to draw interest, to be allowed to the 1st of July, 1856.

3d. The name of the new corporation to be the Pittsburg, Fort Wayne and Chicago railroad company.

4th. The number of Directors to be fifteen, of whom one shall be a resident of the city of New York, four of Pennsylvania, four of Ohio, four of Indiana, and two of Illinois.

5th. The articles of consolidation to be submitted to the stockholders of the respective companies on the 2d day of July, 1856.

The consolidated lines will be 462 miles long, the Ohio and Pennsylvania being 187; the Ohio and Indiana, 131; and the Fort Wayne and Chicago, 144. From a report presented recently to the stockholders of the Pennsylvania railroad company, by W. H. Wilson, Esq., Civil Engineer, we learn that out of 131 miles, the length of the Ohio and Indiana road, 127½ consists of straight lines. The minimum radius of curvature is 2,865 feet; and the total curvature 214 degrees. The length of level road is 61½ miles, and the maximum grade, 26.4 feet per mile. Trains have been running over the whole road since November, 1854. Only 22 miles have yet been fully ballasted; but abundance of excellent materials exist along the line. There is little bridging, and that of a light character, enabling the road, when finished, to be operated at a moderate expense.

The financial condition of this Company is as follows:

Capital stock.....	\$1,358,803
First mortgage bonds.....	1,000,000
Second do.....	480,000
Third do.....	222,000
Bills payable.....	136,163
Total.....	\$3,196,466
Graduation, masonry, superstructure, etc.....	\$1,689,228
Right of way.....	42,417
Interest, discount, commission, &c.....	651,414
Interest paid in stock.....	95,310
General expense account.....	4,022
Total construction.....	\$2,682,391
Equipment.....	280,868
Fort Wayne and Chicago railroad stock.....	213,650
Telegraph.....	10,000
Real estate.....	9,557
Total.....	\$3,196,466

The receipts for 1855 were—

Freight.....	\$132,837
Passengers.....	109,973
Mails and express.....	9,065

Total.....	\$251,875
Transportation expenses.....	196,366

Balance applied to payment of interest...\$55,509

The floating debt, including unsettled accounts, interest due, and bills payable, is about \$322,591. The interest on funded debt is seven per cent. per annum. Until the present year, the interest was regularly paid; but the net earnings have proved insufficient for that purpose. The Directors have rendered themselves personally liable for company's debts to a considerable extent. The road has been managed with skill and economy. It is believed that there is but one way of placing the road on a good foundation—consolidation with the Fort Wayne and Chicago road, and the completion of the latter. The two great lines running east from Chicago already earn annually \$10,000 per mile each. The Fort Wayne and Chicago road may be safely assumed to earn \$6,600 per mile, as also the Ohio and Indiana road. This would give the latter a business of \$864,600 per annum, from which deducting 50 per cent. for working expenses, and interest on debt, there would be left as net profits \$309,800, or 22 per cent. on the capital. The most pressing claims of the O. & T. road should be met at once, also the interest on its funded debt, and the finishing of the Fort Wayne road urged forward as rapidly as can be done.

FORT WAYNE & CHICAGO RAILROAD.

The length of this road is 147 miles of which 144 consist of straight lines. The shortest radius of curvature is 3,820 feet; total deflection, 207 degrees; total ascents and descents, 1,586 feet; maximum grade, 26.4 feet per mile. There are only 1,100 feet of tross-bridging required. The track is now finished and in operation from Fort Wayne to Columbia, 20 miles. Between the latter point and Chicago, the work is in an advanced state; and, with a liberal supply of funds, could be finished in from 15 to 18 months. A road, 28 miles long, is already in progress from Plymouth, a point on the line 64 miles from Fort Wayne, to La Porte, on the Michigan Southern road. The latter work is expected to be completed this summer. By means of it a connection might be opened with Chicago by August. The cost of accomplishing this object is estimated at \$222,682. Iron is already paid for and in part delivered, sufficient to lay this section. The thing, however, should be carried forward to Chicago as rapidly as possible. The estimated cost is \$861,015, and the company's means are—

First mortgage bonds.....	\$300,000
Unpaid cash subscriptions.....	55,000
Unencumbered lands.....	404,000
Other means.....	50,000

Total.....\$809,000

The remainder can be derived from net earnings. The route of these two roads is so direct that no possibility of their business being drawn aside by shorter lines can occur. They can always be worked with safety and economy. With their favorable locations and connections, they will always have a larger local business than more northerly routes. They will also, in connection with the

Pennsylvania road, furnish the shortest route between Chicago and the cities of Philadelphia and New York, the distance to the last being only 906 miles, or 54 miles shorter than by any other now or likely soon to be in operation.

The committee to whom was referred the question of aiding the above companies, reported favorably to the measure, believing that a consolidation of the three lines would result advantageously to all; that the aid required would be but small, compared with the good to be obtained; that the Pennsylvania Railroad Company should agree to take up the coupons maturing on the 1st of April last, and hold the same for 12 months; and should also take up and hold for the same period, in addition to \$17,500 it already holds, \$70,000 coupons of Ohio and Indiana 1st mortgage bonds, payable in August next—for which these coupons are to be held as security until payment of the same with interest. The committee also recommended the Pennsylvania Co. to loan the Fort Wayne and Chicago Company its acceptances at four months, to the amount of \$150,000, to be renewed, if necessary, for a like period; the Fort Wayne Company depositing as security First Mortgage bonds at 70 per cent. The Ohio and Pennsylvania Railroad Company to loan the Ohio and Indiana Company their acceptances at four months, renewable for eight months, for \$50,000, the proceeds being applied to the payment of debts to laborers and employees. In payment of this sum, together with that due the Pennsylvania Railroad Company, the net proceeds to be faithfully applied; and a mortgage lien upon the road and equipment to be duly executed, empowering the lenders to sell the same in consequence of failure to perform the stipulations agreed upon.

We presume that these recommendations met the approval of the stockholders in all the above roads.

Virginia and Tennessee Railroad.

At a meeting of the stockholders in this road, on the 30th ult., the Act passed by the Legislature in March last, authorizing the Board of Works to subscribe for \$500,000 additional capital—to be a six per cent. preferred stock—was duly accepted by the company.

Hannibal and St. Joseph Railroad.

The Hannibal (Mo.) Messenger states that the lettings for the balance of the work on this road were made on the 15th of April, and were awarded to the following individuals: On the second division east from St. Joseph, to Messrs. Hennessey, Griffith & Co.; on the third division east from St. Joseph, to Messrs. Shea, Griffin & Paris, Stewart, Goodnell & Co. The work on the Grand river portion of this division has been taken by B. F. Carmichael, Esq., of Davenport, Iowa. On the fourth division, east from St. Joseph, to L. Carmichael, W. C. Cheney, R. D. Melvin, James Cleland, E. B. Thompson, and M. Hunt.

All of this work is to be commenced forthwith, and pushed forward vigorously to an early completion. A very large number of laborers will be required, to whom the highest wages will be paid. The work on the remainder of the line, which was put under contract last year, is now rapidly progressing. The first and second divisions, west from Hannibal about fifty miles, is nearly graded, and it is expected that the track will be laid to the crossing of Salt river by the 4th of July next. The work will now be pushed at every point, so as to keep the track-layers at work from Hannibal westward, until they meet those engaged in the same work from St. Joseph.

Troy and Greenfield Railroad--The Hoosic Tunnel.

A bill is now before the Massachusetts Legislature granting \$150,000 in aid of the above work. A Committee appointed by the House to examine and report upon the propriety of extending the aid asked for, have recently reported in favor of the measure. They urge strongly the fact of a saving of 23 miles' distance, the reduction of grades from 83 feet [on the Western road] to 38 feet per mile on the proposed Troy and Greenfield line. The great advantages which Massachusetts has derived from her railroad connections with the West, are fully dwelt upon, together with the necessity of maintaining and extending them at any reasonable sacrifice. The undertaking is also believed to be eminently feasible.

The amount asked for would be probably sufficient to reach the rocks at both ends. By constantly keeping them bare, the action of the atmosphere, it is well known, in course of time would dissolve the rocks themselves, and if the world is not soon to be destroyed, day-light might thus be let through the stoney ribs of old Hoosic. Who will second this suggestion?

Railroad Earnings.

INDIANA CENTRAL R. R.

The Indiana Central railroad company's earnings for April, 1856, were:

Passengers.....	\$23,255.69
Freight.....	8,909.58
Mail and express.....	1,551.04—\$33,716.31
April, 1855:	
Passengers.....	\$17,722.38
Freight.....	7,081.25
Mail and express.....	1,551.04—\$26,351.67

Increase \$7,351.64

STONINGTON RAILROAD.

The receipts of the Stonington railroad company in April were:

	Pass'gers.	Freight.
1856.....	\$13,008.25	\$10,478.36
1855.....	12,488.79	9,669.91
Increase.....	\$524.46	\$808.45

CATAWISSA RAILROAD.

The receipts of the Catawissa railroad company for the month of April, 1856, were:

From passengers.....	\$10,359.77
From freight.....	12,108.98

Total \$22,468.75
Being the largest amount earned in any one month since the road has been opened.

ILLINOIS CENTRAL R. R.

The business of this road for April was as follows:

Passengers.....	\$83,097.37
Freight.....	83,382.11
Mails.....	4,399.40
From other Roads.....	13,338.22
Express.....	1,103.29
Total.....	\$190,320.39
April, 1855.....	\$118,444.00

Increase..... \$66,876.39

NORWICH & WORCESTER R. R.

Earnings for March and April, 1856	
March.....	\$28,458.86
April.....	29,930.89

Total \$58,389.76
Same months last year..... 47,643.95

Increase in 1856..... \$10,745.81

MACON & WESTERN R. R.

The earnings of the Macon and Western Railroad for April, 1856, were:

Through.....	\$403.25
Local.....	6,493.67
Mail.....	1,362.30
Freight.....	21,512.54

Total \$29,771.76
April, 1855..... 27,052.66

Increase..... \$2,719.10

PENNSYLVANIA R. R.

The receipts of the Pennsylvania Railroad for the month of April show an extraordinary increase over the corresponding month last year, and exceed that of any month since the opening of the road:

Rec'pts for the month end'g April 30.....	\$610,969.11
Same month last year.....	355,349.29

Increase..... \$225,619.82
Rec'pts fr'm Jan. 1, '56, to May 1, '56..... \$1,727,709.36
Same period last year..... 1,222,573.64

Increase..... \$505,135.72

CLEVELAND & PITTSBURG R. R.

The earnings of the Cleveland and Pittsburgh Road for April

Were.....	\$51,134
April, 1855.....	44,908

Increase in 1856..... \$6,226

LA CROSSE & MILWAUKEE R. R.

The receipts of the La Crosse and Milwaukee railroad for the month of April past were as follows:

Passenger income.....	\$15,938.15
Freight do.....	16,012.72
Trans. of U. S. mails.....	187.85

Total \$32,138.72

MILWAUKEE & MISSISSIPPI RAILROAD.

The earnings of the Milwaukee and Mississippi railroad, [103 miles] for the month of April past, were as follows:

Passengers.....	\$17,619.62
Freight, &c.....	17,810.63

Total \$35,432.25

The receipts for the past four months were \$131,144, against \$123,520 for the same period in 1855.

BELLEFONTAINE & INDIANA R. R.

The receipts of this road for the first four months of the present year [April partly estimated] were \$117,313, against \$93,824 for the corresponding period last year. Those on the Indianapolis, Pittsburg and Cleveland line were \$83,906, against \$71,046 in 1855. These roads are now to be operated as one line between Crestline, on the Cleveland, Columbus and Cincinnati road, and Indianapolis. This arrangement will doubtless prove advantageous to both interests.

Collingwood Line Completed.

We are gratified to learn from an authentic source, that arrangements for a daily line of steamers between Collingwood, Chicago, and the ports on Lake Michigan have been perfected. The same boats that ran in the line last year—the Keystone State, Lady Elgin, Queen City, Louisiana, and Niagara, will run this season, with the addition of the Buckeye State, heretofore on the Michigan Central line, between Buffalo and Detroit, Mackinac and Green Bay, connecting with steamers running to Lake Superior, and also with the steamers Aquilla, Ajax, and Pioneer, and the propeller Buffalo, which will form a line the coming season between Green Bay, Oshkosh and Fond du Lac, on the newly opened ship channel by Lake Winnebago, the Fox and Wisconsin rivers, connecting the navigation of Lake Michigan with the Mississippi.

—Oswego Times.

NOTICE. CHILSON'S NEW CONE FURNACE.



GARDNER CHILSON has just completed and patented in America, England, and France, his new invention—THE "CONE" FURNACE—and asks the special attention of those about erecting and remodeling buildings, as well as dealers in Hot Air, Steam, or Hot Water Furnaces, and all interested in Steam Power, to carefully examine this invention, which entirely changes the principle and character of Hot Air Furnaces, developing another and a new principle, and obviating all former objections to their use. The practical operation of a number of these Furnaces erected during the past winter, points out a new discovery in science, by which the most wonderful economy in fuel has been attained, and clearly demonstrates that the waste heat lost from chimneys is enough to warm every dwelling in the city. By this invention the heat formerly lost is made to warm the house.

This discovery—simple in itself—is the daily wonder of those who witness its results, and it becomes a matter of surprise, that a plan at once so ample and practical in its operation, should have thus far entirely escaped the notice of scientific men. We believe no one who investigates this principle will be liable to use a furnace constructed on any other, and we invite all who would witness its operation to call at the store of CHILSON, GOULD & CO., 99 & 101 Blackstone st., Boston, Mass.

Augustus Schwaab, CIVIL ENGINEER, MACON, GEORGIA.

IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible positions on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

Passenger and Freight Cars FOR SALE.

4 FIRST CLASS (60 seats) PASSENGER CARS.
85 BOX FREIGHT CARS, 28 ft. long.
11 PLATFORM "

The above are for a 4 ft. 8 1/2 in. gauge, and are well and thoroughly made. WILLIAMS & PAGE, 4113 44 Water St., Boston, Mass.

To Railroad Bridge Builders.

OFFICE OF THE CATASAUQUA AND FOGELSVILLE R. R. Co., Catasauqua, Lehigh Co., Pa.
PLANS and proposals will be received at this office until the 22nd of May inst. for building an Iron Bridge over the Jordan Valley of about 11,000 feet long and 80 feet high on the line of the Catasauqua and Fogelsville Railroad in Lehigh Co., Pa. DAVID THOMAS, Pres't.

Notice to Contractors.

CHIEF ENGINEER'S OFFICE N. AND P. R. R., Norfolk, Va., May 6th, 1856.

THE undersigned has for contract 3,000 cubic yards of Bridge Masonry, situated near Norfolk and Petersburg, respectively, and on the line of the Norfolk and Petersburg Railroad. Plans and specifications of the two bridges near Petersburg may be seen at the Division Engineer's office there, or at this place, and like information may be had about the work contiguous to Norfolk, at this office.

WILLIAM MAHON, Chief Engineer.

1m20

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LANTERNS AND LAMPS.—Locomotive Head Lights: Wray's 23 inch Reflector, 21 do. do.; Olcott's 23 do. do., 21 do. do.; Porter's 21 do. do., 17 do. do.; Miller's 22 do. do., 20 do. do.; Arm Lamps, Breast Lamps, Hand Lamps.
PATENT OIL CANS.—Brass, 3 pints, 1 quart, 1 pint; Tin, 3 pints, 1 quart, 1 pint.
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PUMPS.—For Water Stations.
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Red; Medium Square, 10 inch Reflector, Red; Small Square, 6 inch Bull's Eye, Red; Large Round Fresnel Lens, Red, Common Square, Large, Red; Common Square, Small, Red; Brass Globes, Red; Brass Globes, Green; Brass Globes, Blue; Common Tinned Japanese Lantern; Engine Lamps, Large Square Signal Lantern for Stations, Bridges, Switches, etc., etc.

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PETTES' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

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THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

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New York and Erie R. R.

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will leave Pier foot of Duane street, as follows, viz:—

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MAIL, at 8 1/2 a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

NEWBURGH EXPRESS, at 4 p.m., for Newburgh direct, without change of cars.

BOOKLAND PASSENGER, at 4 p.m., via Suffern's, for Piermont and intermediate stations.

WAY PASSENGER, at 4 p.m., for Otisville and intermediate stations.

NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

No Train will leave on Sundays.

These Express Trains connect at Elmira, with the Elmira & Niagara Falls Railroad, for Niagara Falls, at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,

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UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....\$15 50

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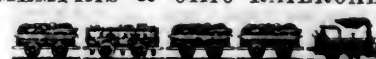
6m13

RAILROAD NOTICE.

NOTICE is hereby given, that there will be a Stockholders' meeting of the Dubuque and Pacific Railroad Company, at the office of the Company, in the City of Dubuque, Iowa, on the third Monday in May next, at two o'clock, p.m. for the purpose of amending the Articles of Incorporation, among other things, so as to increase the number of the Directors to thirteen, and to transact such other business as may be legally done at a Stockholders' meeting. And further notice is hereby given, that, on the first Monday in June next, the annual meeting of the stockholders, for the election of Directors, will be held at the office of the Company, in said city.

H. P. LEACH, Sec'y D. & P. R. R. Co.

MEMPHIS & OHIO RAILROAD.



Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R. & Memphis, Tenn., April 11, 1856.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and cleaning, graduation, masonry and bridging of forty miles of the Northern division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.

The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for handling.

The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.

It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1858. Good reference will be required of Contractors as to ability to carry out their contract.

Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET, Engineer M. and O. R. R.

6t17

NOTICE

IS hereby given, that books will be open for subscriptions for \$300,000, the residue of the capital stock of "THE LOCO DOCK COMPANY," chartered by the Legislature of New Jersey, at the office of the New York and Erie Railroad Company, 45 WALL STREET, New York, on Wednesday, the 28th day of May, instant, from twelve to one o'clock of said day.

By order of the Directors.

J. LANSING ZABRISKIE, HOMER RAMSDALL, Secretary, President.

Dated, May 1st, 1856.

The whole capital stock of the above Company is \$800,000. Arrangements have been made with the New York and Erie Railroad Company by which the property purchased for the LOCO DOCK COMPANY in New Jersey, to be paid for by their capital stock, will be leased at a rent of 10 per cent. on its cost, with privilege of purchase; and such shareholders of the New York and Erie Railroad as desire it, and subscribe therefor, will receive a proportionate share of the stock of the LOCO DOCK COMPANY.

3t19

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern, 58 lbs. per yard, apply to
VOSE, LIVINGSTON & CO.,
 9 South William st.
 New York, May 9th, 1886.

To Bridge Contractors.

PROPOSALS will be received at the office of the **EDGEFIELD AND KENTUCKY RAILROAD COMPANY**, at Nashville, Tenn., until the 20th day of May next, to build the Bridge across Cumberland river, for the joint use of the **LOUISVILLE & NASHVILLE** and the **EDGEFIELD & KENTUCKY RAILROADS**, according to the provisions of the Act of the late General Assembly, appropriating two hundred thousand dollars for its construction. The superstructure will be about seven hundred feet long, including a draw with one hundred feet opening. The piers will be from sixty to eighty feet high, in water from twelve to eighteen feet deep at its lowest stage, and the foundations will be upon piles, or put in with coffer dams, or otherwise, as the nature of the river bottom renders expedient.

Bridge Constructors are invited to send plans and specifications for superstructure, of both wood and iron, for spans of from one hundred and sixty to two hundred feet long, and when of wood, with a proposal for preserving and rendering it fire proof.

Propositions may be made for the entire structure, or for the foundations, masonry, or superstructure, separately. The foundation must be bid for per pier, the masonry per perch of twenty-five cubic feet, and the superstructure per lineal foot. Any further information can be obtained by addressing the Chief Engineer of the Edgefield and Kentucky Railroad at Nashville.

The following is a copy of the Act of the General Assembly referred to:

"Be it enacted, That the Edgefield and Kentucky Railroad and the Louisville and Nashville Railroad are entitled to the sum of one hundred thousand dollars each, to construct a Bridge across the Cumberland river at Nashville, and that they are hereby consolidated for that purpose, and shall be entitled, upon application, to the sum of two hundred thousand dollars, for which the Governor shall issue Coupon Bonds of the State at six per cent. at thirty years, to be issued as twenty thousand dollars of the work shall be done, from time to time."

JNO. L. HELM, President
Louisville and Nashville Railroad Company.
EDWARD S. CHEATHAM, Presr
Edgefield and Kentucky Railroad Company.
 NASHVILLE, April 18th, 1886. 417

BUSINESS CARDS.**JAMES WINSLOW**

RETIRE this day from the firm of **WINSLOW, LANIER & CO.** The business will be continued under the same name by **R. H. WINSLOW** and **JAMES F. D. LANIER**, at No. 52 Wall st. Either of the partners will sign in liquidation.
R. H. WINSLOW.
J. F. D. LANIER.
 New York, May 1, 1886 1m20 **JAMES WINSLOW.**

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3m19

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P.S.—Presidents of railway companies are requested to favor Messrs. L. & Co. with Exhibits or Reports of their companies as published.
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 London, Oct 1885. 6m46

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JUST PUBLISHED—A set of Tables for finding, at a glance, the true cubical content of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes. By **M. E. LYONS**, Associate Engineer, Lebanon Valley R. R.

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1. General Table for all Bases and all Slopes.	13. For Base 16ft. Slope. 1 1/2 to 1
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3. Base 12 ft. Slopes 1 1/2 to 1 1/2.	15. " 24 " 1 1/2 to 1
4. " 14 " 1 1/2 to 1 1/2.	16. " 28 " 1 1/2 to 1
5. " 15 " 1 1/2 to 1 1/2.	17. " 32 " 1 1/2 to 1
6. " 15 " 1 to 1 1/2.	18. " 36 " 1 1/2 to 1
7. " 15 " 1 1/2 to 1 1/2.	19. " 40 " 1 1/2 to 1
8. " 16 " 1 1/2 to 1 1/2.	20. " 44 " 1 1/2 to 1
9. " 16 " 1 to 1 1/2.	21. " 48 " 1 1/2 to 1
10. " 18 " 1 1/2 to 1 1/2.	22. " 52 " 1 1/2 to 1
11. " 18 " 1 1/2 to 1 1/2.	23. " 56 " 1 1/2 to 1
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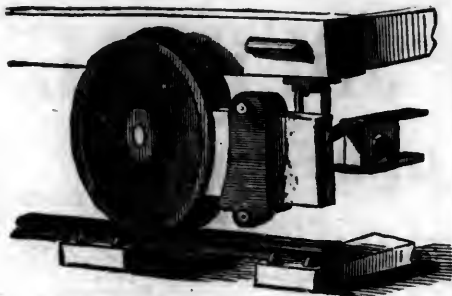
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are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use.

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The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivation and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned soil is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of, — that for those located in the interior, there are no conveniences for transporting the produce to market, railroad not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses the distance to market is far greater, and every hundred miles the produce of those lands is carried either in wagons, or interrupted water communications, in-

creases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

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The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

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They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

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Land Commissioner of the Illinois Central R. R. Co.,
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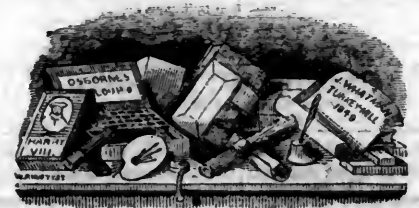
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Successor to H. L. Lipman,
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Mar 15, 1854

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This is the only fountain pen we know of, that will not leak in the pocket, or feed too fast in using. The feed of this is perfectly under the control of the writer, who may use it without danger from blots or discoloration of the clothes. Price \$3. They are adapted to all styles of pen. They will be sent by mail to any address upon the receipt of the price.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, May 24, 1856.

Florida Railroad.

In our paper of the 10th inst., we showed, in a more general manner, the saving that would be effected, in time and expense, by the route to be formed by the construction of the *Florida* railroad, over that now pursued around the South shore of the Peninsula. We showed the former to be admirably adapted to the objects sought to be accomplished, and that for high-priced goods, the cost of transportation over it, including insurance, would be much less than by sailing vessels, by the more circuitous route. Added to this advantage, would be celerity and certainty of movement, which, in commercial affairs, have a positive value, exceeding very often the cost of transportation. As an illustration, we referred to the great change that has taken place in the routes and modes of transportation between New York and Boston. The immense traffic in valuable and perishable articles between these cities is now monopolized by the lines of steamboats and railroads connecting the two, although the rates over them exceed twice those charged by sailing vessels around Cape Cod. We also stated, and of which there can be no doubt, that the advantages gained by the new route across the Peninsula of

Florida would be relatively much greater than those which give to the routes across the peninsula which separates Boston from New York, the trade between these cities. The extent of the diversion which will be caused by the work proposed, and the probable amount of traffic over it, we now proceed to discuss.

The North and South maintain most intimate commercial relations from the entire diversity in the products of the industry of the two sections; those of the latter being almost entirely of the products of *agriculture*, which are exported in their *raw* state, while those of the North are *manufactured* articles of various kinds. The same remarks hold true of the relations between the North and East, and the interior of the country generally, the outlet of a large portion of which is through the Mississippi river. This river and its tributaries are estimated to form a navigable water line of 50,000 miles. The drainage of the vast interior basin of the country is naturally in the direction of its rivers. N. Orleans, consequently, is the entrepot and point of export for extensive communities that have no other relations than those of trade. The greater part of the exports of that city are sent to the North-eastern States, while the former supply in return, and through the same channels, nearly all the fabrics that are used in the interior.

We have no means of ascertaining the extent and value of the trade described, nor that between the North-eastern States and the various Gulf ports. It being a *coasting* trade, no detailed statements in reference to it are obtainable. A good idea may be formed of its magnitude from the amount of tonnage employed in it. For the fiscal year ending June 30th, 1854, there cleared from the ports of New York, Boston, Philadelphia, and Baltimore, for the Gulf ports, 882 vessels having an aggregate tonnage of 453,378 tons. Since that date there must have been a large increase in this trade, so that it is entirely safe to estimate, at the present time, the tonnage both ways at 1,000,000 per annum.

This trade vast as it is, is steadily and rapidly increasing, from the rapid progress of railroads in all the Gulf States. The construction of railroads doubles at once the consumption of high-priced fabrics, among the people through which

they are built, for the reason that they more than double the means of a people for purchasing. Extensive lines of railroad are now in progress from all the leading ports on the Gulf into the interior, which will develop the resources of the sections traversed in an extraordinary degree, and will soon double the volume of exported products, and will in an equal degree increase the importations of merchandize. It is certain, therefore, that the amount of merchandize passing between the Northern and the Gulf States will many times exceed the capacity of any line of railroad, whatever may be its accommodations.

There is no doubt that, taking insurance into account, the cost of transportation between New York and New Orleans for the more valuable kinds of merchandize would be less over the route proposed, than by sailing vessels. But considering the advantage which the Peninsula route would have on the score of dispatch and regularity of movement, it is certain that the former would be able to compete with the latter at *twice* the charges by sailing vessels, as has been the case with the commerce between Boston and New York. The advantages of the now proposed route appear the more striking, the more they are examined. The use of the magnetic telegraph enables the merchant in the interior to make known at any instant his wants to his New York correspondent. The merchandize on the same day it was ordered could be put on board the steamer. If destined for New Orleans, or Mobile, or Port Galveston, the person ordering it could count with entire safety upon receiving it within five days!—a period of time less than that in which, before the use of railroads, a trader living 50 miles from New York could order and receive his goods, and probably at less cost. This fact will strikingly illustrate the great value of the Peninsula route. It will bring all the Gulf cities within five days of New York. Six days will enable a merchant living 900 miles into the interior to order and receive his goods. This celerity in transportation will give the route over which it can be effected not only a monopoly of carriage, but will vastly increase the consumption, as the intimate relations between the interior and the commercial emporium of the country will naturally beget a taste for luxuries and comforts now rarely indulged in. We

have a right, consequently, to expect that within five years after the completion of the road across the Peninsula, the consumption of high-priced merchandize will be doubled in all the Gulf States.

In speaking of the business of the proposed route we have assumed that it would be confined to the more valuable kinds of merchandize, upon which the insurance adds largely to the cost of transportation. Although the carriage of such articles would form the most profitable source of revenue, a line being once established across the Peninsula, and supported by passengers and high-priced goods, it could compete with sailing vessels for all the low-priced merchandize it could carry; such as cotton, tobacco, hemp, &c., &c. The steamers would always take a full cargo both ways. There can, therefore, be no doubt that a considerable portion of the cotton arriving at the Gulf ports would take this route. At Fernandina, the Eastern terminus of the above road, cotton is worth more by half a cent. per pound or ten dollars per ton, than at New Orleans. The cost of transportation between these points would not be more than two-thirds this sum.

We have considered the above route chiefly in reference to the business between New Orleans and New York. What we have said is equally applicable to all the Gulf ports. The above route will be particularly adapted to the commerce of Texas. That State has no harbors having a depth of water greater than 12 feet, which entirely excludes from them larger class merchant ships. Cedar Key and Galveston have each about the same depth of water over their respective bars. Fernandina, on the other hand, has 20 feet of water at high tide. The above route will, therefore, be the cheapest and most expeditious mode of conveyance between Texas and the Eastern States, and must be chiefly used for the greater part of this commerce.

If the above route can command the trade of New Orleans, there can be no doubt that it can a very considerable portion of that between New York and St. Louis. The average rate of transportation between New Orleans and St. Louis is about \$6 per ton, making the whole cost from New York about \$26 per ton. The whole time required for the transit would be 13 days. The rate of transportation charged by the Merchants' Express Line, by the inland route, is \$57 per ton, and the average time required for the round trip, 20 days. It may be safely affirmed, we think, that the cost of transportation between New York and St. Louis, by the route proposed, would not exceed one-half that charged by any Express company between the two cities, nor will the time exceed much more than one-half that now required. It is the opinion of merchants having constant intercourse and a very large business between the above cities that the greater part of it will go over the new route when formed.

There appears therefore to be no difficulty in showing from well authenticated data the superiority of the proposed route to that by way of the Florida Keys, for a very considerable portion of the commerce between the Mississippi valley and New York. Whenever we have given figures we have in all cases drawn them from authentic sources. We present the data for public consideration. We have no doubt as to the conclusion

to which every one who examines the subject must come. We need not insist upon what is really the strongest point in the case, the speed and certainty with which merchandise can be transported. For a very large portion of the merchandise between the North and the South, rapidity of movement has a value much greater than the whole cost of transportation; so that the new route would command an immense traffic even should sailing vessels carry merchandise for nothing.

After what we have said in reference to freight, the value of the route for passenger traffic may be easily disposed of. There is no doubt that between New York and New Orleans, the trip could be made over it in as short a time as by railroad, traveling night and day. The charge for passengers, found, would be much less than by the railroad. On the Peninsula route, the trip would be one of recreation, against one of excessive fatigue for several days and nights in succession. We cannot doubt under such circumstances, which route would take the business. We believe the above line has only to be established to call for a daily line of first class steamboats in both directions.

We are happy to learn that the construction of the proposed road is being carried rapidly forward. A considerable progress has been made in the graduation of it. Rails for fifty miles have been purchased for early delivery. It is believed that the road will be fully finished within two years from the present date.

Improvements in the South Western States. (Continued from p. 308.)

(4)

NEW ORLEANS, February 8, 1856.

To His Excellency ROBERT C. WICKLIFFE,
Governor of the State of Louisiana.

SIR—My third letter concluded with the promise of making this the subject of aid from the State of Mississippi, in pursuance of the recommendations contained in Governor McRAE's message. That State is about 339 miles long, from North to South, and 150 miles broad, comprising in area about 45,760 square miles, or 29,286,400 acres. Its population exceeds 700,000 inhabitants, including slaves; and the value of the assessment of landed and personal property reaches nearly \$300,000,000, which in proportion to its white inhabitants is the largest average of property owned among the same number of persons in any purely agricultural community in the world. The northern portion of the State is healthy and productive; and the country bordering on the Mississippi and Yazoo rivers is esteemed the finest cotton producing region in the South, being favored by the climate and latitude most favorable to its cultivation. The Mississippi river, flowing along the western boundary of the State, furnishes at all seasons an uninterrupted and cheap facility for the transportation of its produce. The other streams having their course through the State, are of precarious navigation, and there are seasons when the inhabitants of populous and wealthy districts are subjected to the greatest inconveniences and sacrifices, owing to the suspension of navigation, and the want of facilities for carrying their produce to market, and obtaining their supplies. There is perhaps no State in the Union which relatively has so many agricultural advantages as Mississippi, and which would develop more rapidly its great resources, if the agency of intercommunication was improved; besides there is no country, taking every thing into calculation, that is more favorable for the construction of cheap and productive railroads. The surface of the country is facile—without mountains and rocks to excavate or valleys to fill. Timber is abundant; and its

latitude secures its highways against the injuries of frost and a rigorous climate. Superadded to all this, the teeming fruitfulness of its soil is a rich promise of traffic which cannot be computed in value and importance.

A State with the territory, climate, soil, and population I have described, with an assessment of near three hundred millions of dollars, has riches and resources far greater than those of the bankers of any European capital; and if employed in only a moderate degree in aid of the railroads now being constructed within its limits, will achieve the noblest works of the present age, which posterity, when inheriting their great benefits will not fail to appreciate and applaud.

Mississippi might aid the railroads projected and building through its limits, without oppression to any, to the extent of a million of dollars annually; but suppose it gave less, and its representatives in a spirit of enlightened liberality, corresponding to the recommendation of its Governor, should consider the question of raising revenue for so noble an object. The levy of a three mill tax, or thirty cents on the hundred dollars—a tax too insignificant to invite serious opposition among a people possessed of resources so great, would give near nine hundred thousand dollars annually, and seven years would swell the amount to \$6,300,000, which is the latest period I could assign for the entire completion of a system of improvements that would give the State eight hundred miles of railroad of great and certain productiveness on their cost. Assuming that provision was made by legislative enactment for aid on this basis, we are brought to an enquiry of how it can be best applied to secure and protect the State. This may be satisfactorily answered by citing the example of the State of Tennessee, which has aided its railroads by a contribution of \$10,000 per mile on the security of a statutory mortgage. Mississippi may do the same, and secure itself by ample lien for money advanced instead of engagements payable at a very remote period, but it can do more. The State, while creating no public engagement, performs the function of the capitalist, which its great wealth enables it to do with the most perfect facility and convenience. The entire independence of the circumstances of the State and its citizens will allow of any extension, and in a consistent policy she can make her advances perpetual on the payment of six per cent. per annum, reversing all the rights of the creditor in case of default. At the expiration of seven years the State would have an annual revenue of \$378,000 upon its investments, besides having the merit of originating a policy which, in solid advantages, would supersede all the inventions suggested by schemes of credit and expediency, and would fortify every interest against its sacrifices and uncertainties.

I am no advocate for employing public credit when it can be avoided; it is powerful as a resource in periods flushed with confidence but mischievous in its tendencies, and States as well as individuals will best consult their own welfare and interests when they rely upon their own acknowledged resources instead of borrowing from others. The Southern States have more than ordinary motives to practice and encourage this policy in the face of the fanatical crusade waged upon their institutions and credit, the influence of which cannot be better illustrated than by referring to the difference established in the value of northern and southern State securities, which is fully twenty per cent. That this difference is assignable to the mere question of repudiation is not borne out by the facts. The State of Michigan has openly repudiated her engagements for millions, and the delinquent States, Indiana and Illinois, may further be cited as an example that punctuality and good faith do not exclusively reside in States where slavery is disavowed: and to go farther, it certainly does not appear that the Southern States in the management of their public works and corporations have not evinced a higher degree of prudence and integrity than prevail elsewhere. They are at least free from the vices of stockjobbing

which has been the parent of stupendous frauds committed at the North.

The pursuits of the people of Mississippi are almost entirely agricultural. The State has no seaports of trade or export—no manufactures worthy of enumeration. Almost every article that supplies the consumption of its inhabitants, from the most common want to the most superfluous, is the production of a foreign and distant industry; but the value of her great staple is greater in proportion to population than the average of production in other States. Its citizens in the same ratio are larger consumers of the manufactures of the country and its importations from abroad, and are therefore proportionately the largest contributors to the revenue of the federal treasury, the receipts of which from duties for the current fiscal year will exceed sixty millions of dollars. The present population of all the States is presumed to be over twenty-six millions. Mississippi will perhaps enumerate 750,000 inhabitants or 1/84th of the population of the whole Union, and if we make a distribution of the revenue collected from duties on imports the State would furnish as its proportion \$1,764,706, equal to a fraction over \$2.33 on each inhabitant, and a fraction under a six-mill tax on its total assessment. But, recurring to the preceding consideration of the pursuits of the people of Mississippi and their dependence on foreign and distant manufactures to supply their wants, it is as plain as demonstration can make it that each inhabitant is made to contribute double to the national revenue over that of the farmer and artisan of Pennsylvania, Ohio, New York or New England; but admitting the proposition overstated, (although every one who has attentively considered the working of the system and felt its inconveniences knows it is no exaggeration), and the average paid by each inhabitant is reduced to four dollars—this, on a population of 750,000, swells the taxation to three millions of dollars. It seems incredible that a sum so enormous should be insensibly drawn from the pockets of the people almost without their knowledge and without provoking the slightest murmur or complaint. This digression is not designed to excite controversy on the tariff question. It is introduced to expose not only the capacity of a prosperous State to sustain the burthens of taxation collected for legitimate purposes, but to forestall objections that may be raised against an insignificant tax for railroad purposes, and to show how superficial are objections opposed to the judgment of the people when fairly appealed to in behalf of their dearest rights and interests and upon principles plain and practical, and sanctioned by the clearest dictates of sound policy and common sense. If you were the proprietor of such a broad domain how long would you hesitate between inactivity and the appropriation of its vast resources to the accomplishment of a noble and magnificent system of public works that would transmit your name as a benefactor to the latest posterity?

While agreeing with Governor McRae in the application of the States' property in railroads, he has not in his brief exposition considered one of its chief features, which I presume he did not esteem sufficiently important, in view of the moderate amount of aid he has recommended. If the policy was considered on the basis of this letter there is an important interest to be considered and consulted residing in the river counties and removed from the lines of railroad. It would be alleged by the citizens who are proprietors in those counties, and not without reason and justice, that the great bulk of the taxation would fall on their property, and their acquiescence could not be expected, except on the score of equality and compensation; but this objection can readily be answered and a most useful purpose served by appropriating the resources from railroads for a fixed number of years to the enlargement and extension of levees and the improvement of the drainage of land contiguous to the rivers. Ten years would swell the amount of this aid to \$3,728,000 or near two-thirds of the sum raised by taxation, and if

awarded for a more extended period could not be objected to, as the sections of the State through which the different lines of railroad run would be more than compensated in their advantages from the enjoyment of these roads for any loss they would sustain in the diversion of the States' revenue to the objects I have referred to and which are of the greatest importance.

This subject may be discussed at greater length, but my purpose is not to weary you by lengthened details; and the respect due to the opinions of others, who have more licence to comment with freedom on the policy of a neighboring State, forbids my passing the present limits. I cannot, however, retire without expressing the hope that Louisiana and Mississippi, so intimately allied in their political and social relations, and those of interest and commerce will speedily deliberate on the policy alike necessary to the vindication of our enterprise and the improvement of their unrivalled resources.

In my next letter I shall review the progress made in improvements now being constructed in Louisiana and the States east of the Ohio and Mississippi rivers, their commercial, moral, and political advantages, and their necessity to a community of States of kindred laws and institutions, whose perpetuity and independence should be transmitted to our posterity as an inheritance which it will be their just pride to cherish and commemorate.

Very faithfully, yours,
JAMES ROBB.

(5.)

NEW ORLEANS, Feb'y 11, 1856.

To His Excellency ROBT. C. WICKLIFFE,
Governor of the State of Louisiana.

SIR—My fourth letter concluded by promising to resume my subject, in a narrative of the progress of railroads commenced in Louisiana; and those in the States east of the Ohio and Mississippi rivers.

At the first blush it would seem scarcely necessary to allude to our own railroads, as it might fairly be presumed that a subject so often before the public would have made every one acquainted with their condition, circumstances and progress; but unfortunately this is not the case, but the truth is, there is a lamentable ignorance prevailing, and not without more or less hostility, jealousy and opposition, which no promises can propitiate or reason enlighten or subdue.

It could not be expected that the citizens of a State destitute of all public improvements, and possessing mechanical skill and experience to only a very limited extent, could at once be endowed with capacity to carry out large undertakings, and avoid the commission of many and serious mistakes. This is, more or less, the history of every undertaking, public or private, that has been commenced since the country has been settled; and nothing but time and a feeling of permanent interest in our undertakings, by those who have invested their means to construct them, will give us that skill and proficiency which we do not now possess.

That public expectation is disappointed, and its hopes discouraged, needs no proof; but still enough has been done to place our railroads beyond the reach of absolute failure, and to establish an importance for them which should command support; and no discouragement should be permitted to make us despond, or deter us from meeting the issue with courage and a determination to employ our means to their utmost limit, to secure the great prize of commercial distinction within our reach; and which once gained, will repay our sacrifices a hundred-fold.

The Great Northern railroad company will have, within a month hence, one hundred and sixteen miles of finished road, and sixty additional miles graded and bridged, in readiness for the iron, if it had the means to procure it. The Opelousas Co. will soon have its road pushed to Berwick's Bay, a distance of seventy-two miles, and with every prospect of a remunerative traffic. The Vicksburg and Shreveport company is making considerable

progress; and the discretion and foresight evinced in its management, and the character, experience and responsibility of the contractors to build the whole road, are guarantees of its success. As a pioneer road, this is entitled to rank first over any road yet projected in the State. The region it is designed to open is of the greatest fertility, and its capacity to produce cotton alone will, in a few years, be sufficient to build up a trade that would support a city as large as Memphis. The travel of North Louisiana and Texas will pass over it to Vicksburg; thence by the Vicksburg road to Jackson, and over the Great Northern road to New Orleans and every State in the Union. North of Canton, Miss., commences a series of railroads which have already made progress, and are being pushed forward with energy. They will establish a complete network of intercommunication, commencing with the Mississippi Central, extending from Canton to Holly Springs, and thence to Lagrange, Tenn., where it intersects the Memphis and Charleston; and on to Jackson, Tenn., where it intersects the Mobile and Ohio road, running to the mouth of the Ohio river, and to Paducah, at the mouth of the Tennessee river. Twenty-four miles of the Mississippi Central are finished, between Holly Springs and Lagrange; fifty miles south of Holly Springs, and north of Canton, are graded and prepared for the reception of the iron, which has already been purchased; and every reasonable expectation prevails that the remainder of the grading and the preparation of the superstructure, will be complete within twelve months. The work on this road is chiefly performed by the planers on its line, and at a very small cost. Seventy miles north of Canton commences the Memphis and Grenada road, which will become the route for a direct line of travel from New Orleans to Memphis. Of this road ten miles are finished, and the remainder is progressing under such auspices as to assure its completion. From Memphis various lines of railroad radiate, all of which have made constant progress; and the one constructing through Arkansas to Little Rock, is of great importance to New Orleans, in assuring a considerable outlet for the produce of the interior to the Mississippi river, which, in seasons of suspended navigation, is locked up for many months. The Memphis and Louisville road is now finished for a distance of thirty miles, and the energy that has distinguished its past management, is an index of its future progress. This road is entitled to aid from the State of Tennessee to the extent of ten thousand dollars per mile on the portion constructed within its limits. The Memphis and Charleston company have in operation 172 miles of finished road, and the assistance lately voted by the State of Alabama, will greatly facilitate its progress towards completing all its connections within another year. At Chattanooga, railroad communication commences and extends beyond Knoxville to Virginia, and the entire line thence to Washington city is now more than two-thirds finished. Every calculation is to be made, on the whole being completed within the next three years. The road from Louisville to Nashville is now finished for a distance of 30 miles, and its friends are sanguine of its success. In proof of its estimated importance, the citizens of Louisville have recently voted it additional aid for one million of dollars. The Tennessee and Alabama company have finished thirty miles of road south of Nashville; this road is designed to form a continuation of the line between that city and New Orleans, and is entitled to the aid of the State of Tennessee, for \$10,000 per mile on the portion running within its limits, which will amount to \$1,100,000. The Mobile and Ohio company have in operation 162 miles of road, and the whole of the line is nearly graded to the mouth of the Ohio river and Paducah. That portion running through Tennessee is already prepared for the iron, and the State is about to issue, in its six per cent. bonds, one million one hundred thousand dollars to finish it.

The foregoing is an accurate sketch of the various railroads projected and commenced since 1851, (excepting the Mobile and Ohio,) which exceeded

2,000 miles in extent, the work on which is to-day more than half completed, and every mile of which, when every connection is made, will contribute something in favor of the trade and importance of New Orleans. It suggests to every mind that will examine the subject, the profitable traffic and travel which such a system of extensions and intersections of railroads will at once bring to the Great Northern road; and the slightest reflection will be quick to appreciate the rich inheritance this company will enjoy, in the undisturbed possession of the link of 206 miles between New Orleans and Canton, forever secure against rivalry and competition.

Its importance is emphatically, and relatively to any other railroad projected in the Union, what the Mississippi river is to its tributaries.—Boston, New York, Philadelphia and Baltimore, have expended one hundred and fifty millions of dollars in constructing lines of railroad that are rivals for the trade and travel of the West; less than one-tenth of the sum will give to New Orleans the advantages of facilities of equal extent to those possessed by any of the great Northern cities through their enormous outlays. No expedient which invention can contrive, will ever intrude any competition against the exclusive control which is now and forever invested in the 206 miles from it, to Canton; and capital that is given to construct it will in time prove remunerative and productive beyond all example.

The vast basin of country which this grand system of improvement is designed to improve and adorn, embraces eight degrees of latitude from north to south, and thirty degrees of longitude.—Of all climates it is the most highly favored; its riches in the fertility of the soil, its mines of coal and iron, constitute it in every respect the finest region within the broad limits of our republic; and aided in its development by the freedom of our genial institutions, and the enterprise of a bold and noble race, it will obtain an opulence and power which will descend with renown to the latest generations.

Its present area may be computed at 185,360 square miles, and 119 millions of acres, exclusive of the territory of Louisiana. Its population in 1850 exceeded three millions of inhabitants, nearly equal to the total of the New England States, and not much under that of the thirteen States when our war of independence commenced; and if its population was increased to twelve millions the average would not exceed to the square mile that known in England in the commencement of the 17th century. Should it ever reach the average to the square mile in England at the present day, it would contain sixty-three millions of people.

I am now brought to a point of confession which must cause every honest and patriotic citizen who is attached to his country, to bow his head in humiliation. Every section of this vast and magnificent region, from which we draw the materials of our enormous export, is exerting every influence to push forward great works, designed to achieve for New Orleans the greatest commercial grandeur and power; every day brings fresh appeals to arouse us from our indifference, and to extend a helping hand in completing the greatest mission of the age. But in vain do those appeals come recommended by works of the greatest promise, which are progressing for our benefit. We are in a condition of supineness with the works we have commenced, incredible as it is true; and to use an expressive figure of Indian eloquence, we are "an aged hemlock, dead at the top."

There is that in American enterprise which, in other States shrinks not, and faints not and fails not in its labor, but rises equal to its purposes; its unflinching resolution can accomplish everything, and the friends of progress must assume the armor of determination to renew the struggle, and restore our undertakings to a solid basis, by resuming the policy which experience has demonstrated to be one of economy and safety. If the State of Mississippi postpones action, and denies the aid which is so clearly within the compass of her ability,

without oppression to the most humble of its citizens, we must rely upon our own resources. I do not and cannot doubt that the large mass of our liberal and intelligent property-holders will be willing to lend cordial co-operation and support in answer to any appeal that is recommended and assured by guarantees of renewed activity in prosecuting to their completion, the works we have begun.

I shall address you a sixth letter, which will conclude my subject,

And am,

Very faithfully yours,

JAMES ROBE.

(6)

NEW ORLEANS, Feb. 12th, 1856.

To His Excellency ROBT. C. WICKLIFFE,
Governor of the State of Louisiana:

SIR—The varied importance that attaches to the subject of my preceding letters has imperceptibly extended their length, and I fear may overtax your time and exhaust your interest. In seeking to confine my observations to the points most prominent in favor of attaining the great end I have so much at heart, I am precluded from enlarging upon the feeble objections which I know to prevail, not so much to public works themselves as to aiding them. I must be content to rest the cause I am advocating on its own merits and what I have already expressed its favor, and confine this letter to the plan of those preceding.

Having conclusively set forth what the importance of New Orleans will be when interior communications are extended and improved, I will now invite your attention to the consideration of the external advantages that will follow. The citizens of New York have constructed at great cost a railroad over the Isthmus of Darien, terminating at Panama on the Pacific side. The distance from New York to San Francisco by this route is 4,992 miles, and the voyage has never been performed under twenty-two days; the average of the voyages of the year being twenty-four days. The distance from New York to San Francisco, via Washington City, and by railroad from Washington City to New Orleans and hence by Tehuantepec, is 4,166 miles, making a difference of 826 miles in favor of New Orleans and Tehuantepec, and a gain of more than two thousand miles in ocean navigation. If we allow seven days from San Francisco to Ventosa on the Pacific end of the proposed road across Tehuantepec, and four days thence to New Orleans, and three days hence to New York, it gives fourteen days as the time employed in travelling between New York and California, and a gain of eight days over the shortest time by the Isthmus of Darien, which is more than one-third. The time saved in going to and returning from California would average twenty days and lessen the cost of travel more than thirty-three per cent. The simple statement of these facts dismisses the necessity of any lengthened argument to prove their importance, and if public attention were fairly awakened to their claims we would hear less of the utopian schemes of Pacific railroads to be located over trackless deserts and mountains of perpetual snow. I have confidence in American enterprise that it will ever be equal to its purposes, but it will never be directed to fallacies which experience already acquired exposes and condemns. The Opelousas road, located over a savannah, in three years is not quite completed seventy-two miles, and the Great Northern Company has finished in the same time 116 miles and graded 60 additional miles of its road. How long will it take to extend the former 1600 miles on this scale of progress over a country of great physical obstruction and destitute of population and provisions? Great lines of railroad are not the creation of a month or a year, and if opulent and populous cities like New York and Philadelphia have consumed twenty years in the building of the Erie Railroad, and ten years for the Pennsylvania Central, both of which penetrate regions where a large and active population resides; and abounding in materials and all the aids needed in the construction of great public works, we should

assign the building of a Pacific railroad to remote generations. When population extends west, its wants and their convenient supply will be met as necessity and interest will point out, and either of these causes urges us in our present circumstances to consider the population already settled, and not anticipate that of the future. We need the concentration of public attention to our local schemes. To succeed in those already commenced we must consolidate our resources and calculate our purposes. We must be satisfied to do one thing at a time and do it well, and this will give to other and fresh schemes life and intensity from the success of undertakings that have made progress. When the capital invested in our present railroads becomes productive, its employment can be diverted to other channels without embarrassment or inconvenience. It is the assurance of large profit as well as the security of capital that can attract it from the ordinary channels of its employment.—The mere money-lender, and he belongs to a class as distinct as the importer or factor, calculates with singular prudence the risks and profits of his investments. In our region of country where the demand for capital is active, he can have a choice of securities, and schemes however attractive in theory and plausible in promises will never overcome his preference for those that are solid and reliable. Schemes which are so extensive as to be defined by no boundary, seldom or never command confidence with the money-lender or capitalist.

The importance that would accrue to New Orleans by becoming the great centre of intercourse between the Pacific and Europe and North America I need not enlarge upon: no one can foresee or estimate its magnitude; but the first and immediate influence that will follow the completion of its communications, exterior and interior, will be the increase and expansion of our import trade which is now insignificant. New Orleans now exports coastwise and to foreign countries, a larger amount in bulk and value of raw produce than any city in the world. Its cotton, which is first in importance, is now an element in the exchanges of commerce greater than that of gold or silver. The States cultivating it require its value to be returned to them, not in gold or silver, but in the manufactures and products of Europe and Asia; from the most useful to the most ornamental and expensive, the greater proportion of which now finds its way to the interior through the northern cities, owing to their superior advantages in facilities of cheap and rapid distribution of commodities by means of their railroads.

The constant and serious interruptions between New Orleans and the interior tend to lessen and retard this most important branch of the trade of a great city. Large and populous districts are cut off for whole seasons at a time, and the transportation employed to supply the inhabitants in their most ordinary and pressing wants is both tardy and expensive, and unless overcome by improved facilities of intercourse, must retard all progress, if it does not lead to the abandonment of districts the most fertile and valuable. The loss of interest alone on the crops detained in Western Louisiana and Arkansas the last year cannot be less to the cultivator than \$600,000. This is sufficient to discourage both merchant and planter and render all calculations insecure. The one has no certainty when he will have his customer's crop, and the other has no means to buy, so long as his cotton is detained on his plantation; but merchant and planter are in altered circumstances when the obstructions to intercourse disappear—both can then buy and sell without the risks of the depreciation of the stocks of merchandise of the one or the loss of interest on the cotton of the other. The advantages that will flow from this enlarged freedom of intercourse will be attended with the greatest encouragement to cultivation, and every description of improvement that will insure the comfort, luxury and happiness of the inhabitants.

Having passed in review the external benefits of establishing the most extended system of communication with distant regions, I shall invite your

attention to the study of a practical picture of collateral advantages which our railroads will give to New Orleans.

I have adverted to the extent of population located east of the Mississippi and Ohio rivers, estimated at three millions of inhabitants; that residing west of those great rivers is still more considerable, and has over five thousand miles of finished railroads. If the dilatory modes of conveyance which now prevail, were superseded by the cheap and expeditious facility afforded by railroads, how many of this vast population would be attracted to New Orleans, that are now prevented from visiting it at all, when the distance between New Orleans and Louisville would be travelled in thirty hours, and that between New Orleans and Chicago in thirty-six hours, with greater safety and comfort, and smaller expense! It will not appear any exaggeration to you, to estimate the annual number at 500,000 persons; but suppose we reduce it to 800,000, some of whom would be attracted by motives of business and traffic, but the larger portion by those of change of climate, recreation and pleasure; and who are generally the spending class. The expenditure of such a movement of population will be immense considering that the planters of the South-Western States receive large sums for their crops and are proverbial for liberality in personal expenses. If we assign two hundred dollars to each person, and take into the average the supplies purchased by the country dealer, it will give sixty millions of dollars that would be expended in our stores, shops and hotels, every dollar of which is and will be diverted to and expended in the cities of the North if we neglect to imitate the example of their enterprise.

The resort of this large and opulent population to New Orleans for six months of the year would be in the season of its gaiety and pleasure, as it now resorts to the northern cities in summer and autumn. We would then become the centre, where the intelligence and talent of the South-Western States would annually assemble, prejudice would be worn off by the contact and interchange of opinion, and ignorance would disappear before the mighty power of that locomotion which would render the fruitful fields of Tennessee and the bowling-greens of Kentucky almost the environs of the great metropolis of the South-West. It is impossible to compute the advantages to every department of moral, social and commercial life that would be the fruits of this wonderful activity. Its accommodation would require vast numbers of houses, hotels, stores and shops. Improvement would be visible in every direction, and a great demand would spring up for our vacant squares and lots. Builders, mechanics and workmen of every description would have constant and active employment, who, in turn, would need houses to live in; all of which would further add to the demand for the property of the landlord, and greatly enhance his rents. The condition of our city would soon present a picture of energy, activity and prosperity it has never known; and if narrow-minded and illiberal proprietors could recognise it, they would perceive that it suggests our only remedy against a taxation now appropriated and expended by those who have no interest in property, other than the support it affords to nourish idleness and corruption.

The produce of the earth, during the preceding season has been bountiful beyond all example.—Our financial condition is one of ease and the greatest security, and we may feel justly proud of the pre-eminence to which it entitles us to lay claim. Rigid adherence to the principles that have established this advantage, and to the wise laws that govern our banks and currency, will fortify our financial independence, and secure a solid prosperity in which reliance may be reposed, and which will, in time, supply capital to aid our enterprise, instead of our having to seek it among those who have no interest in our prosperity, or sympathy with our institutions.

The public indebtedness of the State and City, between 1842 and 1863, was reduced to the extent

of twenty millions of dollars, principal and interest, inclusive of our own stocks returned upon us for sale and the liquidation of some of our banking institutions. The whole of this enormous sum was supplied exclusively from our own resources and remitted abroad, without undue pressure or inconvenience; while in the same period we did not bring back capital, or emit fresh obligations to take the place of the old, except in the case of the Consolidated City for \$3,300,000, a considerable portion of which was taken by our own citizens.

These facts are not only important in themselves but more so when they convey so just an idea of our immense resources, and of their being entirely adequate to assist great public undertakings, provided encouragements were offered that would renew hope and fortify confidence. This is what is needed, and, if aided by your approbation and support, my letters should prove the humble instruments of effecting this in any degree, I shall feel that I am more than rewarded for the sacrifices I have made in a cause which has ever excited in me the strongest and liveliest emotions of interest.

Congratulating you on your elevation to the highest rank within the gift of the free and enlightened citizens of a great commonwealth, and persuaded of your patriotic attachment to the institutions of the South, I earnestly pray that you may be the happy instrument of diffusing the blessings of an enlarged and liberal policy, which will promote its interests, prosperity and glory, and establish for yourself an enduring fame.

Very respectfully, yours,

JAMES ROBE.

Delaware, Lackawanna and Western Railroad.

The various divisions composing this great work, viz: the New Jersey Central, [wide gauge,] the Warren, and the Southern division of the road proper, are now ready for opening; and the Directors have announced that, on the 27th inst., the opening ceremonies are to take place. We congratulate the stockholders in that important undertaking, and the city of New York, towards which it will sustain so important a relationship, on the completion of the work.

French Railroads.

We find the following notice of the progress of some of the French railroads, in a recent communication from an American traveler:

The great railroad line from Paris to Marseilles, a distance of 535 miles, is now completed, except the bridges at Lyons across the two rivers, the Soane and the Rhone, at the junction of which the city stands. These bridges, when finished, will be as fine specimens of workmanship as can anywhere be found. The one across the Rhone is already nearly done—built of cast iron—and it presents a most beautiful and picturesque view, as seen from a point about half a mile above it. The piers of the bridge across the Soane are now building in water that is forty or fifty feet deep.

Great cylinders of cast iron are first planted on the bottom of the river—by some means, I know not how—which reach above the surface of the water. From these the water is pumped out, and the workmen descend in them, as in a well, and carry on the work of rearing the piers from the bottom of the river. This bridge across the Soane is approached by a tunnel five or six miles in length! How far it is below the surface of the earth I cannot tell. But it is no uncommon thing in this country to travel for a mile or two at a time through a tunnel, and that, too, at the rate of about forty miles per hour.

In obtaining tickets, but one person can approach at the same time, and he must get his change and retire before another can apply. In a word, there is perfect system about everything.—The coaches are not like ours. They are divided into apartments that resemble elegantly furnished

private carriages. On the Continent, there are eight seats in these apartments; in England, only six. The first class on the Continent is far superior in point of comfort to the first class in England. In England they have no means of warming the coaches in cold weather. In France, they warm them by means of cylinders of hot water, which are changed two or three times during the night or day. They keep the coach very comfortable.

Delaware and Raritan Bay Railroad.

The construction of this work was commenced on the 20th inst., the ground being broken at Port Monmouth with appropriate ceremonies. This road will be of importance, having the prospect of ultimately being extended to Norfolk, Va.

Its total length from Raritan Bay to Cape May, will be 120 miles. At the latter point it will connect by a line of steamers, with the Eastern Shore railroad, 130 miles in length, passing through parts of the States of Delaware, Maryland and Virginia, to the mouth of the Chesapeake, opposite Norfolk. Another line of steamers will run thence to Norfolk. The route will cut off nearly one-third the distance between New York and Norfolk, and will prove of much advantage to parties traveling between this city and those on the South Atlantic coast.

The capital stock of this road was \$2,000,000, which has been increased to \$4,000,000. The whole line has been contracted for by Mr. Charles Gould, of this city, at \$20,000 per mile, half in stock and half cash, which amount covers the cost of grading, rails, stations, bridges, telegraph line, and everything else with the exception of the running stock. It is Mr. Gould's intention to push the work to an immediate completion.

Vermont Central Railroad.

The *State of Maine* says—"We understand that Chancellor Poland has vacated his decree of May last, which gave possession of the Vermont Central and Vermont and Canada railroads to the Vermont and Canada company, and restored the property to the Trustees of the first mortgage bonds of the Vermont Central railroad; and that the Hon. L. Brainard of Vermont has been appointed a Trustee, in place of Mr. Lee, resigned. The Board of Trustees now consist of Messrs. Smith and Brainard of Vermont, and Eldridge of Boston.—The restoration of the Central road to its Trustees will no doubt be gratifying to the various interests in the Vermont Central railroad corporation, which property it is understood is at present doing a large business."

Quebec and Lake Huron Railway.

A project is now before the Canadian Parliament to run a railroad from Quebec, up to the northern shore of the St. Lawrence, to the Ottawa, and thence up the valley of that river to some point high up on the Georgian Bay—the work to be encouraged by a grant of public lands.

Atlantic and Gulf Railroad.

The city of Savannah has made a subscription of \$200,000 towards the construction of the above road, conditioned on \$400,000 being raised by the western counties and from other sources. Of the latter being done, there is considered to be no reasonable doubt. This will entitle the work to aid from the State of \$500,000 additional, making a total amount subscribed of \$1,100,000. It is expected that the road will be completed to Wareboro in 1858.

It is stated that no more city bonds will be issued. We presume therefore that the above subscription is to be met by direct taxation.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	none	65	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---
Androscoggin & Kennebec	55	642,343	1,473,080	2,245,020	190,005	12,807	none	14	South Western	27	1,007,490	465,500	1,624,970	253,306	---	---	---
Androscoggin	20	91,192	232,193	343,317	29,896	12,807	none	10	Tennessee and Alabama	80	244,498	---	679,906	In progr.	---	---	---
Kennebec & Portland	56	1,114,725	1,661,238	2,470,000	---	---	---	---	Tennessee and Missis.	---	170,931	---	175,440	In progr.	---	---	---
Portland, Saco, & Portsmouth	61	1,367,000	119,237	1,486,237	250,330	124,038	6	96	Memphis and Charleston	268	2,103,177	968,275	3,063,362	176,484	102,016	---	---
Boston, Concord, & Montreal	93	1,808,093	1,069,512	2,771,810	233,284	120,634	---	---	Mobile and Ohio	153	2,468,555	1,802,921	4,536,412	199,932	109,236	---	---
Chester	53	2,085,925	899,313	3,179,687	390,721	148,856	2	---	Miss. Central	158	64,584	---	628,308	In progr.	---	---	---
Concord	35	1,486,000	---	1,412,676	329,744	188,432	8	79 1/2	N.O. Opelousas & G.W.	626	2,930,426	671,645	2,667,565	In progr.	---	---	---
Northern, N. H.	82	2,768,400	---	3,016,633	370,529	188,299	2 1/2	44 1/2	Vienna, Shreveport, & Tex.	---	111,750	---	107,896	In progr.	---	---	---
Con't & Passumpsic Riv.	61	1,048,145	787,908	1,780,062	162,697	65,178	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Rutland & Burlington	20	2,233,376	2,662,396	5,378,428	894,971	---	---	---	East Tennessee and Va.	16	625,426	988,693	1,033,781	In progr.	---	---	---
Vermont Central	117	5,000,000	3,550,235	8,463,366	820,119	214,795	---	---	Nash. and Chattanooga	161	2,919,890	1,497,061	3,843,694	316,000	112,177	---	---
Boston and Lowell	27	1,830,000	325,636	2,188,595	499,754	140,377	6	65	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	264,978	138,094	---	15
Boston and Maine	83	4,076,974	156,000	4,179,535	864,426	339,090	6	93	Lexington and Frankfort	29	431,091	159,299	635,368	90,930	84,864	---	---
Boston and N.Y. Central	74	2,240,300	1,518,671	3,463,181	69,917	7,740	---	---	Lexington & Big Sandy	---	---	---	478,067	In progr.	---	---	---
Boston and Providence	55	3,100,000	359,132	3,677,164	558,471	219,639	---	---	Lexington and Danville	66	540,117	61,525	570,483	In progr.	---	---	---
Boston and Worcester	68	4,500,000	655,428	4,865,419	1,008,004	404,461	6 1/2	88 1/2	Louisville and Frankfort	66	608,236	660,061	1,589,566	244,014	96,902	6	---
Cape Cod	47	681,690	280,598	997,252	119,221	65,527	3	---	Atlantic & Gt. Western	264	866,989	77,294	613,231	In progr.	---	---	---
Connecticut River	62	1,601,110	273,241	1,802,244	286,663	104,787	5 1/2	45	Bellefontaine and Ind.	118	1,851,675	2,025,925	2,852,652	298,238	140,823	none	40
Eastern, Mass.	60	2,533,400	2,947,737	4,621,016	647,281	305,998	---	45	Clev., Col., and Cin.	141	647,020	122,832	4,613,732	129,295	732,066	9	102
Pittsburg	67	3,540,000	153,700	3,765,998	651,163	225,071	---	72 1/2	Cleveland and Toledo	200	2,676,426	2,689,301	6,124,629	736,272	396,986	10	73 1/2
Northern Eastern	30	800,242	253,535	968,521	108,991	56,533	6 1/2	---	Clev. and Mahoning	103	---	---	628,583	In progr.	---	---	---
N. Bedford and Taunton	21	500,000	---	533,953	108,991	56,533	---	---	Clev. and Pittsburg	133	2,780,744	3,043,992	5,537,466	681,877	309,518	---	61 1/2
Old Coffey and Fall River	57	3,015,100	292,650	3,362,499	653,499	295,738	8	88	Cin., Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	433,620	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	294,736	87,318	---	7 1/2	Cin., Wilm. & Zanesville	131	1,120,450	1,181,265	2,326,459	In progr.	---	---	---
Western, Mass.	155	5,150,000	968,420	10,495,905	1,859,673	638,013	7	91	Columbus and Xenia	66	1,454,550	149,000	1,451,733	356,806	187,518	10	85
Worcester and Nashua	46	1,141,000	205,565	1,512,771	294,780	76,780	2	43	Dayton, Xen. & Beirpre	63	437,538	422,658	860,496	In progr.	---	---	---
Providence and Worcester	43	1,510,020	335,461	1,806,696	311,430	138,067	---	73	Dayton and Michigan	140	1,076,032	303,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven	72	2,350,000	939,000	3,313,932	730,012	352,799	10	20	Dayton and Western	35	310,000	500,000	733,769	In progr.	---	---	---
Hartford, Prov. and Fishkill	125	1,845,610	2,090,124	4,060,969	268,685	119,671	---	---	Easton and Hamilton	42	454,000	904,489	1,155,135	171,929	65,000	---	24
Housatonic	110	2,000,000	474,177	2,424,066	380,792	18,861	---	---	Little Miami	65	2,963,921	1,171,785	3,648,172	681,562	336,708	---	90 1/2
Naugatuck	57	1,031,800	573,995	1,577,167	238,266	---	---	---	Mad River and L. Erie	205	2,451,660	2,572,982	4,446,661	In progr.	---	---	---
N. York and N. Haven	62	2,992,450	2,264,556	4,906,784	936,025	341,667	---	---	Central Ohio	138	1,620,927	3,495,076	4,283,443	Recently opened.	---	---	10
N. Haven and N. London	50	738,258	735,165	1,450,318	88,007	30,318	---	---	Ohio and Penn.	187	2,451,700	2,810,000	5,670,700	111,626	662,117	9	---
N. London, W. & Palmer	66	509,200	1,073,673	1,594,953	124,044	68,331	---	---	Pittsburg, Mayv. & Cin.	60	371,350	31,000	900,933	In progr.	---	---	---
Norwich and Worcester	62	1,222,300	783,489	2,507,113	304,236	88,458	2 1/2	83	Sand'y, Mansf. & Newk.	127	1,860,000	2,206,387	3,562,387	328,958	164,479	---	---
Albany Northern	32	439,065	1,625,099	1,840,665	117,716	9,904	---	---	Scioto & Hocking Valley	135	408,976	509,060	888,868	In progr.	---	---	---
Black River and Utica	35	643,330	317,850	974,323	In progr.	---	---	---	Spring, Mt. Vernon & P.	113	1,000,000	960,000	---	In progr.	---	---	10
Buffalo, Conn. and N. Y.	100	1,487,371	1,011,183	2,819,096	172,476	66,333	---	---	Tol. Wabash & St. Louis	242	2,500,000	4,530,000	---	In progr.	---	---	---
Buffalo and N. Y. City	92	798,439	2,557,849	3,401,868	288,892	31,896	---	---	Cin., Leg. and Chicago	255	4,196,679	1,006,125	2,080,433	In progr.	---	---	6
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	385,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,956	1,844,541	127,400	64,562	---	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	59,508	---	---	Ind. and Cincinnati	182	1,213,723	1,442,859	2,178,461	366,012	193,142	7	58
Canandaigua & Niagara Falls	98	1,315,000	2,279,854	3,495,832	---	---	---	---	Indiana Central	66	611,400	1,261,179	1,907,911	350,176	134,375	---	48
Cayuga & Susquehanna	35	687,000	506,689	1,187,562	135,433	48,649	---	---	Ind., Clev. & Pittsburg	88	834,137	1,011,971	1,671,544	In progr.	---	---	22
Hudson River	144	3,758,468	9,250,362	12,787,896	1,812,087	603,946	---	33 1/2	Jeffersonville	60	1,014,252	694,000	---	206,544	94,318	---	---
Long Island	95	1,875,148	686,949	2,555,086	301,793	116,462	---	---	Madison and Indianapolis	37	1,647,700	1,386,816	1,205,000	286,146	112,880	---	---
New York Central	634	24,154,860	14,662,742	25,523,913	6,563,581	3,162,126	8	90	New Albany and Salem	288	2,535,121	5,281,548	6,643,189	646,827	371,402	none	12 1/2
New York and Erie	464	10,023,958	25,126,669	33,439,481	5,458,993	2,627,118	---	56 1/2	Peru and Indianapolis	73	---	868,314	---	150,000	90,000	none	11
New York and Harlem	138	5,117,100	4,069,769	8,768,203	1,035,577	234,126	---	16 1/2	Terre Haute and Ind.	73	974,800	604,356	1,502,166	287,512	189,702	10	---
Northern, N. Y.	113	6,333,022	4,603,874	5,470,714	590,153	138,754	---	---	Chicago and Rock Is'd	182	3,141,500	2,387,155	6,214,162	In progr.	---	---	89 1/2
Oswego and Syracuse	35	309,000	216,681	723,683	126,540	59,982	8 1/2	---	Chicago and St. Louis	220	---	---	---	1,077,312	---	---	---
Potomac and Watertown	29	467,200	294,189	749,683	In progr.	---	---	---	Chicago, Burl. and Quincy	138	1,475,300	1,811,557	2,761,429	722,580	379,821	20	---
Rensselaer & Saratoga	25	610,000	140,000	895,423	241,149	82,600	7	---	Chic., St. Paul & F'd du Lac	178	2,800,000	1,825,000	3,625,000	In progr.	---	---	---
Saratoga and Whitehall	48	500,000	395,600	---	71,909	21,089	---	---	Galena and Chicago	296	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	110
Syracuse & Binghamton	80	768,369	1,678,804	2,272,777	159,484	22,503	---	---	Illinois Central	627	2,271,050	10,416,392	20,374,446	1,532,116	527,952	---	99
Troy and Boston	27	437,830	737,079	1,109,222	156,363	55,184	---	---	Peoria and Ogawqua	93	669,889	818,454	1,388,342	In progr.	---	---	---
Watertown and Rome	97	1,370,378	700,979	2,068,083	404,374	172,474	3 1/2	---	Ohio & Miss. (Wat. Div.)	147	1,780,296	2,292,403	4,870,586	Recently opened.	---	---	---
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,356	75,634	---	---	Terre Haute and Alton	178	2,281,420	1,256,000	3,537,424	In progr.	---	---	---
Camden and Amboy	94	3,000,000	11,407,200	6,886,523	2,017,127	961,941	12	---	Detroit and Milwaukee	185	838,000	1,123,964	1,966,969	In progr.	---	---	---
Camden and Atlantic	60	369,320	1,252,131	1,729,642	122,417	50,080	---	---	Mich. Central	282	6,021,916	4,162,023	10,300,147	2,215,283	879,656	---	94 1/2
New Jersey	80	8,482,850	690,000	4,310,011	861,514	500,747	10	120	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	94
New Jersey Central	63	2,000,000	2,268,176	3,893,728	171,003	---	---	---	Green Bay, Mil. & Ch.	156	764,076	442,726	1,193,766	In progr.	---	---	---
Morris and Essex	53	1,167,956	375,000	1,636,550	225,893	102,474	6	---	Milwaukee and Miss.	106	1,825,428	2,467,889	3,578,757	691,845	417,443	17	84
Allegheny Valley	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee & Water'n	72	354,861	132,000	514,238	In progr.	---	---	---
Cataw. W. & Erie	66	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Milwaukee and Horicon	16	564,200	---	854,109	In progr.	---	---	---
Cumberland Valley	56	1,099,500	12,211	1,101,833	146,881	66,994	---	---	Milwaukee & La Crosse	61	1,351,832	532,131	1,883,963	In progr.	---	---	---
Del. Lack. & Western	100																

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible.	7	April, October.	"	1866	96	98
Bellefontaine and Indiana	600,000	Do. convertible.	7	Jan'y, July	"	1866	90	
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859		
Central Ohio	1,250,000	1st mort. conv. est. sec.	7	Divers	"	1861-64	77	79
Do.	800,000	2d do. inconvertible.	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible.	7	20 Jan. 20 July	"	1867	91	
Do. do.	485,000	2d do. do.	7	May, Novemb.	"	1880	86	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882.	7	Jan'y, July	"	1868	62 1/2	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.	"	1862	95	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.	"	1861	93	
Cleveland and Pittsburgh	800,000	Do. convertible.	7	Feb'y, August.	"	1860	80	
Do. do.	1,200,000	Do. on Branches.	7	March, Sept.	"	1873	70	80
Cleveland and Toledo	525,000	Do. inconvertible.	7	Feb'y, August.	"	1863	80	
Chicago and Mississippi	800,000	Do. conv. till 1867.	7	April, October.	"	1862-72	60	80
Do. do.	1,200,000	Do. inconvertible.	7	April, October.	"	1862-72	72	75
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	66	
Do. do.	1,000,000	2d mortgage, convertible.	7	March, Sept.	"	1883	100	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	80	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	95	97 1/2
Gaiana and Chicago	2,000,000	Do. inconvertible.	7	Feb'y, August.	"	1863	89	90 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	91	
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	94	96
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	10 April, 10 Oct.	"	1863	75	
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1873	80	
Indiana Central	600,000	Do. convertible.	7	May, Novemb.	"	1868	81	82 1/2
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	85	
Indiana & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857.	7	March, Sept.	"	1866	82 1/2	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	73	75
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859.	7	Feb'y, August.	"	1865	80	82 1/2
Little Miami	1,500,000	Do. inconv.	6 1/2	May, 2 Nov.	"	1853	80	82 1/2
Michigan Central	1,000,000	No mortgage, convertible.	8	April, October.	East.	1860	98 1/2	100 1/2
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101 1/2
Milwaukee and Mississippi	800,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	
Do. do.	850,000	Do. 2d do. 1858	8	April, October.	"	1863	89	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	89	90
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible.	8	Jan'y, July	"	1873	84	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	96	97
Do. do.	2,000,000	Income, convertible.	7	April, October.	"	1872	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860.	6	Jan'y, July	Phila.	1860	96 1/2	97 1/2
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August.	N.Y.	1875	96	
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Staubenville and Indiana	1,500,000	Do. convertible.	7	Jan'y, July	"	1865	98	100
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	77	78 1/2
Terre Haute and Alten	1,000,000	Do. do.	7	Feb'y, August.	"	1867-77	77	78 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	75	76

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84	
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	87	
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94 1/2	95 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104 1/2	106
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	96 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	91	93
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	90 1/2	90 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	83 1/2	83 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	92 1/2	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	89 1/2	90
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67	68
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1875	86	86 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	91 1/2	92 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	82	
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	81 1/2	82 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1856-60	82	83
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	92	
Do. Gosben Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	83 1/2	84
New York Central	8,237,000	No mortgage, do.	6	May, Novemb.	"	1863	86	86 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	105	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	105	
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	92 1/2	93 1/2
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	93 1/2
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October.	"	1870	82 1/2	83

CITY SECURITIES.	Int'l payable.	Off'd	Ask'd	CITY SECURITIES.	Int'l payable.	Off'd	Ask'd
New York, 7 per ct. 1857	{ Feb'y, May, August, and November,	100	101	Milwaukee, 7 per ct. coup. X	Divers	87	80
Do. 5 do. 1858-60		94	95	Do. X	Do.	75	80
Do. 5 do. 1870-75		91	95	New Orleans, 6 per ct. cp. municip. X	Jan'y, July	80	83
Do. 5 do. 1880		94	95	Philadelphia, 6 per ct. 1876-98	Jan'y, July	91 1/2	91 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	97 1/2		Pittsburgh, 6 per ct. coup. X	Divers	74	75
Allegany, 6 per ct. coup.	Jan'y, July	74	78	Quincy, 8 per ct. coup. 1868 X	Jan'y, July		
Baltimore, 6 per ct. 1870-90	Quarterly,	97	99	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.	85	
Boston, 5 per ct. coup.	April	97	98	Rochester, 6 per cent. coup. X	Divers	95	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	78	79
Cler'f'd, 7 per ct. cp. W. W. 1879 X	Do. do.	101 1/2		Do. do. Municipal. X	Do.	79 1/2	80 1/2
Cincinnati, 6 per ct. coup.	Divers	89	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	79	80
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	90 1/2	S. F. & C. 7 p. cp. 1865, pay. N. Y. X	May, Novemb.	80	
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871 X	Do.	98	
Detroit, 7 per ct. cp. W. W. 1873-78 X	Feb'y, August.	101	102 1/2	Do. 10 do. pay. N. Y. X	Jan'y, July	104	
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N. Y. 1875 X	Do. do.	58	60
Jersey City, 6 p. ct. cp. W. W. 1877 X	Jan'y, July	94	96	Wheeling, 6 per ct. coup. X	Divers	67 1/2	
Louisville, 6 per ct. cp. 1880-83 X	Divers	70 1/2		Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	80	81
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70		Zanesville, 7 do. 1874 X	April, October	97 1/2	

Cincinnati Stock Sales,
BY HEWSON & HOLMES.

For the week ending May 14th, 1856.

BONDS.

\$1,000 Gov. and Lex., 10 per ct. Income	55	(& int.)
18,000 Cov. and Lex., 7 per ct. 2nd Mortgage	65	
1,000 Indiana Central, 10 per ct. Income	95	
2,000 Little Miami, 6 per ct. 1st Mortg.	81 1/2	
1,300 Ind. & Cin. 7 per cent. Dividend	70	
6,000 Hillsboro' and Cin., 7 per cent. 1st Mortg.	48	
2,500 Cin. Wilm. & Zanesv., 7 per ct. Income	35	
5,000 Ohio & Miss. 7 per ct. 2nd Mort.	45	
1,100 Columbus & Xenia, 7 per ct. Dividend	90	
500 Cincinnati Western, Taylor & McLean, Real Estate, 8%	40	
625 Cincinnati Western, Coupons	28	
425 Little Miami, Divid. old issue	92	

STOCKS.

60 Shares Ohio & Mississippi	7 1/2	
200 " "	7 1/2	
580 " "	8	
60 " Indianapolis and Cincinnati	67 1/2	
30 " New York Central	91	
11 " Covington and Lexington	15	
140 " Eaton & Hamilton	20	
50 " Bellefontaine & Indiana	40	
22 " Columbus and Xenia	86	
10 " Cin. Ham. and Dayton	63	
100 " Cin. & Chicago	5 1/2	
200 " "	6	
50 " Peru and Indianapolis	14	
80 " Junction (Ind.)	8	
20 " Cin. Harrison and Indianapolis	8	

BY KIRK & CHEEVER.

For the week ending May 13th, 1856.

BONDS.

Little Miami, 6 per ct. Mort.	82	Per ct.
Covington & Lexington, 2nd Mort. 7 per ct.	65	
Ohio & Mississippi, 2nd Mort. 7 per ct.	45	
Indianap. & Cin. 2nd Mort. 7 per ct.	80	
Hillsboro' and Cin., 7 per ct. 1st Mort.	50	
Cin. Ham. and Dayton, 2nd Mort. 7 per ct.	85	
Cin. Wilm. & Zanes. 2d Mort. 7 per ct.	55	
Covington & Lexington, 10 per ct. Income	58	
Indianapolis and Cincinnati Dividend	70	

STOCKS.

Cin. Wilm. and Zanesv., 15—Cin. Ham. and Dayton, 65—	
Col. & Xenia, 85—Cincinnati & Chic., 5 1/2—Central Ohio, 10.	
Covington and Lexington, 14—Dayton and Western, 17—	
Eaton and Hamilton, 24—Fort Wayne and Southern, none.	
Indiana Central, 4 1/2—Indianapolis and Cincinnati, 53—Little	
Miami, 93—Mad River & Lake Erie, 16—Marietta & Cin.,	
14—Ohio and Mississippi, 8—Hillsboro' and Cincinnati, 14.	
Peru and Indianapolis, 17—Bellefontaine and Indiana, 40—	
Cincinnati, Harrison and Indianapolis, 10.	

Extract from De Coppet & Co.'s Money
Circular for the European Steamer of the
21st Inst.

[TRANSLATED.]

NEW YORK, Monday, May 19th, 1856.

Nothing of interest has occurred in our Stock market during the past week up to this day. Money has been in less active demand without imparting any improvement in Stocks. The same inaction in securities for permanent investment noticed in our last advices exists yet, and the disposition to operate in speculative stocks has decreased. To-day, reports from Washington lead to the fear that the English Ambassador may soon be tendered his passports. These rumors, in the already unsettled state of our market, have affected it very markedly. Money is a little less inquired for—7 per cent. for loans on call, 8 and 10 per cent. for business paper, according to length. Exchanges on Europe in less demand, without material changes in rates. London, 109 1/2 to 109 1/2; Paris, 5.16 1/2 to 5.17 1/2.

DE COPPET & CO.

Marie & Kutz' Money Circular for the
European Steamer of the 21st Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, May 19th, 1856.

The same features as noticed in our last circular of 13th inst.—very limited transactions and lower prices—have characterized the week's business. The heavy export of specie by the Persia, though without immediate effect upon prices generally, still prevented any active speculation, and a general feeling of uneasiness in regard to our relations with Great Britain also kept buyers out of the market, which leaves off with a decided downward tendency. The fluctuations have been trifling up to Saturday, excepting Panama, which declined 5 per cent., under the apprehension that the recent accident on the road might result in some considerable losses to the company. To-day the decline was general, on the rumors of the dismissal of the British Minister at Washington.

Money has been less active than during the previous week, and the supply in all cases is equal to the demand. The foreign orders for our stocks remain very limited, and probably will not increase so long as the rates of interest in England and on the Continent remain as high as at present. Exchanges firm; limited transactions on London, 109 $\frac{3}{4}$ @109 $\frac{3}{8}$; Paris, 5.17 $\frac{1}{2}$ @5.16 $\frac{1}{4}$.

MARIE & KANZ.

Extract from the Circular of Robt. Benson & Co., per Asia.

LONDON, May 24, 1856.

We have had a tight money market during the week, and 6 per cent. has been readily paid for Loans on Government Securities at short dates.—The weekly returns of the Bank of England are still unfavorable, and its stock of bullion continues to decrease in the face of favorable Exchanges, and continued arrivals of gold from abroad.

There has been a considerable decline in Consols, arising from rumors in regard to a new Loan and the possibility of ministerial changes. We quoted Consols in our last circular at 93 $\frac{1}{8}$ for money, and 93 $\frac{1}{8}$ @ $\frac{1}{4}$ for the account. During the week they have been done as low as 91 $\frac{1}{2}$ @92 for money. To-day we quote them at 92 $\frac{1}{4}$ @ $\frac{3}{8}$ for money, and 92 $\frac{1}{4}$ for the June account.

The market for American Securities has been very flat. We have not heard of any transactions in State Stocks during the week, and business in Railroad Bonds has been limited. Erie 3d mortgage bonds have changed hands at 84 $\frac{1}{2}$. Sinking Fund bonds at 81 $\frac{1}{2}$; and the bonds of 1862 at 80. Pennsylvania 2d mortgage bonds have been sold at 90 $\frac{1}{4}$. Illinois Central Construction Bonds at 79 $\frac{3}{4}$. Freehold bonds at 85. The share are 3 $\frac{1}{2}$ discount.

Our Corn markets have manifested no new feature of much interest,—prices, after some slight fluctuations are firm.

The Iron market continues very firm, and the prices of rails are from 5 to 10 per cent. per ton dearer.

ROBT. BENSON.

American Railroad Journal.

Saturday, May 24, 1856.

The Recent Grants of Lands by the General Government, and Their Influence upon Prices of Lands in Other States.

The General Government have recently made grants of lands to the State of Iowa in aid of railroads which will immediately take a large portion of the unlocated lands of that State out of the market. The above bill is only a prelude to others, that are to follow for roads in nearly all the new States. The effect of such grants will be to withdraw such an amount of land from market that it will be doubtful whether a sufficient quantity will remain to meet the call for land warrants already issued.

An important consequence of such grants will be to put up the value of lands throughout the States, such as Indiana, Illinois, Wisconsin, Iowa, and Minnesota, as to these States has tended the vast tide of emigration which has been setting into the interior, both from the Eastern States and the Old Countries. For want of Government lands, the settler will have to fall back upon such as are held by individuals and corporations, the prices of which will advance in proportion to the demand. The effect of the new grants will be most favorable upon the value of the lands of the Illinois Central Railroad, which will be very largely appreciated, probably from one to three dollars per acre. Cut off for a time from the other States, the emigrant will have to turn his steps to Illinois.

He will have a large compensation for the higher price he will be compelled to pay, in being able to locate himself near near lines of railroads, and in a country already so well filled as to afford easy means for meet'g his social and physical wants. His lands, if they cost him more than in States more remote, will be worth more being nearer the Eastern markets, and located amid a dense population.

The passage of the above bill and similar ones to follow, may be regarded as the most fortunate event that has happened to the Central Company since its formation; and cannot fail to materially strengthen its position, in rendering certain a rapid sale of its lands at good prices. In fact, every day furnishes fresh indications that the lauds of the Company will realize the anticipations of the most sanguine in reference to their value.

The Locomotive.

No. 2.

By THEODORE KRAUSCH, Civil and Mechanical Engineer.

The extraordinary speed of the motions of the machine parts of the locomotive, shows again a difference from the stationary engine. At the time the first public railroad was built, the speed was not expected to be higher than 10 miles per hour; but the first experiment proved that a higher rate was not impossible. Since that time the speed has been increased from four to six times; the present common passenger trains averaging 40 miles per hour. Let us observe the speed of the driving wheels: If the diameter of a driving wheel is 5 ft., or 15.70 feet circumference, we receive 336 revolutions of drivers per mile. The most usual speed is 2, sometimes 2 $\frac{1}{2}$ revolutions per second, very rarely 3 revolutions. A speed of from 60 to 80 miles per hour, which has been tried, supposes abnormal proportions. Drivers of 7 feet diameter must revolve 4 times per second, running 60 miles per hour, or 88 feet per second; 8 feet drivers, 3 $\frac{1}{2}$ times.

To remove this evil there are two ways, namely: using larger drivers, from this we receive a greater speed without a multiplication of strokes; or by means of gearing to obtain more than one revolution of drivers per each double stroke. Both ways have been practically tried, principally on the Great Western Railway. Mr. Brunel, the builder of this road, designed locomotives, using 8 and 10 feet drivers: an engine with 10 feet drivers will run 2 miles by 336 revolutions, just one mile farther than an engine with 5 ft. drivers. But drivers of such a size are not advisable, even on a road like the Great Western, which has a seven feet gauge; and economical reasons are, under certain circumstances, against the construction of wide gauge roads. In using gearing, to increase the number of revolutions, we meet with great mechanical difficulties.

Simple as it seems to put a tooth-wheel in motion by the piston rod, and by that another one, fastened to the driving shaft, still it is very difficult to design a durable engine with such an arrangement; the strength which these wheels must possess, and the speed with which they revolve, are the obstacles.

Engineer Hawthorn built an engine of this peculiar system. The boiler was put on a separate car; on the first car were attached only the cylinders and the tooth-wheels, the second car carried

the boiler, and a third the fuel and water. The drivers were 5 ft. in diameter, revolving 3 times per each double stroke, the tooth-wheel fastened on the driving-shaft being three times smaller than that communicating the motion from the piston rod.

To diminish the concussion and rattling, and to facilitate the reverse operation of the engine, an especial arrangement was made consisting of a very broad and double finished teething.

Each one of the cars was furnished with four wheels. The boiler and chimney were placed on the second car, as we mentioned; moveable connecting pieces applied to the steam and exhaust pipes arise from this. Placing the cylinders and all the working parts separate and free, has the advantage to counteract every occurring concussion. The valve motion applied was altogether different from that in common use: operating without eccentrics.

No important improvements have been made in the construction of the apparatus for the production of steam; the type is still the same, namely: to obtain the largest possible heating surface by a great number of small tubes, which are in connection with the fire-box. The fire-box and tubes are surrounded with water; the steam, exhausting into the chimney, producing a draft. Stephenson is said to be the inventor of this combination.

A highly important peculiarity of the locomotive boiler, is its power of evaporation. Boilers of the most common dimensions evaporate from 60 to 80 lbs. of water per minute; the newest from 100 to 140. Such a degree of evaporation is only possible with an apparatus for producing steam, as mentioned above. The evaporation depends on the arrangement made to supply the amount to be consumed, which will vary according to the intended speed of the engine.

Here we give the necessary dimensions of a new freight engine, to show the extent of the heating surface, and the quantity of steam consumed. Drivers, 5 feet diameter = 15.7 feet circumference. Cylinders, 15 in. diameter. Stroke, 12 in. Speed, 2 $\frac{1}{2}$ revolutions of drivers per second. Each revolution requires four cylinders full of steam. 2 $\frac{1}{2}$ revolutions, thus: $4 \times 2\frac{1}{2} = 10$. The quantity of steam for one cylinder is = radius² of the cylinder \times its periphery (circumference) \times double stroke = 226.99 sq. inches \times 24 = 3.15 cubic ft.; consequently 10 cylinders contain 31.5 cub. ft.; this quantity is consumed per second. Now, 5 feet drivers revolve 336 times per mile, and 336×12.6 12.6 cub. ft. = 4233.6 cub. ft. shows the amount of steam consumed per mile. Consumption per minute, 1890 cub. ft. The consumption of fuel, to produce this enormous quantity of steam, is great; the fire surface increases in this engine to 1115 sq. feet. This engine contains 180 tubes (11 feet long, 2 in. outside diameter); a fire-box of 4 ft. in length, 4 ft. depth and 4 ft. width.

The heating surface of 180 tubes is $132 \times 2 \times 3.1416 = 5.75$ sq. ft., for 180 = 1035 sq. ft. The fire-box contains 80 sq. ft. The dimensions of the fire-box depend upon the size of grates; here it is 4 ft. \times 4 ft. = 16 sq. ft. area.

The area of the grate and the area of fire-box stand, generally, in a proportion as 1:4 $\frac{1}{2}$, and area of fire-box to the area of tubes as 1:15.

It is to be remembered, that the water immediately surrounding the fire-box receives a much

higher degree of heat, than that within the boiler at a more remote distance. The diminution in temperature, of the heat passing through the tubes takes place very quickly, and the more quickly, the longer and smaller they are. From this we learn to make the fire-box as large as possible, and reduce the fire-surface of the tubes in proportion to the extent of the fire-box. Experiments have given this result: 3 sq. ft. in tubes, have an effect = to 1 sq. ft. of fire-box heating surface.

This proportion is used in calculating the effective heating surface.

Michigan Central Railroad.

We omitted publishing a notice of this company's last semi-annual report. The receipts for the six months ending 30th November, 1855, were \$1,488,073 31, or including balance on hand from previous six months, \$1,719,810 86. From this were paid operating expenses \$627,334 73, interest account, \$209,787 46, and June dividend (4 per cent.) \$240,960 00, leaving a balance of \$641,728 67. Out of this sum a dividend of six per cent., amounting to \$361,946 64, was declared, leaving a balance to credit of account of \$279,782 03. The most important transaction at the meeting was the resignation of Mr. Forbes as President of the company; and the election of Mr. J. W. Brooks as his successor. The report contains a pretty full history of the company's operations, earnings, &c., showing the propriety of their course in extending their line to Chicago. The increase of gross receipts last year over 1854 was 40 per cent. It is estimated that the outside amount of business which can be done with a single track is, at present rates, \$3,000,000 per annum. This limit the company are now rapidly approaching; and, consequently the necessity for a second track is beginning to be seriously felt. In order to provide the means for putting down this a fund should be provided as early as possible.

The retiring President suggests the appointment of an Auditor to assist in supervising all issues of stocks, bonds, &c.

GENERAL ACCOUNT.

Capital stock.....	\$6,032,444 00
Bond account, viz:	
6 per cent. Sterling Bonds, not convertible.....	463,613 83
8 per cent. Bonds, not convertible.....	1,205,950 00
8 per cent. Sierl'g Bonds, convertible.....	500,000 00
8 per cent. Bonds, convertible.....	3,295,500 00
	5,465,063 38
Dividend unpaid.....	2,044 00
Bills payable and receivable, balance of this account.....	530,950 11
Income account, balance of this account.....	641,728 67
	\$12,672,230 11
Construction account, purchase of road.....	\$2,000,000 00
Construction account, expenditures since purchase.....	8,668,155 07
Assets of B. N. Rice, Superintendent.....	129,268 59
Assets in hands of U. T. Howe, Local Treasurer.....	93,250 73
Assets in hands of C. B. Swain, steamboat agent.....	25,409 51
New Albany and Salem R. R. Co.....	609,763 99
Illinois Central Railroad Bonds.....	800,000 00
Cash on hand.....	35,471 11
	\$12,672,230 11

Railroads in Tennessee.

[A well informed correspondent of the *Journal*, and a resident of Tennessee, gives the following particulars of the works completed and in progress in that State.]

ED. AM. R. R. JOURNAL:

The Legislative documents have not yet been got up. So soon as they are, I will endeavor to get a copy of our acts, which will embrace these reports, and forward it to you. Below, I annex a list of the roads finished, and those that I think will be built, classed as they are placed—

	Miles in progress.	Miles finished.
Nashville and Chattanooga.....		151
Branch to Shelbyville.....		8
Memphis and Ch'lest'n (in Tenn.).....		75
East Tenn. and Georgia.....		110
Tenn. and Alabama (Nashville to New Orleans).....	100	30
Decatur Branch.....	50	
Nashville and Louisville.....	50	
Nashville and Henderson.....	47	
Nashville and Cincinnati.....	85	
Nashville and North-western.....	175	
Winchester and Alabama.....	27	
Fayetteville Branch.....	17	
McMinnville and Winchester.....		34½
Extension to Carthage.....	30	
E. Tenn. and Virginia.....	95	40
Chattanooga and Cleveland.....	30	
Tusculum and Charleston.....	30	
Rayburn Gap.....	45	
Memphis and Ohio.....	85	40
Tenn. and Miss. Central (Jackson to Holly Springs, Miss.).....	20	30
Branch Memphis and Charleston.....		17
Memphis and Panola.....		12
Mobile and Ohio (all graded).....	120	
Louisville and Memphis (to connect with the Nashville and N. Western, and Memphis and Ohio, near Paris, W. T., from Clarksville, Tenn.).....	80	
Branch E. Tenn. and Virginia.....	20	
Secanee Mining Co.....	10	10
Totals.....	1116	557½

The above are only the roads and parts of roads in Tennessee, which in all cases when passing out of the State, have important connections.

Those not finished, but certain to be built, are—

	Miles.
East Tennessee and Virginia.....	95
Chattanooga and Cleveland.....	30
Tennessee Central and Charleston [the extension of the above to Rayburn Gap].....	30
Winchester and Alabama.....	27
Secanee Mining Co.....	10
Lincoln Branch [to Fayetteville].....	20
Tennessee and Alabama.....	100
Giles County Branch.....	50
Nashville and Louisville.....	50
Nashville and Henderson.....	50
Nashville and North Western.....	175
Tennessee and Mississippi Central.....	30
Mobile and Ohio.....	120
Total.....	787

These will all be built probably within the next two years, and certainly very soon after; as they are amply provided with means, except the Nashville and North Western, which is not fully provided for, and will therefore move on more slowly. This company will probably have 30 miles done this year at the Mississippi river end, and as much at the Nashville end next year. The balance will, I think, certainly be completed within five years, by which time I have no doubt many

others not now so promising will have been built, bringing the aggregate length of our railroads, in 1862, fully up to 2,000 miles.

Our system is a good one in all respects.

Attention is asked to the advertisement of two Locomotive Engines, for sale by BRIDGES & BRO. The dimensions of these machines, and the well known reputation of their builders, will doubtless make them an object to parties in need of such engines.

By reference to their advertisement, it will be seen that the Erie company have recently made some alterations in their time-table.

Western Air Line Railroad.

It appears, from a statement recently put forth by the Secretary of this company, that they have at present \$610,000 subscribed to the capital stock. Of this amount, \$250,000 are raised by county vote, as authorized by statute. The city of Lacon has subscribed \$50,000. The individual subscriptions are expected to be increased somewhat; and a further amount will be taken by contractors. The road will be 186 miles long, crossing the State of Illinois from east to west, thro' the counties of Vermilion, Livingston, La Salle, Marshall, Stark, Henry, and Mercer—all among the best and most productive in the State. Already, 106 miles are under contract, and the work of construction is steadily progressing. Of that part between Lacon and the Illinois Central line, two-thirds the grading are completed, and the whole is expected to be ready for the iron in July or August. Other sections are in various stages of advancement. Total expenditure to date, about \$130,000. The prices to be paid for contractors' work are reasonable. Connections will be established at various points with the Mississippi river, the Peoria and Rock Island, Central Military Tract, Bureau Valley, Illinois Central, Chicago and St. Louis, and the Chicago Branch railroads. To the eastward, this great "air line" will be extended to Fort Wayne, furnishing to the section of country it traverses much the shortest route to the Eastern States. We learn that a fuller statement of the character and progress of this enterprise will be published sometime in June.

Baltimore and Ohio Railroad.

The revenue of this road for the month of April was—

	Main Stem.	Wash'n Branch.	Total.
For Pass'gers.....	\$60,025	\$29,224	\$89,249
For Freight.....	452,215	10,346	462,561
	\$512,240	\$39,570	\$551,811

The business on the Main Stem shows an increase of \$175,973, and on the Washington Branch \$7,229, over April, 1855. For the first seven months of the present fiscal year, the receipts have been \$2,625,327, against \$2,325,471 for the corresponding period last year, showing a gain of \$299,855. Last month's revenue is the largest ever earned by the road. Among the articles transported we notice 35,194 tons of coal, 166,661 bbls. of flour, 10,138 hogs, 5,029 sheep, 4,014 horned cattle, 6,674 tons of pork and bacon, and 15,492 bbls. of whiskey. The sum of \$10,000 was set apart by the Board, at its monthly meeting, for making repairs to the track in the city of Baltimore. It was also resolved to request the Mayor and City Council to rescind the preamble

nd resolutions instructing the Commissioners of Finance not to issue the \$555,000 City Stock, appropriated to the North-western Virginia Railroad Company, and re-affirming the determination of the company to complete the construction of the second track as expeditiously as possible.

The following is a copy of the Company's Balance Sheet, on the 1st of May, 1856, published by order of the Board:

LIABILITIES.	
Stock held by individuals.....	\$5,420,100
Do. City of Baltimore.....	3,500,000
Do. State of Maryland.....	685,500
Do. Wheeling.....	500,000
	\$10,105,600
Scrip—not funded.....	18,302
Preferred stock.....	3,000,000
Loan at 6 per cent.....	\$167,217
" No. 2 at six per cent.....	1,000,000
" " 3 " " ".....	453,333
" " 4 " " " with	
coupons.....	1,128,500
" " 5 " " ".....	700,000
" " 6 " " ".....	2,500,000
City loan, amount received	
to this date.....	3,606,000
	9,555,050
Bills payable.....	4,500
Ross Winans.....	12,800
Open accounts.....	14,614
Washington Branch road.....	70,225
Profit and loss.....	3,318,757
	\$26,094,849
ASSETS.	
Cost of road.....	\$17,647,755
Second track.....	1,009,038
Rolling power.....	3,242,649
Real estate.....	1,132,064
	\$23,031,507
Bills receivable:	
For note of North-western Virginia	
R. R. Co.....	\$210,000
For note received on account	
of damaged goods sold....	605
	210,605
Central Ohio R. R. Co.....	403,370
Wellersburg and West Newton Plank	
Road Co.....	8,050
Stock of Washington Branch.....	1,016,800
Stock of Pittsburg and Connellsville	
R. R. Co.....	35,000
Western Telegraph Co.....	5,000
Bonds of City of Baltimore.....	16,625
Sinking Fund for the redemption of	
the million loan.....	20,000
President and Treasurer of the Balti-	
more and Ohio Railroad Company,	
Trustees for the redemption of	
ground rents at Camden station....	19,747
Five million loan sinking fund.....	360,600
Outstanding dues.....	12,601
Uncollected revenue.....	283,443
Machinery department—materials on	
hand.....	104,464
Road department—materials on hand.	
	135,243
Cash in the hands of officers.....	50,115
Cash in bank.....	351,678
	\$26,094,849
Profit and loss acc't as stated above....	\$3,318,756
Balance of same account on 1st Oct.,	
1855.....	2,692,491
Showing the net earnings of the Com-	
pny for the 7 months ending May	
1st, 1856, to be.....	\$626,265
Amount required for dividend payable	
May 15th, 1856.....	303,168
Leaving a balance of net profits for the	
7 months, after the payment of the	
above dividend, of.....	\$323,097

Bangor, Oldtown and Milford Railroad.

This road, nearly 13 miles long, was chartered by the Legislature of Maine, in 1833, under the title of the Bangor and Piscataquis Railroad and Canal Company. By the terms of the act the company were empowered to construct a canal or railroad from the west side of the Penobscot to any point in the counties of Penobscot and Somerset east of the Sebec and Pleasant rivers. Under this act the road was constructed to Oldtown, about 11¾ miles. An additional act, passed in 1847, extended the charter for ten years, and gave authority to continue the road to the steamboat landing in Oldtown, and across the Penobscot river to Milford; also to extend the road to tide-water in Bangor. In 1855, the company were authorized to change their corporate name to that which they now bear.

Generally speaking, the line is a very favorable one. In the original road are seven curves, the shortest having 1200 feet of radius, except at the Oldtown station, where there is one of 600 feet. About 50 per cent. of the line is level, the remainder having grades varying from 5 to 40 feet per mile. The Stillwater river is crossed by a truss bridge (Long's patent) 500 feet in length. Over the Penobscot, a bridge of Howe's patent, 1460 feet long, has been thrown. The former of these cost about \$23,000; the latter \$50,000.

The original estimate of cost was \$300,000.

The work of construction was commenced in the autumn of 1835, and the road was opened to Oldtown in November, 1836. In 1849, it was extended to the river; and in 1854-5, across the river to Milford.

The road was originally laid with a flat bar rail which was, in 1849, replaced by one of the edge pattern, weighing 36 lbs. per yard. On the Milford extension the rail is 50 lbs. per yard.

The road at its opening cost \$354,000. In 1842, when the construction account was closed, it amounted to \$378,739. Yearly mileage about 23,000 miles, since increased to 25,000, besides gravel and wood trains.

The authorized capital stock was \$300,000, increased by the act of 1847 to \$600,000—in shares of \$100 each. After the sum above named had been paid in, and the debt created to finish the road had been suffered to lie for some years, the property went into the creditors' hands in payment. In 1848, the road was sold for \$60,000 to a new company, organized under the act of 1847. These expended, in addition to the cost, \$75,000 in relaying the track and building the extension to the river. Since 1854, a floating debt of about \$50,000 has been created in consequence of building the bridge and extending the road to Milford. The net income has also been appropriated to the same objects. The only dividends paid amounted to seven per cent. in 1853.

The road is at present in good order. The motive power consists of 3 four-wheeled and 1 eight-wheeled engines. The total equipment is valued at \$22,000.

The gross receipts for the fiscal year ending 30th June, 1855, were \$47,349, and the operating expenses about \$22,484, leaving \$24,865 net profits. The gross and net receipts are the largest ever recorded. Number of passengers carried, about 6,000, of whom about 56,000 were through.

The principal part of the stock is owned by one individual who has made the recent expenditures to accommodate the mills in Oldtown, and with a view to connect with the road from Milford to Lincoln. The latter work, when built, will be 33 miles long.

The gross and net receipts since 1838, have been as follows:

Year	Gross Receipts.	Working Expenses.	Net Earnings.
1838.....	\$19,551	\$14,577	\$4,973
9.....	19,634	14,501	5,133
1840.....	16,324	13,888	2,427
1.....	11,843	9,620	3,222
2.....	18,865	13,243	5,622
3.....	16,599	13,918	2,681
4.....	19,897	14,127	5,769
5.....	18,776	12,809	6,467
6.....	23,851	14,624	9,226
7.....	24,921	17,271	7,650
8.....	33,805	19,517	14,188
9.....	30,382	23,188	7,249
1850.....	27,549	17,482	10,067
1.....	30,168	16,423	13,745
2.....	31,702	18,011	13,690
3.....	42,373	18,654	23,719
4.....	44,889	22,150	22,739
5.....	47,349	22,484	24,865

Samuel Veazie is President; John W. Veazie, Vice President, Treasurer and General Manager; and Joseph Teehney, Secretary. Annual meeting held on the first Thursday in August. Fiscal year closes 30th June. Office in Bangor, Me.

Pittsburg, Fort Wayne and Chicago Railroad.

We have received a copy of the Articles of Consolidation agreed to by the three companies now owning the above work. The agreement is dated from the 8th inst. By the first article, the number of shareholders composing the Directory, is fixed at fifteen, "one of whom shall reside in the city of New York, four in the State of Pennsylvania, four in the State of Ohio, four in the State of Indiana, and two in the city of Chicago, in the State of Illinois." Article second provides that an election for Directors shall be held in Pittsburg, on the 30th of July ensuing. Articles third and fourth provide for the appointment of other officers, and the exchange of stock. By the fifth article, the capital stock of the new corporation is fixed at \$16,000,000, to be divided into 320,000 shares of \$50 each. The Directors are empowered to increase the stock when necessary. The sixth article regulates the relative values of shares in the different companies—the Ohio and Indiana rating at 100; the Ft. Wayne and Chicago at 106; and the Ohio and Pennsylvania at 120. Article seventh provides that all stock and bonds of either of the companies, now or in future to be owned by either shall be surrendered and merged in the consolidated company, thereby lessening its capital and liabilities to that extent. The eighth article provides for the conversion of bonds already issued into stock of the consolidated company. By the ninth, parties who have subscribed but not paid in to the stock of either of the old corporations, are entitled to receive stock in the new one. By the tenth, the stock in either of the old companies entitled to it shall be allowed to draw interest till the 1st of July next. Each company entitled to a premium on its stock, may in the meantime issue to the stockholders scrip certificates for the amount.—Scrip stock shall be issued for fractional shares.—By the twelfth article, the Directors in the new

company are empowered to pay interest on stock till the road shall be completed, or a cash dividend paid—this interest to be payable in stock.—The thirteenth and fourteenth articles provide, that all the rights, property, &c., of the old companies shall immediately be held by the new corporations; also that their debts and liabilities of every description shall be assumed. By article sixteenth, the new company are to proceed as soon as convenient to complete the road to Chicago.—The seventeenth provides that special meetings of the stockholders in each corporation shall be called for the consideration and ratification of the same—the Ohio and Pennsylvania company to meet at Pittsburg, on July 2d; the Ohio and Indiana, at Bucyrus, Ohio, on June 24th; and the Fort Wayne and Chicago, at Fort Wayne, on the 26th of June next. The remaining articles consist mainly of unimportant details.

The above statement is accompanied by an address to the stockholders, showing the condition of the several companies, and pointing out the advantages likely to result from the proposed measure. The length of the new work will be 465 miles.—(In our last issue this was inadvertently given at 462.) There are 338 miles already constructed.—The present annual receipts of the Ohio and Pennsylvania road average \$6,000 per mile, which will doubtless be increased to \$8,000, on the connection with Chicago being completed. The new company will be untrammelled with any unremunerative branches. The united line passes through a section of country containing in abundance nearly every element of wealth. In grades, alignment, and facilities for speed, it is unsurpassed. No rival route can divert its legitimate traffic. It is believed that within twelve months after completion to Plymouth, the earnings will amount to \$2,000,000 annually. To the cities of Pittsburg and Philadelphia, the consolidation will prove of the highest advantage. Already, 3,000 miles of railroad centre at Chicago, the aggregate earnings of which are \$15,000,000 per annum. The address says:—

"The leading reasons already indicated in favor of consolidation, as proposed in the accompanying articles, may be briefly summed up in the following points:

1. The early and thorough completion of the Ohio and Indiana and Fort Wayne and Chicago roads, and a consequently greatly increased business over these roads, and the Ohio and Pennsylvania road.

2. An immediate and permanently favorable effect upon the value of the stocks of the respective roads. The market value of the stock of the Ohio and Pennsylvania road, it is believed, will advance from fifteen to twenty per cent. on the consolidation being perfected, and a corresponding advantage would result to the stockholders of the two other companies.

3. A largely increased credit to the consolidated company beyond that now possessed by either of the three companies as a distinct corporation, insuring a high character and high price for all its securities required for the completion of the line, and consequent saving of expense of construction.

4. An entire unity of interest in the operation of the three roads, and more thorough system, economy, and efficiency in management in every department.

5. The ability of the consolidated company, by the length of its line, and the importance and strength of its position in the railroad system of the country, to exercise a large influence in the working of that system, by the extension of adequate accommodations to constructed and inter-

secting roads, and by removing inducements to the construction of competing and unnecessary and consequently unprofitable roads."

In our last we gave statistics of grades, curves, &c., of the several lines. The cost of these to the present date has been as follows:

Ohio and Penn'a.....	\$6,186,088
Ohio and Indiana.....	3,432,053
Ft. Wayne and Chicago.....	1,918,704

Total \$11,534,845

The estimated cost of these roads completed and equipped, will be—

Ohio and Penn'a.....	\$6,586,088
Ohio and Indiana.....	3,906,850
Ft. Wayne and Chicago.....	3,904,584

Total \$14,397,022

—or an increase of \$2,862,177. This will bring the cost per mile of the consolidated work, to \$30,220. The present liabilities of the several companies are—

	Stock.	Bonds.	Other Debts.
O. and P.....	\$2,651,030	\$4,091,000	\$398,126
O. and I.	1,504,377	1,702,000	341,050
Ft. W. and C.	1,787,484	1,186,000	812,960

Totals ..\$5,942,891 \$6,979,000 \$1,052,136

The entire liabilities of the several companies accordingly are—

Ohio and Penn'a.....	\$6,186,088
Ohio and Indiana.....	3,333,777
Ft. Wayne and Chicago.....	3,285,944

Total \$12,805,809

The rolling stock belonging to each consists of—

Ohio and Pennsylvania.

51 engines, 42 passenger cars, 11 baggage, 345 house and stock, and 263 other cars.

Ohio and Indiana.

13 engines, 12 passenger cars, 6 baggage, 142 house and stock, and 103 other cars.

Ft. Wayne and Chicago.

6 new engines and 12 platform cars.

Earnings of Roads in 1855.

Ohio and Pennsylvania.....	\$979,401
Ohio and Indiana.....	252,000

Estimated earnings per mile of consolidated road per year.....\$8,000
Or.....\$3,520,000

The Ft. Wayne and Chicago road being yet incomplete, a large portion of its assets are not converted, and will pass to the consolidated company; embracing mainly unpaid stock subscriptions, and lands in Ohio, Indiana, Illinois, and Michigan, and valuable property at Chicago, estimated to be worth about \$1,430,000; and will constitute available means for the payment of its liabilities and the progress of its work.

In considering the effect of the apparent increase of the consolidated stock by the allowance of premiums to two of the companies, it is to be borne in mind that the Ohio and Pennsylvania company holds \$100,000 of stock, and \$305,000 of bonds of the Ohio and Indiana company, and \$100,000 of stock in the Fort Wayne and Chicago company.—The Ohio and Indiana company holds \$213,650 of the stock of the Fort Wayne and Chicago company, and the later company holds \$16,750 of the stock of the former. On all these interest has accumulated, which is represented in the stock accounts or liabilities of each company. By the consolidation, all these stocks and bonds will be merged, and the stock and liabilities of the consolidated company diminished to a corresponding degree. The stock of each individual stockholder will, therefore, be enriched, rather than weakened or impoverished, by the process of consolidation.

Columbia and Octorara Railroad.

The report of the surveys and location of this road from Columbia (Pa.) to the Delaware State line, has recently been laid before the stockholders. The first division extends from Columbia to the dividing ridge at Quarryville, 23½ miles; and the second from that point to the State line, 24½ miles. That part extending from the line to New Castle, Del., will be about 12 miles, making a total length of 60 miles. This will shorten the distance between the interior and the Atlantic by over 55 miles. The maximum grades adopted are 21 feet ascending to the eastward, and 31½ to the westward. It is believed that hardly any limit to the coal business offering will be found; furnishing, as it does, a connection with tide-water, having 20 miles less of railroad and 30 of navigation than any other possible route. The undeveloped coal fields of Central Pennsylvania are awaiting the construction of such a work, in order to be brought into profitable use. The following are the estimates of cost for a single track:

First division, 23½ miles.....	\$596,608
Second division, 24½ miles.....	826,920
Delaware division, 12 miles.....	177,941

Total cost of grading 60 miles.....\$1,601,469
Superstructure 600,000

\$2,201,469

Add for second track..... 774,780

Total\$2,976,249

Railroad Earnings.

NEW YORK & ERIE R. R.

The earnings of this road for
April, 1856, were.....\$613,669.90
April, 1855..... 506,597.42

Increase (20 per cent.).....\$107,072.48

MICHIGAN SOUTHERN R. R.

The earnings of the Michigan Southern Railroad for April were:

Passengers.....	\$193,257.69
Freight.....	93,355.41
Mails, Miscellaneous and Express....	12,096.59

Total\$298,710.69
Same month 1855..... 246,127.15

Increase.....\$52,583.54

GALENA & CHICAGO R. R.

The earnings of this road for April, were
Freight.....\$89,462.51
Passengers..... 101,596.78
Mails, &c..... 2,151.13

Total\$198,310.47
April, 1855..... 174,908.07

Increase.....\$18,902.07

PHILADELPHIA & READING R. R.

The business of this road for April was—
1856. 1855.
Received from coal....\$342,987.61 \$340,128.98
Received from m'd's'c. 36,984.57 32,347.88
Received from travel &c. 30,608.72 29,999.49

Total\$410,430.90 \$402,470.35
Transportation, roadway, dumpage, renewal f'd, and all charges..... 179,286.81 171,783.18

Net profit for the month.....\$231,194.09 \$230,698.17
Net profit for previous four months..... 258,672.96 481,124.20

Total net profit for five months.....\$489,867.05 \$711,817.37

N. Y. CENTRAL R. R.

The following is the comparative statement of receipts from passengers and freight, including mails and miscellaneous, of the New York Central Railroad, for the months of March and April, 1855 and 1856:

March—Passengers....	\$220,082.01	\$202,984.35
Freight.....	818,175.14	309,115.90
Mails.....	—	6,807.50
Miscellaneous.....	—	904.11
April—Passengers....	284,135.05	270,097.49
Freight.....	349,946.19	429,806.16
3 months—Mails.....	29,187.50	—
1 month— ".....	—	6,807.50
Miscellaneous.....	—	1,252.08
Total.....	\$1,192,525.92	\$1,227,775.8
		1,192,525.92

Increase..... \$35,249.17

INDIANAPOLIS & CINCINNATI R. R.

The earnings of this road for April were—

Passengers.....	\$18,306.35
Freight.....	21,085.58
Mail and express.....	1,402.08
	\$40,795.01

GREAT WESTERN (CA.) R. R.

The business of this road (241 miles), for four weeks ending the 16th inst. was—

Local passengers.....	\$62,312.79
Foreign.....	84,696.52
Emigrants.....	11,947.35
Mails and sundries.....	8,555.46
Local freight and live stock.....	43,686.60
Foreign.....	79,775.11

Total..... \$290,953.83

The total receipts from 1st of February have been \$897,219, against \$629,008 for the same time in 1855.

Williamsport and Elmira Railroad.

From the late report, the first, we believe, made by the present company, we make the following extract. Most of the remainder is taken up with a description of the position, sources of revenue, &c., properly belonging to the road, which our limits prevent inserting at length.

The present officers of the company entered upon their duties about the first of the year, and their primary object was to ascertain the precise condition of its affairs. After a laborious and rigid examination, both of the books at Philadelphia and the accounts at Elmira, they feel bound to bear testimony to the scrupulous accuracy with which the affairs of the company have been administered by its late able Treasurer, William D. Lewis, of this city, the President of the Cattawissa company; and the fidelity with which the accounts have been kept at Elmira, by the late President, Alex. S. Diven, of that place.

It was the fortune of these gentlemen and their associates to originate and carry on this enterprise with inadequate means, at a period of great financial difficulty over the country generally. The best proof of their ability and good faith is found in the fact that the stockholders now have a finished road, free from any debt along its line, for construction or supplies, and with the universal good will of the community in its neighborhood.

Owing, however, to the causes above alluded to, and not to any want of exertion on the part of its officers, the affairs of the company became somewhat embarrassed, and it was obliged to demand an extension of two years on a portion of its debt; placing as collateral the bonds and stock of the company with the holders of its obligations.

Although the time of this extension has yet a year to expire, more than one-half the original debt so extended has been liquidated and paid off,

and the remainder will be punctually met at or before its maturity.

The Board of Managers, under its present organization, believing that the maintenance of the credit of the company was of primary importance, and that the trade of the road would warrant the future continuance of its regular interest payments, authorized the punctual liquidation of the coupons of the first and second mortgage bonds, which fell due since the first of the present year, from any funds in the hands of the Treasurer; and about forty thousand dollars have been paid on these accounts to the date of this report, besides the punctual payment of all the obligations of the company.

To develop adequately the business of the road, and to secure the benefits of the investments already made, the managers concluded to order a large amount of rolling stock and machinery, and to authorize a loan for the payment of the same, as well as for the liquidation of the past indebtedness of the company. To effect this, the sum of three hundred and fifty thousand dollars was required, and a loan to that amount directed to be raised, at an annual interest of ten per cent.—the present condition of the money market rendering it improbable that the bonds would be taken at par at a lower rate. Of this loan, two hundred and fifty thousand dollars have been subscribed, including the subscriptions of the contractors for the rolling stock. It is believed that the loan will all be taken at par, as required, there being few, if any, investments offering the same return on adequate security.

Owing to the previous embarrassments of the company, a large amount of floating debt was owing at Elmira and along the line of the road, to contractors and laborers, as well as for the supplies of the company. The workmen and employees of the road were also two or three months behind-hand in their pay. All these arrears have been promptly paid off, either in cash or on short paper, which now appears among the obligations of the company. The pay roll has been brought up in cash to the present month, and will hereafter be promptly discharged as soon as the acc'ts of the month can be made out.

In conclusion, the managers submit to the stockholders the following accounts of the business of the road to the close of the fiscal year, 3d month, (March) 31st, 1856.

The balance sheet of the construction account was presented, showing the entire cost of the road, 78 miles in length, including right of way, grad'g, masonry, iron, bridges, depots, stations, engine-houses, offices, freight-houses, water-stations, &c., with all depreciations on stock or bonds parted with or on hand, to be..... \$3,692,735

Coupon acc'ts, 1st and 2d mort. to March 31st, 1856..... \$173,945
Less balance transportation acc't.... 100,443

64,502
\$3,157,238
Elmira basin, real estate, &c..... 30,000
Williamsport " "..... 15,000

Total construction account, March 31, 1856..... \$3,202,237
Locomotive engines..... 104,981
Cars..... 100,074
Real estate..... 15,840
Machine-shop at Williamsport..... 35,000
Sundry acc'ts..... 6,300

\$3,464,454
Dr.
To capital stock..... \$1,500,000
First mort. bonds..... 1,000,000
Second " "..... 700,000
Postponed debt..... 161,580
Guaranteed bonds..... 31,500
Bills payable..... 200,304

\$3,692,364

Due assets on hand, at their realizable value, collateral 2nd mortgage bonds and stock..... \$181,560
Other stocks and bonds, at market value..... 40,875
Cash on hand..... 6,274

277,909

\$3,484,454

Estimated business for the year to third month, (March) 31st, 1856, inclusive:

Passenger receipts..... \$125,000
Freight, iron and miscellaneous..... 125,000
Coal freights, 150,000 tons, at \$1.69.... 253,000

\$503,500

Expense working..... 250,000

\$253,500

Int. 1st mort..... \$70,000
" 2d "..... 49,000
10 per cent. bonds..... 35,000

154,000

\$99,500

The above is based on a careful estimate of the facilities afforded by the rolling stock and machinery ordered and on hand, and the demand for coal and iron, as calculated by the dealers.

It is believed that the estimate will be realized, and greatly exceeded the following year.

The following are the Directors for the ensuing year:

Thomas Kimber, Jr., Saml. V. Merrick, Israel Norris, Albert S. Worrell, John Tucker, Francis N. Buck, Caleb Jones and A. S. Diven.

Ohio and Mississippi Railroad.

The officers of this company (Eastern Division) recently chosen are—

Joseph W. Alsop, President; Saml. L. M. Barlow, Vice President; Charles Gould, Treasurer and Managing Director. The other Directors are Henry Chauncey, Wm. H. Aspinwall, Saml. W. Comstock, John F. A. Sandford, Edwin Bartlett, David Leavitt, David Hoadley, N. T. Carryl, Wm. A. Booth, and L. D. Coman, of New York; Chas. Stetson, L. B. Parsons, Nahaniel Wright, Henry C. Lord, A. B. Coleman, and Saml. Trevor, of Cincinnati, and Col. A. Talcott, who is also Chief Engineer.

We learn that operations on that part of the road between Vincennes and Seymour will be immediately proceeded with. Should no interruption take place, it is expected that the whole line may be completed by the close of the present year.

La Crosse and Milwaukee Railroad.

The present business of this road is all that has been promised by its projectors and friends. The road was opened from Horican to the Oak Grove Station, 57 miles from Milwaukee, on the 18th day of March; and on the 24th day of April its line was extended and put in operation to the city of Beaver Dam, 61 miles from Milwaukee; and we may look for a large increase of earnings for the present month over the amount earned any previous month. We understand that a contract similar to the one granted to the Milwaukee and Horican railroad company has been entered into between the La Crosse and Milwaukee railroad company and the Wisconsin and Minnesota railroad company, whereby the latter named company agrees to transfer its business to the La Crosse road at Beaver Dam. The route of the Wisconsin and Minnesota railroad will be by the way of Fox Lake, Kingston and Montello to Grand Rapids on the Wisconsin river, and thence in the direction of St. Paul on the Mississippi river, and must be an important line of road for our city. Surveys are

now being made, and the line will be put under contract to Montello on the Fox river during the present month. The Beaver Dam and Baraboo railroad company have made application to the La Crosse company for a like contract to transfer to and receive business from the last named road. The route of the Beaver Dam and Baraboo railroad will be by the way of the village of Fall river, and through the townships of Fountain Prairie, Ctsego, Lowellville, Lodi and West Point, to the Wisconsin river, and thence to Baraboo. It needs no prophetic eye to discern that the La Crosse and Milwaukee railroad with its tributaries now in operation, and those soon to be put in operation will command the trade of Northern and North-western Wisconsin, and make it what its friends have always claimed it would be, "The Grand Trunk Railroad of Wisconsin."—*Milwaukee Democrat*.

Georgia Railroad Convention.

The stockholders of the Georgia Railroad and Banking Company met in annual convention Tuesday morning, and adjourned yesterday afternoon, after a very harmonious session.

The labors of the Convention were confined exclusively to the consideration of the business and interests of the Company, as presented in the official reports, which represent the affairs of the Company in a most prosperous condition, as will be seen by the following extract from the Report of the President and Directors:

Gross earnings of the road proper, for the year ending 31st March, last\$1,068,202 39
Charged with ordinary expenses ... 617,862 24

Net profit, deducting ordinary expenses.....\$550,350 15
Gross Earnings of the Bank\$108,441 82
Charged with interest on bonds, salaries, and agents' commissions, taxes, &c. 69,474 82

Net from bank earnings.\$38,967 00
The [income of the company from all sources may be stated thus:
Gross income from road\$1,068,202 39
Do. bank 108,441 82
\$1,176,644 21

Charged with ordinary road expenses\$517,852 24
Interest on bonds, salaries, taxes, commissions, &c. 69,474 22
587,327 06

Net from all sources.\$589,317 18
Charged with expenditure for new track, increasing outfit, new depots, fencing, and other new work, specified in Superintendent's Report 192,660 93

To Reserved Fund\$396,656 22
Add Reserved Fund by last Report... 282,454 41

Balance, net profits 31st March..\$629,110 63
From this two dividends have been deducted, one of \$3.50, the other \$4 per share..... 311,700 00

Present Reserved Fund.....\$417,411 63

"As the construction account has been closed for years, and all expenditures for new work, increased outfit, &c., charged upon income, this is a tangible available surplus, and can be appropriated as the exigencies of the Company may require."

This extract shows most conclusively how efficiently the business of the Company has been managed.

The following Board of Directors for the ensuing year was elected:

John P. King, President.
Directors:—John Bones, H. Bowdre, J. W. Davies, B. H. Warren, G. T. Jackson, T. B. Phin-

izey, W. M. D. Antignac, A. Poullain, T. N. Hamilton, A. Hull, S. Barnett, J. Cunningham, E. E. Jones, W. D. Conyers, R. Peters, Geo. W. Evans. —*Augusta Chronicle*, 16th inst.

Cincinnati, Hamilton and Dayton Railroad.

At the recent election of officers, we learn that the old Board, consisting of S. S. L'Hommiedieu, George Carlisle, Jno. C. Wright, S. C. Parkhurst, George H. Hill, Andrew Gross, Wm. Resor, Jno. W. Ellis and Joseph B. Varnum, were elected without opposition. At a subsequent meeting of the Board, S. S. L'Hommiedieu was unanimously elected President, and George Carlisle, Vice President. Mr. F. S. Bond declining re-election as Secretary, the offices of Superintendent and Secretary were consolidated, and H. O. Ames elected.

Chicago, St. Paul and Fond du Lac Railroad.

The Chicago, St. Paul and Fond du Lac railroad company have closed the contract for the extension of their road to Oshkosh. T. F. Strong, Esq., of this city, is the contractor, and agrees to complete the work by the first of December next. The contract is conditional on the vote of this city being favorable to the loan in aid of the work, which will undoubtedly be the case. We are glad that the work is to be prosecuted to completion at so early a day, and that the contract has been taken by one of our own citizens.—*Fond du Lac Jour.*

BALL'S PATENT JACK SCREW.



For sale by

No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Brass Cocks.

McNAB & GARR, 138 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.
They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

MEMPHIS & OHIO RAILROAD.



Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R.
Memphis, Tenn., April 11, 1856.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and cleaning, graduation, masonry and, bridging of forty miles of the Northern division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.
The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for handling.
The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.
It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1858. Good reference will be required of Contractors as to ability to carry out their contract.
Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET,
Engineer M. and O. R. R.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:
Gauge, 4 feet 8½ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4½ feet drivers, with truck; inside connected with 7 inch crank, V books, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

\$10,000.

To Railroad Contractors and Capitalists.

THE advertiser offers for sale the good will of a valuable invention, which has been in successful operation for the last five years, upon the principal railroads south and west, and which is worth, at a low estimate, six thousand dollars a year net profit. To persons desiring a good and permanent business, which may be greatly increased, this offers an excellent opportunity.

For particulars address: D. M. H., Railroad Journal Office.

New York, May 21, 1856.

1121

NOTICE

IS hereby given, that books will be open for subscriptions for \$300,000, the residue of the capital stock of "THE LONG DOCK COMPANY," chartered by the Legislature of New Jersey, at the office of the New York and Erie Railroad Company, 45 WALL STREET, New York, on Wednesday, the 28th day of May, instant, from twelve to one o'clock of said day.

By order of the Directors.

J. LANSING ZABRISKIE, Secretary.
HOMER RAMSDALL, President.

Dated, May 1st, 1856.

The whole capital stock of the above Company is \$800,000. Arrangements have been made with the New York and Erie Railroad Company by which the property purchased for the LONG DOCK COMPANY in New Jersey, to be paid for by their capital stock, will be leased at a rent of 10 per cent. on its cost, with privilege of purchase; and such shareholders of the New York and Erie Railroad as desire it, and subscribe therefor, will receive a proportionate share of the stock of the LONG DOCK COMPANY.
3119

Notice to Contractors.



OFFICE OF STATE ENGINEER BURNHASTA,
Orange Mill Post Office.
St. Johns River, Fla., August 20th, 1855.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1856, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANCY,
State Engineer, State of Florida.
1856

Notice to Contractors.

CHIEF ENGINEER'S OFFICE M. AND P. R. R.
Norfolk, Va., May 6th, 1856.

THE undersigned has for contract 3,000 cubic yards of Bridge Masonry, situated near Norfolk and Petersburg, respectively, and on the line of the Norfolk and Petersburg Railroad. Plans and specifications of the two bridges near Petersburg may be seen at the Division Engineer's office there, or at this place, and like information may be had about the work contiguous to Norfolk, at this office.

WILLIAM MAHONE,
Chief Engineer.

1m20

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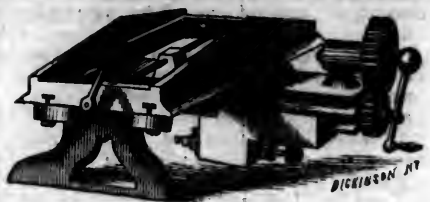
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1. General Table for all Bases	13. for Base 18 ft. Slope 1 1/2 to 1	14. " 20 " 1 1/2 to 1	20. " 24 " 1 1/2 to 1	21. " 24 " 1 1/2 to 1	22. " 24 " 1 1/2 to 1
2. For Side Hill Cuts and Fills	15. " 24 " 1 1/2 to 1	16. " 24 " 1 1/2 to 1	23. " 24 " 1 1/2 to 1	24. " 24 " 1 1/2 to 1	25. " 24 " 1 1/2 to 1
3. Base 12 ft. Slopes 1 1/2 to 1	17. " 24 " 1 1/2 to 1	18. " 24 " 1 1/2 to 1	26. " 24 " 1 1/2 to 1	27. " 24 " 1 1/2 to 1	28. " 24 " 1 1/2 to 1
4. " 14 " 1 1/2 to 1	19. " 24 " 1 1/2 to 1	20. " 24 " 1 1/2 to 1	29. " 24 " 1 1/2 to 1	30. " 24 " 1 1/2 to 1	31. " 24 " 1 1/2 to 1
5. " 15 " 1 1/2 to 1	21. " 24 " 1 1/2 to 1	22. " 24 " 1 1/2 to 1	32. " 24 " 1 1/2 to 1	33. " 24 " 1 1/2 to 1	34. " 24 " 1 1/2 to 1
6. " 16 " 1 1/2 to 1	23. " 24 " 1 1/2 to 1	24. " 24 " 1 1/2 to 1	35. " 24 " 1 1/2 to 1	36. " 24 " 1 1/2 to 1	37. " 24 " 1 1/2 to 1
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8. " 18 " 1 1/2 to 1	27. " 24 " 1 1/2 to 1	28. " 24 " 1 1/2 to 1	41. " 24 " 1 1/2 to 1	42. " 24 " 1 1/2 to 1	43. " 24 " 1 1/2 to 1
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10. " 20 " 1 1/2 to 1	31. " 24 " 1 1/2 to 1	32. " 24 " 1 1/2 to 1	47. " 24 " 1 1/2 to 1	48. " 24 " 1 1/2 to 1	49. " 24 " 1 1/2 to 1
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12. " 22 " 1 1/2 to 1	35. " 24 " 1 1/2 to 1	36. " 24 " 1 1/2 to 1	53. " 24 " 1 1/2 to 1	54. " 24 " 1 1/2 to 1	55. " 24 " 1 1/2 to 1

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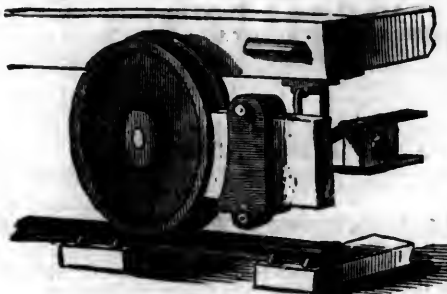
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PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., Chicago, Ill.

Hufty's Engineers, Architects and Draftsmen's STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books.

All goods packed with care, and forwarded to any part of the United States.

May 16, 1854

JOSEPH HUFTY,
Successor to H. L. Lipman,
189 Chestnut St., Philadelphia

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD,
Hanover Building, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 55 lbs. to the yard, for which proposals are invited.

31st

A. WILKINS.

PATENT MACHINE MADE HORSE-SHOES

The Troy Iron and Nail Factory have always on hand a general assortment of Horse Shoes, made from Refined American Iron.

Four sizes being made, it will be well for those ordering to remember that the size of the shoe increases as the numbers—No. 1 being the smallest; No. 4 being the largest.

Wm. F. BURDEN, Agent,
Troy Iron and Nail Factory, Troy, N. Y.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT.

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both, beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
HON. J. V. O. SMITH, Mayor of Boston, Mass.
L. L. BADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. P. FRENCH, Associate Judge, Superior Court, Essex, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

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SATURDAY, MAY 31, 1856.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, May 31, 1856.

New Jersey Railroad and Transportation Company.

The act chartering this corporation was passed in March, 1832, and authorized them to build a railroad, with one or more tracks, from some convenient point in New Brunswick, through or near Rahway, Woodbridge, Elizabethtown, and Newark, to some convenient point on the Hudson, opposite the city of New York. The company were also authorized to run branch lines to Belleville, and to connect with any ferry on the Hudson. Capital stock, \$750,000, which might be increased to double that amount. Shares, \$50 each. Rates of toll not to exceed three cents per mile for passengers, and six cents per ton per mile for freight. Road required to be commenced in two and finished in five years, from date of charter. Company might purchase the old turn-pike and bridge properties; might construct dams, flood-gates, &c., to prevent their property from being injured by the overflowing of rivers; but so as not to obstruct navigation. Required to make annual statements to the Legislature of business done, &c. At the end of thirty years, the State of New Jersey might take possession of the work, by paying such a sum as should be decided upon

by appraisers to be chosen by both parties. After completion, the Company to pay annually, for five years, as tax into the State Treasury, one-fourth per cent. on the capital stock; and after that date, one half per cent. Should a continuous line be built across the State, this tax to be eight cents for each through passenger, and twelve cents for every ton of through merchandise. The State also reserved the right to subscribe one-fourth of the stock at the time; but this measure was subsequently abandoned. The Company were prohibited from using their funds for Banking purposes.

The following amendments and supplements have since been passed:

January, 1837,—Trustees of Free Schools authorized to loan the Company, \$100,000.

November, 1837,—Capital stock increased \$500,000.

March, 1842,—State Treasurer authorized to receive eight cents per passenger, and twelve cents per ton of freight, until 1844, after which the tax to be one quarter per cent.; and after 1849, one-half per cent. on the capital stock, in addition to the above charge on freight and passengers.

April, 1846,—Transit duties fixed at \$4,000 per annum, till 1849. Returns and settlements to be made quarterly.

February, 1848,—Capital stock increased \$500,000, to be distributed *pro rata* among the stockholders, and taken at the option of the latter. The amendment to be also accepted.

Since the above date the stock has been further increased \$1,000,000, making \$3,500,000 in all.

The New Jersey railroad extends from Jersey City, which is connected with the city of New York by a ferry now owned and operated by the company, to a point about three and a half miles south of the Raritan river, making a total length of about 34 miles. From this point it is continued by the Camden and Amboy line to Trenton, where a connection is made with Philadelphia by the Philadelphia and Trenton railroad on the western bank of the Delaware, and by the Camden and Amboy on the eastern. All these roads are united by a running arrangement. The important position of these lines in our railroad system it is needless to refer to; connecting as they do the two great cities of New York and Philadelphia,

whose united populations at present amount to nearly a million and a half! The local business merely is such as but few lines enjoy. The city of Newark, nine miles from this city, has over 55,000 inhabitants, and is doubling her population every 20 years. Elizabeth, Rahway, and New Brunswick are flourishing places. To all these points, particularly Newark, vast numbers of commuters pass back and forth daily. At Newark, a connection is made with the Morris and Essex road, from which a large business is derived; and at Elizabeth, with the New Jersey Central. The former penetrates an extensive mining region in New Jersey, and will ultimately be extended to the Delaware. The latter already has this connection completed to that river at Easton, whence it is continued by the Lehigh Valley road to the coal districts of Pennsylvania. The business of the Erie (Union) railroad also passes for three miles over the New Jersey road.

This road is now one of the most costly in the United States. At Jersey City a vast amount of filling in and embanking has been done. One mile and a half from the depot it enters Bergen ridge, and passes through it by a cut about a mile long, and in some places from 40 to 50 feet in depth.—About half a mile to the westward of this ridge, it crosses the Hackensack river on a pile bridge 1,250 feet long. Its course thence to Newark is over the salt meadows, requiring a large amount of filling to be done to render the track secure. At Newark, the road crosses the Passaic by another substantial bridge. From this point to New Brunswick, the route is eminently favorable for construction purposes. The Raritan is here crossed by a bridge 1,700 feet long.

The road has a double track laid with heavy T rail as far as Rahway, 18 miles. The remaining distance to New Brunswick is expected to be laid this present season. There are no sharp curves, except one in entering the Bergen ridge, and one at the Newark station. The heaviest grades do not exceed 26 feet. Much the greater part of the line is level, or very nearly so.

The company were duly organized in June, 1832, by the choice of a Board of nine Directors. Though a strong feeling was manifested in its favor, but moderate subscriptions could be obtained from residents on the line. The rights of the various

Bridge and Turnpike companies, which possessed exclusive privileges on the route, had also to be purchased. In spite of many gloomy forebodings, however, the Board caused the requisite surveys, &c., to be made, and contracts to be entered into for grading the line between Newark and Bergen Hill. At the time the cut was commenced through the latter, it is stated that there was only the sum of \$35,000 in the Treasury. At this time an enterprising firm in New York entered into an engagement to undertake the construction of this work, from New York to New Brunswick, taking the company's stock in payment. After opening the road through to Newark, with a temporary track over Bergen Heights, it was found that nine-tenths of the stock issued was owned by this firm and their associates. The cut through these rocks, together with the bridges over the Hackensack, the Passaic and the Raritan rivers, added to which was the settling of the embankments over the meadows between Jersey City and Newark—in some instances from seventy to eighty feet—all required long sustained and vigorous efforts to be overcome. The first of these alone cost \$400,000, and the lives of upwards of 40 persons. Nearly \$300,000 were expended for the stock and chartered privileges of the Bridge and Turnpike companies. The cost of bridging amounted to over \$300,000; and that of land, land damages and location, \$400,000. In 1839, the first cost of the whole work was returned to the Legislature at \$1,951,638. The various expenditures since made, including the purchase of the property and rights of the Jersey Associates, have more than doubled the above amount. The original estimate of cost was \$860,226.

In September, 1834, the road was opened for public use, being operated by horse power, between Jersey City and Newark. In 1835, the track was laid as far as Elizabeth, and locomotives first put upon the track. In the following year, it was completed as far as Rahway and East New Brunswick, and on the 28th of October, 1837, the viaduct over the Raritan was passed. In 1838, the deep cut through Bergen ridge was completed; and on the 1st of January, 1839, the first train was run between the cities of New York and Philadelphia.

Owing to the excessive cost of the work, the managers were enabled to make but few dividends for several years at first. The stock was consequently low, rating, in 1840, from 65 to 60. The first dividend, three per cent., was paid in July, 1835. Up to the close of 1841, the stockholders had not realized more than four per cent. per annum on their investment. For the next ten years these averaged about seven per cent.; and latterly they have ranged from ten to twelve. The stock is now quoted at from 120 to 125. Considering the number of trains run, the road has been managed with singular freedom from accidents to passengers. In their report for 1853, from which most of the above information has been derived, it is stated that to that date, although more than *thirteen millions* of passengers, including commuters, had been carried, no person within the cars had sustained an injury in life or limb.

We have but time to merely glance at the various improvements undertaken. In 184-, they commenced laying the second track between Jersey City and Newark. In 1853 it was extended to

Elizabeth, and since has been laid to Rahway.—They also purchased the Jersey City Ferry property and privileges for the sum of \$485,000, payable in their six per cent. ten years bonds. In December of the same year, the Erie company commenced running their trains through the Bergen Hill cut.

The capital stock at present is \$3,482,850; the funded debt, including debt to the Jersey Associates, \$690,000. The sum of \$127,949 has been applied to construction from net earnings. Cost of road and equipment, \$3,358,005. Other assets are valued at \$952,066. Gross earnings for 1855, \$861,514; net earnings, \$500,747, from which dividends amounting to ten per cent. were paid.

The new report of the company will make its appearance in a few days. With this we expect to be able to give tables of earnings &c. in full.

Cincinnati, Hamilton and Dayton R. R. PRESIDENT'S REPORT.

The business operations of your road, during the past year, have been carried on safely and steadily. The trains have been run with regularity, and no accident has occurred by which any passenger has been injured. No collision of trains has ever occurred on the road, from which serious injury has resulted, to either person or property: and from the admirable manner in which the Superintendent arranges his time cards, and the various Employees connected with the trains perform their respective duties, none need be anticipated.

Owing to the failure of the crops in 1854, and to the very general depression in business, and consequent scarcity of money, the earnings of the first six months of the year show a small diminution, compared with those of the corresponding period of last year; but, notwithstanding the continued high stage of water in the Ohio River, during the past Fall, taking from us our usual amount of Eastern freights, and the almost entire suspension of travel during the extreme cold weather of January and February, the increase of the second six months has brought up the account to within \$11,735 of that of the previous year, making a difference only of about two per cent. in the gross earnings.

The strong competition existing for through business, and the claims made by the Little Miami Company of a right to the whole, as being *the route, par excellence*, has led during the past year to prices scarcely remunerative and to the payment of commissions and expenses, which might otherwise have been saved to the stockholders.—In no case, however, within the past eighteen months, has this Company reduced prices or paid commissions, until compelled to by our competitors previously pursuing that course, which can only be accounted for on the ground that they conceive themselves justified, by our efforts to share in an eastern through business. Already have they commenced the same system for this Spring's business, and their agents have been busily engaged throughout our city in soliciting freight for Detroit, and points on and west of our line, at lower rates than are charged over our route. The claim made by the Little Miami Company to a monopoly of eastern business, cannot be assented to on the part of this Company, whilst they know they have a line of roads in no way inferior, but in many respects superior. A route like ours, that for Summer freighting business presents forty miles less of rail to the Lake, with the same rates of freight across the Lake and thence to New York and Boston,—and for passenger purposes one of equal distance by way of Cretline to either Pittsburgh or Cleveland, should not be denied the right to participate in through eastern business.—On the principle of this claim, the New York and Erie, and the Southern Michigan might demand that the N. Y. Central and the Michigan Central should refrain from doing a through business between New York and Chicago. There is undoubtedly sufficient business, at fair prices, to enable

the several roads terminating in this city to pay satisfactory dividends: but the apparent determination of our competitors to monopolise the whole, leads to a competition alike injurious to both Companies in their local and through traffic. At present, this competition is of more advantage to the public and to connecting roads, than to either competing line. Should no amicable arrangement be made, there can be no doubt of the true policy of this Company in building up a business which promises the future advantages that must grow out of our natural situation and connections.

The Secretary's report, appended, prepared with ability and clearness, shows the gross income of the road, for the year ending March 31, 1856, to be \$508,271.71. This is an average of \$8,471.19 per mile, equal to that of any other road terminating in this city.

The expenses have been increased by the necessary purchase of a large number of new axles, wheels and tires, to replace those broken during the past severe winter. The expense of operating the road, however, will compare favorably with that of other roads. By reference to the tables subjoined, it will be seen to amount to forty-nine per cent. on the transportation receipts.

During the past year the net earnings of the Road have been applied to the payment of its floating debt, and to the building of its second track, up to the period when the work was suspended. This debt it will be seen, has been materially reduced, and is now brought within a manageable compass.

The average interest paid on our floating debt, during the period of 1854-5, when the rate of interest ruled unusually high, did not exceed ten per cent. per annum. The remainder of the debt is now carried at an average interest not over nine per cent. per annum.

At the period of our last report it was anticipated that we should soon find sale for our second mortgage bonds, at a price satisfactory to the Stockholders. In this we have been disappointed. The entire amount of the Bonded Debt, compared with the value of the road, is so small, that the Directors, knowing the value of these bonds, cannot consent to have them sold for ninety cents on the dollar.

The policy of the Board for the past eighteen months in applying the net earnings to the discharge of the floating debt, thereby reducing the same from upwards of five to about three hundred thousand dollars, exclusive of the scrip issued for dividend number five, has rendered a sale of the whole issue of second mortgage Bonds unnecessary; and the Directors have therefore ordered three hundred of the Bonds to be withdrawn from the market, leaving four hundred and thirty-nine for sale. When these bonds will command a satisfactory price they will be sold, the remainder of the debt discharged, and the payment of cash dividends resumed. The non-payment of such dividends doubtless bears hard on some of our Stockholders, but the cases are few, as the stock is, to a great extent, held by those able to dispense with dividends until the debt is paid. A large majority of our stockholders readily assent to this course as most judicious.

A sale has been effected of the steamer *Mississippi* to the Michigan Central Railroad Company, at one hundred thousand dollars. The steamer *St. Lawrence* is now laid up at Buffalo, and is held for sale at the same price.

The real estate belonging to the company remains about the same as at the period of our last report. It is increasing in value annually more than the interest on its cost. When the Board can determine how much, and what part of it will be required for the convenient and profitable use of the road, the remainder will be sold at a profit which will in part cover the depreciation on other descriptions of property held by the company.—For the past twelve months there has been little or no demand in our city for real estate. The present indications are, that within the coming year, there will be a greater demand and ready

sale for such as is favorably situated for business purposes. Business is rapidly tending towards the western portion of our city, and there can be little doubt that property in the vicinity of our depot will greatly advance in value. The proximity of the freight and passenger depots of this company to those of the Ohio and Mississippi company, will insure a high value to property in the neighborhood.

At the last annual meeting of the stockholders, a resolution was passed, instructing the Directors to create a Sinking Fund, for accumulation and for the ultimate redemption of the bonds of this company. The Ohio Life Insurance and Trust company was appointed Trustee to receive the fund, and to invest the same in first mortgage bonds; provided they could be purchased at or below par; and if not, then to purchase the second mortgage bonds at their market value—the same to be cancelled and delivered to the President of this company. The resolution was to take effect from the first day of Jan'y, 1856, and payments were to be made quarterly thereafter.—The first instalment has been deposited with the Ohio Life Insurance and Trust company, according to the requirements of the resolution.

The system of accounts in the various departments connected with the operations of the road, is as perfect as the experience of the best accountants in the country can devise. From the commencement of the construction of the road to the present time, vouchers are to be found on file for all expenditures, however small. These are regularly numbered and filed, and are of very easy access. The general plan of business is simple, and the system of checks complete. The number of clerks is small, much below the proportion of those engaged in other business. For the detail of the system reference is made to the report of the Superintendent.

Since our last annual meeting several vacancies have occurred in the Board—three by the non-acceptance of persons then elected, and one by the death of the Hon. John Woods, of Hamilton. He was a most active and valuable Director, one of the original projectors of the road, and continued in connection with it until the day of his death.—Having lived an energetic, enterprising and useful life, with an integrity without spot or blemish, he died respected and beloved by all who knew him. The gentlemen who fill the vacancies were chosen from among the active business men of our city. They were, Messrs. S. C. Parkhurst, A. Gross, W. Resor, and John W. Ellis. Under the direction of the Board, these gentlemen, as a committee, devoted much time during the evenings of the past winter to a thorough examination of the affairs of the company for the past few years. Their report was favorable, and gave credit to the heads of the several departments for their fidelity, industry and capacity.

But little progress has been made during the past year on our connecting roads, in completing more miles of track. The general depreciation of railroad securities, and want of confidence in them still continues, and it is difficult now to predict how soon it may be otherwise. To this company the extension of the Cincinnati and Chicago road to Logansport and Chicago—the Dayton and Michigan road to Toledo and Detroit—the Cincinnati and Indianapolis Junction road to Indianapolis—and the Cincinnati, Union and Ft. Wayne road to Ft. Wayne, is of very great importance.—When such extensions are completed, which we had reason to expect would have been the case before this time, the business on our road will be increased at least fifty per cent. Towards the construction of two of the roads named, with the general approval of our stockholders, this company has made large subscriptions, without as yet realizing benefits in proportion.

However desirable it may be to have these lines completed, it will be the policy of our Board, in future, to refrain from incurring any further obligations, by subscription or otherwise, involving the stockholders in engagements not strictly pertaining to the purposes for which this corporation was formed. All liabilities heretofore incurred for the

benefit of our connecting roads, have been promptly met and discharged. No new ones, under any circumstances, should be assumed.

The question of endorsements heretofore made by one corporation for another, is at present one of great interest to the public. This company, though often strongly urged to make endorsements, has uniformly declined.

The Board again express its continued confidence in the value of the investment in our road. The amount of their individual interest in the stock is large, being equal to about one-fifth of what is held in the West. They can see no reason to doubt that ultimately the full expectations of the stockholder who originally embarked in the enterprise, will be realized. Temporary causes may delay, for a short time, the full development of the business of the road, but finally the stockholder may expect a fair return for the means he has invested.

By order of the Board of Directors,
S. S. L'HOMMEDIÉ, *Pres't.*

The Secretary's report shows the sources of income and expenditure to have been as follows:—

Passenger earnings.....	\$256,568 12
Freight do.....	221,697 54
Mails and express.....	13,620 04
Receipts from rent, interest, &c.....	36,386 01

Total.....	\$508,271 71
Transportation expenses.....	230,258 84
	\$278,012 87

Interest on floating debt..	\$42,501 77
Do. on scrip.....	7,059 54
Do. on mortg. bonds..	58,655 30
Taxes.....	13,717 14
	121,933 75

Net earnings.....	\$156,079 12
Add surplus, April 1st, 1855.....	171,742 23
	\$327,821 35

Transferred to Renewal Fund.....	\$21,742 23
Transferred to depreciation of boats.....	33,116 79
Transferred to depreciation of rail'd stocks..	52,097 10
Transferred to dividend No. 6.....	101,560 00
New York Agency, 1853-'4	
-5.....	5,000 00
	213,516 12

Balance.....	\$114,305 23
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The following table shows the company's

GENERAL ACCOUNT.	
Construction account.....	\$2,470,125 58
Equipment do.....	517,632 35
Real estate do.....	228,433 85
Property do.....	332,500 00
Steamboat do.....	52,070 48
Bills receivable.....	6,397 20
Due from other railroad companies.	70,824 81
Do. open accounts.....	9,312 13
Suspense account.....	16,622 58
Stock and material on hand.....	27,926 85
Cash on hand.....	44,465 32
	\$3,776,311 10

Capital stock.....	\$2,153,900 00
Mortgage bonds, due 1867.....	500,000 00
Mortgage bonds, due 1880.....	511,000 00
Bills payable.....	310,213 14
Due other Railroad Companies.....	44,452 58
Due on open accounts.....	11,665 19
Dividends unpaid.....	2,366 00
Dividend No. 5 Scrip, due Sept. 1, 1857.....	112,443 41
Renewal Fund.....	16,065 55
Surplus earnings.....	114,305 23
	\$3,776,311 10

The construction account increased \$68,206 38 last year. Of this \$36,613 01 were incurred for second track, \$9,607 56 for railroad iron, and \$16,755 79 for interest and discount on bonds sold. The sum of \$12,470 28 has been received from the D. & W. R. R. Co. for right of way through Dayton.

The Superintendent's report states that the local exceeds the through traffic in the proportion of seven to one, while the rates charged both for passengers and freight are also considerably in excess. It is therefore highly important to cherish and protect this branch of business. The item of track-repairing has been largely increased over 1854. On that part of the road between Cincinnati and Hamilton the iron laid down has proved to be of very indifferent quality. About three miles of this portion of the track have had to be re-welded. The severity of last winter has also obliged the company to purchase 200 tons of new rails. A contract, at moderate rates, has been made for re-rolling the old rails. The machinery has also suffered from this imperfect quality of iron on the road. The road-bed otherwise is in excellent condition, as also the machinery and cars. The trains have been run with great regularity, and free from serious accidents. No passenger has been injured since the road was first put in operation. The following is the mode adopted for keeping accounts.

The freight and ticket agents are required to report to the Secretary weekly, and to balance their accounts with him monthly. These reports undergo a searching scrutiny in his office, and are arranged to be a check one on another. Every description of ticket used for passengers is kept in the office of the Superintendent, registered and numbered. They are furnished to the Secretary on his written order, charged to his office, and by him charged to the agents as they are delivered. Payments are made by the Secretary only on a certified voucher, signed by the President, or Superintendent, and the latter is required to audit, keep a record, and cause monthly statements of the working expenses to be made out. All bills of material furnished for the service of the company are required to be signed by the person by whom the purchase is made, but the bulk of these expenditures passes through the books of the Superintendent of Motive Power, who is required to keep an exact account of the same, and report to the Superintendent of the road monthly, in writing.

Imports and Exports of the United States.

The annexed statement, issued from the Treasury Department, exhibits the imports and exports of the United States for the quarter ending March 31st, 1856. The imports of foreign merchandise were—

Specie.....	\$1,043,591
Free goods, exclusive of specie.....	11,269,990
Dutiable good.....	65,269,187

Aggregate value.....	\$77,682,771
EXPORTS OF FOREIGN MERCHANDISE.	
Specie.....	\$219,860
Free goods, exclusive of specie.....	653,675
Dutiable goods.....	2,883,808

Aggregate value.....	\$3,787,343
EXPORTS OF DOMESTIC MERCHANDISE.	
Specie.....	\$6,251,387
Goods, exclusive of specie.....	74,992,703

Aggregate value.....	\$81,244,090
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It will be seen from the above table that the exports from the United States during the last fiscal quarter exceeded the imports seven millions four

hundred and forty-eight thousand six hundred and fifty-six dollars. The subjoined table shows the total amount of exports and imports at the seven principal ports of the United States for the period already designated:

Ports.	Imports.	Exp'ts of foreign merch'dise.	Exp'ts of domestic merch'dise.
Boston....	\$9,645,730	\$503,000	\$3,134,138
New York.	51,299,975	1,690,219	21,258,818
Phila....	3,596,784	49,430	1,149,840
Balt.....	1,876,193	36,499	2,124,569
Charleston.	518,874	.....	5,675,395
N. Orleans.	5,223,669	83,007	27,879,962
S. Fran'o..	2,125,499	213,700	2,369,405

Grants of Public Lands to Iowa.

The Act recently passed by Congress, in aid of railroads in that State, provides for (1) a line from Burlington, on the Mississippi river, to a point on the Missouri near the mouth of Platte river; (2) from the city of Davenport, via Iowa City and Fort Des Moines, to Council Bluffs; (3) from Lyons City north-westerly to a point of intersection with the main line of the Iowa Central Air Line Railroad, near Maquoketa, thence nearly due west, close to the 42nd parallel, across the State to the Missouri river; and (4) from the city of Dubuque to a point on the Missouri river near Sioux City, with a branch to the Tete des Morts. Towards the construction of these, alternate sections of land are granted, for six sections in width on each side of the roads. In case any of these have been sold or pre-empted, the companies to have the right of selecting from the adjoining lands, not exceeding 15 sections in distance from the line. The lands to be applied to the construction of the respective roads exclusively, and disposed as the works progress. The second section requires that the sections remaining in the hands of the General Government shall be sold for not less than double the minimum price. No lands are subject to private entry until they have been first offered for public sale at the increased price. By the third section, the lands thus donated are made subject to the disposal of the Legislature for the aforesaid purpose exclusively. The roads are to remain public highways for the use of Government, free from toll or other charges upon the transportation of any property or troops of the United States. The fourth section requires that the lands shall be disposed of thus: That a quantity of land not exceeding one hundred and twenty sections for each of said roads, and included within a continuous length of twenty miles of each of said roads may be sold; and when the Governor of the State shall certify to the Secretary of the Interior that any twenty continuous miles of any of said roads are completed, then another quantity of land not to exceed one hundred and twenty sections for each of said roads having twenty continuous miles completed as aforesaid, and included within a continuous length of twenty miles of each of such roads, may be sold, and so from time to time until said roads are completed; and if any of said roads are not completed within ten years, no further sale shall be made and the lands unsold shall revert to the United States.

The fifth section provides that the United States mails shall be transported over the roads at such price as Congress may direct; the Postmaster General having the right to determine the same, until it shall have been regulated by law.

The Washington Union gives the following esti-

mated lengths of and land grants to the several lines above stated:

ROUTES.	Estimated length in miles.	Acres granted.
Dubuque via Fort Dodge, to Sioux City.....	296	1,132,800
Lyons City via Maquoketa, due west to the Missouri river.....	325	1,248,000
Davenport via Iowa City and Fort Des Moines, to Council Bluffs.....	290	1,116,800
Burlington, west to the mouth of La Platte river.....	255	979,200
Total.....	1,165	4,473,600
Deduct for the Des Moines river grant, which crosses 4 times, 10x4.....	40	153,660
	1,125	4,320,000

In order to protect the lands granted from sale and location, the Commissioner of the General Land Office has withdrawn, as we heretofore stated, all the lands in this State south of the Dacorrah district, south of the line between townships 92 and 93 in the Fort Dodge district, and south of the line between townships 91 and 92 of the Sioux City district. It is designed to adjust the several grants with as little delay as practicable, in order that the lands not needed for these grants may be restored to market.

Improvements on the Mississippi.

The Committee on Commerce have recently submitted to the House of Representatives a Report on the navigation of the Mississippi and other Western rivers. After enlarging on the importance of that great stream, and the immensity of the commerce carried annually up and down upon it, they refer to the duty of the General Government to make provision for removing obstructions to navigation. Between the States upon its banks, a proper concert of action cannot be secured; besides, the advantage to be conferred will not be confined to the States merely. Vast expenditures have annually been made, hitherto, for protecting our foreign trade, in the construction of light-houses, harbors, break-waters, deepening channels, &c., &c.; whilst to the people in the interior the merest pittance have from time to time been doled out. The aggregate of these from 1824 to the present day, has been perhaps \$1,900,000; but of this much has been wasted by misapplication. In consequence of the veto of the Executive to the appropriation proposed by last Congress, the snag-boats and other property have been disposed of, at a sacrifice of over 80 per cent. on their cost. A different system of operations is necessary for the future. The plan proposed is to contract with responsible parties to do the work, these furnishing the requisite boats and other apparatus. In April last, a proposition was received from Messrs. Eads & Nelson, offering to bind themselves, in a five years' contract, to prosecute the work with energy, at proper times and stages of water, with four steam diving bell boats and one wreck boat, during six months of the year, from Keokuk to the Balize on the Mississippi, for \$225,000; also to operate two diving bell boats and one snag boat, from Council Bluffs to the mouth of the Missouri, for

\$65,000; also to operate a like force for four months on the Ohio, below the falls, for \$60,000; also the same force on the Arkansas below Little Rock for \$55,000. After the first two years, as the labor of keeping the channel clear would be lessened, it is proposed to reduce the compensation 15 per cent. It is guaranteed that the second year there will be a diminution of 10 per cent. in the number of steamboats annually lost; in the third year, 17 1/2 per cent.; in the fourth year, 25; and in the fifth, 30 per cent. This compensation obliges the contractors to remove rocks, place the necessary iron buoys, &c. The apparatus is now ready, and operations might be commenced at once. The cost of the fleet required will exceed \$300,000. Without removing the rocks, &c., they would engage to do the work on the Mississippi recommended by Col. Long, for \$75,090 per annum.

The Committee have presented bills containing provisions in accordance with the above, and making appropriations to those several amounts.

Debt of St. Louis.

The Controller's annual report gives the following particulars with reference to the indebtedness of that city.

Bonded debt of the city at the commencement of the fiscal year of 1855, April 10.....	\$3,905,096 00
Interest due on same.....	235,283 76
Total.....	\$4,140,379 76
Amount of bonds, issued since, up to April 14, 1856.....	1,234,000 00
Interest on same.....	74,040 00

Grand total.....	\$5,448,419 76
Of these, fifty-four have been paid, amounting to.....	\$53,700 00
Interest on same.....	3,222 00
Redeem'd and cancelled by Sink'g Fund Commissioner, 140 bonds, amounting to ..	140,000 00
Interest on same.....	8,400 00

Total diminishment of city bonded debt.....	205,322 00
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Remainder.....	\$5,243,097 76
From this deduct the amount of bonds issued for certain railroad companies, the interest on which are paid by the several companies.....	1,985,000 00
And amount issued for private sewers.....	198 00
And the amount remaining will show the bonded debt of the city for general purposes to be.....	2,929,117 76

The Iron Mountain Railroad.

The public will be pleased to know that the work of laying the rails on the St. Louis and Iron Mountain railroad has been commenced in good earnest. It is progressing at Carondelet, north and south, and if too much delay is not interposed by the Senate of the United States, in the passage of the bill granting the right of way, the rails will be laid between St. Louis and Carondelet in thirty days, and the locomotives running on them.

Pittsburg and Steubenville Railroad.

This road has been leased by the stockholders to King & Thompson, of New York, for the term of twenty years, upon certain conditions, one of which is, that the lessees shall complete the road to connect with the Pennsylvania and the Steubenville and Indiana railroads, within eighteen months after completing the Pittsburg and Steubenville railroad.

Commerce of the Canadas.

The Toronto *Colonist* gives the following abstract of the returns made to the Provincial Parliament of the trade and navigation returns of Upper and Lower Canada, for the year 1855:

It is no longer possible for the most sceptical to doubt the beneficial operation of the reciprocity treaty, although it must be allowed that it has thus far worked greatly to the disadvantage of Lower Canada, by diverting trade from Montreal and Quebec to New York. It is stated, however, that the trade of these cities shows symptoms of reviving, and the commerce of the Lower St. Lawrence is likely to recover a portion of its former prosperity. The following figures will be examined with great interest by our business men:

The total tonnage of property and vessels on the St. Lawrence, Burlington Bay, Chambly and Welland Canals, and St. Ann's Lock, shows an increase in favor of 1855 over 1854 equal to 8.3 per cent., there being a slight decrease on the St. Lawrence and Welland Canals, which is counterbalanced by a considerable increase on the Burlington Bay Canal.

The value of articles entered for consumption in Canada was in 1854, £10,132,331, in 1855, £9,021,542; showing a decrease of £1,110,789. The amount of duties collected was £881,455 in 1855, or £343,306 less than in 1854, a result attributable to the effects of reciprocity, as is proved by the return of £2,586,878, value of free goods imported in 1855, against £703,435 in 1854.

The imports by sea *via* the St. Lawrence amounted in 1854 to £5,292,938. In 1855 they were but £2,873,507; showing a decrease of £2,419,431 or nearly one-half. The imports from the U. S. amounted in 1854 to £3,883,274, and in 1855 to £5,207,169, showing an increase of £1,323,895, or about one-third. The imports from the United States of free goods under the reciprocity treaty, were valued in 1855 at £1,931,393.

The total exports from Canada amounted in 1854 to £5,754,797; in 1855, they were £7,047,115; showing an increase of £1,292,318. The export of wheat was in 1854, 1,442,677 bushels, valued at £524,534; and in 1855, 3,193,748 bushels, valued at £1,482,216, showing an increase in quantity of 1,751,071 bushels, and of £957,682 in value. The export of flour, on the contrary, shows a decrease of 7,464 barrels, accompanied by an increase in value of £251,306.

In comparing the value of exports and imports at each port for 1854 and 1855, we find some singular results. The exports at Quebec have fallen off £923,065; the imports, £1,021,773. At Montreal the exports have declined £96,865; the imports, £752,021. At Hamilton the exports have increased from £148,121 to £454,586, or £306,465; the imports have decreased to the extent of £35,342. At Toronto the exports have increased from £273,049 to £404,105, or £131,056; the imports have also increased from £1,362,706 to £1,401,468, or £38,762. Thus it appears that Toronto is the only important port, which shows an increase in 1855 on both exports and imports. The decrease in duties collected at Hamilton is £28,102; and at Toronto £19,991.

The total increase of the commerce of Canada in 1855 over 1854, is £181,528, or $1\frac{1}{4}$ per ct.

The Toronto *Leader* gives the following summary:

There passed up the Welland Canal during the year 3,459 vessels of an aggregate tonnage of 491,364. Through the same Canal there passed down 3,320 vessels measuring altogether 560,103 tons; from which there were collected tolls to the amount of £5,346 12s. 6d.

Through the St. Lawrence Canals there passed up 4,171 vessels, measuring 335,672 tons; the number of vessels passing down was 3,728, representing an aggregate tonnage of 319,832. From these, tolls were collected to the amount of £1,774 48s. 6d.

The number of vessels which passed up the Chambly Canal was 1,162, measuring 67,737 tons; the down passages were 1,185, giving a tonnage of 69,765, and supplying tolls to the amount of £376 12s. 2d.

The Burlington Bay passages up and down were 1,319—giving a tonnage of 362,052, and a revenue of £388 15s.

The upward passages by the Saint Ann's Lock were 1,877—with a tonnage of 76,917; the downward passages were 1,188, and the tonnage 74,271.

The total number of British vessels was 17,446; the number of foreign, 20,909; the British tonnage being 1,765,175; the foreign, 2,358,014.

It will be noticed with regret that while the gross receipts from tolls in 1853 was £95,814 5s. 2d., and the cost of collection £16,319 10s. 7d., the receipts for 1855 had declined to £81,172 17s. 1d., while the cost of collection had increased to £19,737 5s. 4d.

The following articles of imports attract attention:

The brandy imports amounted to £60,065; gin, £16,985; rum, £5,353; whiskey, £91,295—making the total importation of spirits, £173,707.

The total produce of the mine exported during 1855, was \$31,458; of the sea, £114,980; of the forest, £1,986,980; animals and their products, £398,796; agriculture, £3,257,599; manufactures, £119,019; other articles, £17,140; making the total exports exclusive of ship manufactures, £5,956,975. The shipping being valued at £304,886, gives the aggregate exports at £6,260,861, against an import trade of £9,021,542.

San Francisco Railroad Company.

The San Francisco Railroad Company was organized by the election of the following gentlemen from among the subscribers to the stock of the Company.

President—John McKee; Vice President—John Center; Treasurer—F. M. Pixley; Secretary—W. C. Jewett; Directors—L. J. Ritter, J. McKee, John Center, F. M. Pixley, D. Brigham, Jr., Wm. Reynolds, G. W. Pinzer, R. Schoyer, W. Probasco, Silas C. Field, Henry Baker, Geo. W. Plume, and W. C. Jewett; Commissioners to open books for balance of stock—L. E. Ritter, John Center, W. C. Jewett, Geo. W. Plume, and R. Schoyer.

Erie and North-East Railroad.

The following resolutions were adopted at a meeting of the Erie and North-east railroad company held in the city of Erie, on the 15th inst.:

Resolved, That the Directors of this company be and are hereby requested to employ a competent Engineer or Engineers to examine the two routes proposed for the Pittsburg and Erie road, viz:—The Western, leaving the Lake Shore road at the most proper point west of Girard, and the East'n. known as the Waterford route; and to ascertain as near as practicable, by the 8th of July next, the distance, grades, curvature, and cost of each, and to employ an agent or agents, for the purpose of receiving subscriptions to the stock of said road, and to ascertain on what conditions the right of way can be obtained upon each route.—Also, to appoint a committee to ascertain by which route the coal will be best developed, and further ascertain from the Directors of the Sunbury and Erie railroad company, whether the interests of their own, and the Pittsburg and Erie road, can be advanced by uniting the two roads for any distance, in case the eastern route shall ultimately be adopted by the latter company, and if so, to what extent and upon what conditions. And also to ascertain from the C. & P. and A. B. R. Co. what arrangements can be made for doing the business on their road between Erie and the point of divergence, in case the western route is adopted. Also, what arrangements can be made to connect the Erie and North-east road, with their branch to the harbor.

Resolved, That this meeting adjourn to the 8th of July next, in order to receive the report of the Engineers and agents appointed to examine the routes proposed for the Pittsburg and Erie road, to obtain subscriptions, &c., for the purpose of determining by a vote of the stockholders, the route

of said Pittsburg and Erie road, and to elect whether they will make a subscription of \$100,000, or build a portion of said road; if the latter, what portion, and any other matters connected with carrying out the provisions of the act this day accepted.

New York and Harlem Railroad.

At the stockholders' meeting, on the 20th inst., the following gentlemen were elected Directors of the New York and Harlem railroad company for the ensuing year:—Philo Hurd, Wm. C. Wetmore, Horace Brooks, Philip Dater, Thos. H. Faile, Edwin Crosby, Edward Haight, John H. Gourlie, F. W. Edmonds, Albert J. Akin, Albert Smith, Sam. T. Taber, Nath'l P. Bailey.

Pennsylvania Railroad Tonnage.

The following exhibit shows the aggregate of the different articles sent from and received at the Philadelphia depot of the Pennsylvania railroad during the month of April, 1856:

	Sent from.	Received.
Agricultural implem'ts....	26,441	....
Do. productions....	50,594	28,345
Boots, shoes, hats, &c....	1,081,831	....
Books and stationery....	530,820	51,062
Butter and eggs....	....	951,807
Brown sheet'gs and bag'g.	610,380	....
Bark and sumac....	....	135,602
Cedarware....	50,812	8,880
Confectionary and foreign fruit....	281,657	....
Coffee....	1,686,860	....
Cotton....	....	588,200
Coal....	....	4,166,272
Copper, tin and lead....	352,782	....
Dry goods....	9,749,431	84,030
Drugs, medicines, and dye stuffs....	1,488,239	44,640
Earthenware....	....	9,961
Fresh meats, poultry and fish....	....	3,436
Flour....	....	7,102,204
Feathers, furs and skins....	....	583,628
Furniture and oil cloth....	446,257	50,873
Glass and glassware....	164,609	61,625
Green and dried fruits....	....	150,055
Grass and other seeds....	....	10,547
Grain of all kinds....	....	3,622,209
Groceries, [except coffee].	2,190,294	13,820
Ginseng....	....	26,873
Guano....	8,330	....
Hardware....	2,689,825	161,110
Hides and hair....	173,789	21,866
Hemp and cordage....	285,087	64,580
Iron rolled, ham'd, &c....	....	344,510
Iron, blooms and pig....	....	101,229
Iron, railroad....	183,238	....
Live stock....	41,915	3,252,590
Leather....	240,816	449,576
Lard, lard oil and tallow..	....	1,968,171
Lumber and timber....	....	82,534
Machinery and castings....	981,117	72,295
Marble and cement....	241,225	....
Malt and malt liquors....	7,385	....
Nails and spikes....	74,156	75,582
Oil....	285,881	....
Paper and rags....	228,700	27,918
Pot, pearl and soda ash....	722,321	....
Queensware....	1,447,026	....
Salt....	36,473	....
Salt meats and fish....	1,001,122	13,025,788
Soap and candles....	....	279,168
Tobacco....	396,946	287,985
Tar, pitch and rosin....	160,673	....
Wines and liquors, foreign.	445,798	9,295
Whiskey and alcohol....	....	1,428,326
Wool and woolen yarn....	....	221,651
Miscellaneous....	204,240	108,401
Total first class....	12,463,018	1,152,176
" second class....	8,888,849	2,448,868
" third class....	1,155,151	3,402,501
" fourth class....	6,022,551	32,649,029
Total during April....	28,539,569	39,647,074

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.	---	---	---	---
Androskey & Kennebec.	55	642,343	1,473,080	2,245,020	130,005	50,797	14	6	South Western	92	1,007,496	466,500	1,624,920	253,306	141,168	8	---	---
Kennebec & Portland.	58	1,114,725	1,661,336	2,470,600	---	---	---	---	Tennessee and Alabama	30	248,486	---	679,906	---	---	---	---	---
Portl., Saco, & Portland.	51	1,367,000	119,237	1,486,237	259,530	124,038	6	95	Tennessee and Mississ.	---	170,931	---	175,740	In progr.	---	---	---	---
Boston, Concord, & Montreal.	93	1,808,093	1,059,512	2,771,810	233,224	143,665	2	---	Memphis and Charleston	288	2,103,177	958,275	3,563,382	176,484	102,016	---	---	---
Oshesire.	53	2,083,925	899,313	3,179,687	390,221	188,632	8	79	Mobile and Ohio	153	2,568,555	1,902,921	4,536,412	199,932	109,236	---	---	---
Concord.	38	1,485,400	---	1,412,576	329,744	138,299	2	44	Miss. Central	188	642,634	---	628,303	In progr.	---	---	---	---
Northern, N. H.	82	2,793,400	---	3,016,633	670,529	355,173	2	44	N.O., Opelousa & G.W.	55	2,930,425	671,645	2,537,565	In progr.	---	---	---	---
Conn't & Passumpsic Riv.	81	1,048,145	787,608	1,780,062	162,687	55,173	---	---	Vicksburg, Shreveport & Tex.	---	111,750	---	107,895	In progr.	---	---	---	---
Rutland & Burlington.	120	2,233,376	2,662,390	5,378,428	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---	---
Vermont Central.	117	5,000,000	5,550,236	8,463,366	220,119	214,797	6	65	East Tennessee and Va.	16	625,426	938,593	1,033,781	In progr.	---	---	---	---
Boston and Lowell.	27	1,830,000	325,635	2,188,506	486,754	339,600	6	32	Nash. and Chattanooga	151	2,319,330	1,407,081	3,843,694	316,090	112,177	---	---	---
Boston and Maine.	83	4,076,974	150,000	4,179,535	60,917	8,740	---	---	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	264,973	138,694	---	---	---
Boston and N.Y. Central.	74	2,240,800	1,518,671	3,463,118	558,311	219,689	---	---	Lexington and Frankfort	29	431,091	159,299	636,363	90,930	34,364	---	---	---
Boston and Providence.	58	3,160,000	399,132	3,677,154	1,008,004	404,461	6	34	Lexington & Big Sandy	---	---	---	428,067	In progr.	---	---	---	---
Boston and Worcester.	68	4,500,000	655,428	4,855,478	1,008,004	404,461	6	34	Lexington and Danville	---	640,117	61,525	700,463	In progr.	---	---	---	---
Cape Cod.	47	681,000	280,595	997,252	199,221	65,527	---	---	Louisville and Frankfort	65	698,236	608,061	1,589,566	244,014	96,902	6	---	---
Connecticut River.	62	1,591,110	273,241	1,862,244	246,251	305,998	5	44	Atlantic & Gt. Western	234	806,939	77,294	613,231	In progr.	---	---	---	---
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	681,163	225,071	---	---	Bellefontaine and Ind.	118	1,881,625	2,025,925	2,852,652	298,293	140,823	---	---	---
Fitchburg.	367	3,540,000	133,700	3,705,998	681,163	225,071	---	---	Clev. Col. and Cin.	141	4,547,020	122,557	4,613,722	1,290,295	732,056	9	100	---
Northern Eastern	30	800,242	253,585	963,521	In progr.	---	---	---	Cleveland and Toledo	200	2,675,425	2,689,301	5,124,625	736,272	396,986	10	74	---
N. Bedford and Taunton.	21	500,000	---	533,953	198,491	66,533	6	8	Clev. and Mahoning	103	---	---	628,533	In progr.	---	---	---	---
Old Colony and Fall River.	87	3,015,100	292,650	3,362,949	663,499	295,738	---	---	Clev. and Pittsburg	133	2,780,744	3,043,992	5,637,406	681,877	309,618	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	2,876,736	633,013	7	90	Cin. Hamilton & Dayton	60	2,100,000	1,464,364	2,961,978	483,620	---	---	---	---
Western, Mass.	155	6,150,000	9,966,420	10,493,096	1,849,678	633,013	7	90	Cin. Wm. & Zanesville	131	1,120,450	1,131,265	2,326,459	In progr.	---	---	---	---
Worcester and Nashua.	46	1,141,000	205,055	1,251,271	294,780	75,760	2	43	Columbus and Xenia	56	1,484,550	149,000	1,481,733	356,367	187,518	10	86	---
Providence and Worcester.	43	1,510,020	388,461	1,900,696	311,430	138,657	---	---	Dayton, Xen. & Belpie	63	437,838	422,658	860,496	In progr.	---	---	---	---
Hartford and N. Haven.	72	2,359,000	939,000	3,313,932	730,011	352,799	10	20	Dayton and Michigan	140	1,076,692	593,011	1,185,826	In progr.	---	---	---	---
Hartford, Prov. and Fishkill.	128	1,845,610	900,124	4,060,869	253,685	110,611	---	---	Dayton and Western	35	310,000	300,000	733,769	In progr.	---	---	---	---
Housatonic	110	2,000,000	474,177	2,429,066	530,192	18,351	---	---	Katow and Hamilton	42	454,690	904,489	1,156,135	171,929	65,000	---	---	---
Naugatuck	67	1,031,800	573,996	1,577,167	238,266	---	---	---	Little Miami	65	2,963,921	1,171,785	3,648,172	681,562	336,708	---	---	---
N. York and N. Haven.	62	2,992,450	2,264,656	4,906,748	886,025	341,667	---	---	Mad River and L. Erie	205	2,451,650	2,672,932	4,446,661	In progr.	---	---	---	---
N. Haven and N. London.	60	738,258	735,165	1,450,318	68,007	30,315	---	---	Central Ohio	138	1,520,927	3,485,076	4,283,443	Recently opened.	---	---	---	---
N. London, W. & Palmer.	68	609,200	1,073,673	1,694,353	124,044	66,331	---	---	Ohio and Penn.	187	2,451,700	3,219,000	6,670,700	1,111,626	662,117	9	12	---
Norwich and Worcester.	66	2,122,300	873,489	2,997,183	304,296	88,468	2	30	Pittsburg, Mans. & Newk.	50	371,350	31,000	390,933	In progr.	---	---	---	---
Albany Northern.	32	430,005	1,623,098	1,840,695	117,716	9,904	---	---	Scioto & Hocking Valley	135	403,975	500,650	888,858	In progr.	---	---	---	---
Black River and Utica.	35	643,330	317,550	974,323	In progr.	---	---	---	Spring Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,871	1,501,183	2,819,096	172,476	66,333	---	---	Tol. Wabash & St. Louis	242	2,500,000	4,630,000	---	In progr.	---	---	---	---
Buffalo and N. Y. City.	92	798,439	2,577,849	3,401,868	1,819,678	31,896	---	---	Cin. Log. and Chicago	255	4,196,679	1,006,126	2,080,433	In progr.	---	---	---	---
Buffalo and St. Line.	99	1,300,000	1,040,000	2,494,364	679,750	356,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,560	1,844,541	127,400	64,552	---	---	---
Canandaigua and Elmira.	47	434,111	1,232,303	1,775,796	174,059	69,606	---	---	Ind. and Cincinnati	88	1,213,723	1,442,850	2,178,461	356,012	193,142	7	58	---
Canandaigua & Niagara F.s.	58	1,315,000	2,279,854	3,406,832	1,319,433	49,649	---	---	Indiana Central	66	611,400	1,220,179	1,907,911	585,176	134,878	---	---	---
Cattaraugus & Susquehanna.	35	687,000	506,899	1,187,502	1,819,678	300,646	---	---	Ind., Clev. & Pittsburg	83	834,137	1,011,971	1,671,544	---	---	---	---	---
Hudson River.	144	8,758,496	9,250,362	12,737,898	301,793	116,462	---	---	Jeffersonville	66	1,014,252	694,000	---	206,544	94,518	---	---	---
Long Island.	91	1,875,148	660,949	2,555,986	6,668,581	3,162,126	---	---	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	286,146	112,880	---	---	---
New York Central.	534	24,154,860	14,462,742	28,628,913	33,439,431	6,267,118	---	---	New Albany and Salem	288	2,535,121	6,943,189	6,943,189	643,827	371,402	---	---	---
New York and Erie	464	10,023,985	10,023,985	33,439,431	1,435,077	234,126	---	---	Peru and Indianapolis	73	---	858,314	---	150,000	90,000	---	---	---
New York and Harlem.	138	6,717,100	4,069,769	8,758,203	520,183	135,754	---	---	Terre Haute and Ind.	73	974,800	604,356	1,502,166	287,512	189,702	10	---	---
Northern, N. Y.	114	1,633,022	4,068,874	5,707,714	126,540	59,982	---	---	Chicago and Rock Is'd.	182	3,147,500	2,387,156	6,214,152	In progr.	---	---	---	---
Oswego and Syracuse.	35	399,000	216,681	723,683	In progr.	---	---	---	Chicago and St. Louis	220	---	---	1,077,312	---	---	---	---	---
Pottsdam and Watertown.	29	407,200	294,189	740,683	241,313	82,600	---	---	Chicago, Burl. and Quincy	138	1,475,300	1,811,557	2,761,429	722,580	379,821	20	---	---
Rensselaer & Saratoga.	25	610,000	140,000	890,423	71,909	21,089	---	---	Chic. St. Paul & F'd do Lac.	178	2,300,000	1,325,000	3,025,000	---	---	---	---	---
Saratoga and Whitehall.	48	500,000	395,000	---	159,545	22,503	---	---	Galena and Chicago	298	4,334,800	1,189,304	6,866,263	1,506,710	942,231	17	112	---
Syracuse & Binghamton.	80	763,399	1,578,804	2,272,777	404,374	172,474	3	125	Illinois Central	627	2,271,050	10,416,392	20,374,446	1,532,118	527,962	---	---	---
Troy and Boston.	27	437,830	737,079	1,109,522	159,363	55,184	---	---	Peoria and Onawa	93	669,889	818,544	1,388,342	In progr.	---	---	---	---
Watertown and Rome.	67	1,870,878	700,979	2,068,063	404,374	172,474	3	125	Ohio & Miss. (West Div.)	147	1,780,295	3,292,403	4,870,686	Recently opened.	---	---	---	---
Bulverde Delaware.	64	1,500,000	1,619,000	2,619,000	2,017,127	961,941	12	---	Terre Haute and Alton	178	2,351,420	1,256,000	3,537,424	In progr.	---	---	---	---
Camden and Amboy.	94	3,000,000	11,407,200	8,636,623	2,017,127	961,941	12	---	Detroit and Milwaukee	185	638,000	1,128,964	1,960,969	In progr.	---	---	---	---
Camden and Atlantic.	80	399,320	1,522,131	1,729,642	122,417	60,980	---	---	Mich. Central	282	6,032,441	5,998,013	10,685,152	2,215,283	879,656	10	96	---
New Jersey.	30	3,452,850	690,000	4,310,111	801,514	500,747	10	121	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	96	---
New Jersey Central.	63	2,000,000	2,296,176	3,083,149	393,728	171,606	---	---	Green Bay, Mil. & Ch.	155	764,074	442,726	1,193,765	In progr.	---	---	---	---
Morris and Essex.	53	1,167,893	375,000	1,636,550	225,896	102,474	---	---	Milwaukee and Miss.	109	1,826,428	2,677,889	3,578,757	691,843	417,443	17	83	---
Alleghany Valley.	44	1,637,867	344,564	1,983,319	219,533	62,450	---	---	Milwaukee & Water'n.	72	354,861	132,000	484,238	In progr.	---	---	---	---
Cataw. Wil. & Kri.	63	1,700,000	1,940,000	3,640,000	431,781	64,994	---	---	Milwaukee and Horicon	15	554,200	---	854,109	In progr.	---	---	---	---
Cumberland Valley.	56	1,099,500	12,211	1,191,833	140,381	66,994	---	---	Milwaukee & La Crosse	51	1,361,832	532,131	1,883,963	In progr.</				

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$888,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	85	
Buffalo and State Line	600,000	Do. inconvertible	7	April, October	"	1866	97 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1866		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	79
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1866		
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	86	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	92 1/2	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	80	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	80	
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	88 1/2	
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	80	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	76
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863		90 1/2
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875		80
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		80
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	95	97 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88 1/2	90 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	91	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		90
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		82 1/2
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61		85
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866		85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	82 1/2	
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	80	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	100 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100 1/2	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N. Y.	1862		98
Do. do.	650,000	Do. 2d do. 1868	8	April, October	"	1863		97
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88 1/2	89 1/2
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1868	8	May, Novemb.	"	1864-75		95
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		90
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		96
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		96
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96 1/2	
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N. Y.	1875		85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		80
Stenhouseville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		98
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	78 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	73	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1865		84
Do. do.	1,128,500	Do. do.	6	Jan'y, July	Balt.	1875	87	
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N. Y.	1870	96	97
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96 1/2	97
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	92 1/2	94
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	90 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	83 1/2	83 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	88	
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	90	92
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67 1/2	67 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87	87 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1860	92	92 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	93	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	82	86
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	82	83
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	93
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83 1/2	84
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	86 1/2	87
Do. do.	3,000,000	No m'ge conv. from June 57-69	7	15 June, 15 Dec	"	1864	102 1/2	103
Panama, 1st issue	900,000	Convertible till 1866	7	Jan'y, July	"	1866	101	103
Do. 2d do.	1,478,000	Do. till 1868	7	Jan'y, July	"	1866	101	103
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	92 1/2
Do. do. 1849	3,468,000	Do. inconvertible	6	April, October	"	1870	82	83 1/2

CITY SECURITIES.	Int'l payable.	Off'd	Asked	CITY SECURITIES.	Int'l payable.	Off'd	Asked
New York, 7 per ct. 1857	{ Feb'y, 100 May, 101 August, and November, 94	100	101	Milwaukee, 7 per ct. coup. -----	X	Divers -----	87 88
Do. 5 do. 1858-60		94	95	New Orleans, 6 per ct. cp. R.R. X	Do. -----	75 80	
Do. 5 do. 1870-75		94	95	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July -----	80 83	
Do. 5 do. 1880		94	95	Philadelphia, 6 per ct. 1876-98	Jan'y, July -----	91 92	92 93
Albany, 6 per ct. coup. 1871-81	X Feb'y, August.	97 1/2		Pittsburgh, 6 per ct. coup. -----	X	Divers -----	73 74
Alleghany, 6 per ct. coup. -----	X Jan'y, July	97		Quincy, 8 per ct. coup. -----	X 1868	Jan'y, July -----	
Baltimore, 6 per ct. 1879-90	Quarterly, 97	98		Racine, 7 per ct. coup. -----	X 1873	10 Feb'y, Aug -----	85
Boston, 5 per ct. coup. -----	X April, October.	98		Rochester, 6 per cent. coup. -----	X	Divers -----	95
Brooklyn, 6 per ct. coup. Long	X Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long	X	Do. -----	78 79
Clev'Pd, 7 per ct. cp. W. W. 1879	X Do. do.	101 1/2		Do. do. Municipal. -----	X	Do. -----	79 1/2 80
Cincinnati, 6 per ct. coup. -----	X Divers	89	90	Sacramento, 10 p. ct. cp. 1862-74	X	Do. -----	78
Chicago, 6 per ct. coup. 1873-77	X Jan'y, July	90	90 1/2	S. Frisco, 7 p. cp. 1865, pay N. Y. X	May, Novemb. -----	80	
Do. 7 per ct. coup. 1880	X Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. -----	X 1871	Do. do. -----	96
Detroit, 7 per ct. cp. W. W. 1873-78	X Feb'y, August.	100	102	Do. 10 do. pay N. Y. -----	X	Jan'y, July -----	104
Des Moines, 8 per ct. cp. Long	X March, Sept.	101	105	Do. 6 per ct. pay N. Y. 1875	X	Do. do. -----	67 1/2 69
Jersey City, 6 per ct. cp. W. W. 1877	X Jan'y, July	94	97	Wheeling, 6 per ct. coup. -----	X	Divers -----	67
Louisville, 6 per ct. cp. 1880-83	X Divers	79 1/2		Do. 6 p. ct. cp. Mun. 1874	X	March, Sept. -----	80 81
Memphis, 6 per ct. coup. 1882	X Jan'y, July	70		Zanesville, 7 do. -----	X	April, October -----	97

Cincinnati Stock Sales,

By HEWSON & HOLMES.

For the week ending May 21st, 1866.

BONDS.	45 (4 cent.)
\$5,000 Ohio & Miss. 7 per ct. 2nd Mort.	45
5,000 Cov'g & Lex., 7 per ct. 2nd Mortgage	65
1,000 Marietta & Cin., 7 per ct. Income	85
3,000 Little Miami, 6 per ct., 1st Mort.	80
3,000 Ohio and Miss., 7 per ct., 1st Mort.	65
2,000 Cin., Wilm. & Zanesv., 7 per ct. Income	85
600 Cin. and Chic., Coup. 10 per ct. Real Estate	60
350 Ohio and Miss. Coup. 2d Mortgage	100
STOCKS.	
400 Shares Ohio & Mississippi	8
35 " " "	8 1/2
180 " Cin. & Chicago	6
300 " Mad River and Lake Erie	15
100 " Little Miami	50
100 " Cin., Harrison and Indianap.	8
26 " Dayton & Western	20
20 " Cin., Ham. and Dayton	62 1/2
18 " Columbus and Xenia	56
124 " Peru and Indianapolis, 60 days	15
40 " Indiana Central	47
30 " Bellefontaine & Indiana	42
11 " Cin., Ham. and Dayton	62
42 " Ohio Central	12 1/2

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 28th inst.

[TRANSLATED.]

NEW YORK, Tuesday, May 27th, 1866.

The general feeling in our market is more satisfactory. The conciliating tone of the last dispatches of the English Minister to the United States Government, published the day following our advices of the 19th inst., has dispelled apprehension on that score, and our stock market, favored besides by a more decided ease in money imports, immediately improved. The advance in prices has been general; but the rise is especially marked, and without exception, on the railroad stocks, as may be seen in our subjoined table of daily quotations. Operations, nevertheless, are limited within very moderate bounds. The favorable tenor of the news from Liverpool (to the 14th inst., received to-day) has given more decision to the improvement already existing.

City and County Bonds have somewhat recovered from their previous entire inaction. There have been sales of San Francisco 10s at a small advance, and also a retail demand for Des Moines and Henry counties, (Iowa,) and for some of the Kentucky county bonds.

DE COPPET & CO.

Marie & Kan's Money Circular for the European Steamer of the 28th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, May 27th, 1866.

Our last advices were of the 19th inst. Since, the market has evinced a general improvement, the fears of any serious difficulty with Great Britain having nearly disappeared, notwithstanding the almost certain dismissal of the British Ambassador, which now seems to have been resolved upon for mere personal reasons. A marked increase in the supply of money and the heaviness in the rates of foreign exchanges have likewise created a better feeling, which has shown itself in a livelier demand for investment as well as speculative stocks; the rise, especially on the latter, is from 1 to 3 per cent., and the market, assisted by the very favorable weekly exhibit of our banks, and the more encouraging European news received this morning per Baltic, closes with considerable firmness.

State Stocks—Firm without much activity. Virginia advanced 1/4, Missouri 1/2, Louisiana 1 1/2, Indiana 1/2, while California 7s sold at a decline of 1 per cent.

City and County Bonds.—The demand for foreign account shows a trifling increase, but still is of a mere retail character.

MARIE & KANZ.

Mobile and Girard Railroad.

We are pleased to learn that the work on this important line of railroad is progressing satisfactorily under the Presidency of Mr. John H. Howard. The cars are now running to Colbert. The grading is nearly completed to Enon depot, and an efficient force is now at work laying down the su-

perstructure. Nine car loads of iron have recently come to hand. By the 1st of October, the cars will be running to Enon, and by the 1st of Jan'y, to Union Springs. During the current season, 20,000 bales of cotton have been shipped over the road. It is the opinion of well informed persons, that the receipts of cotton next winter will reach 50,000 bales.—*Columbus (Ga.) Times.*

American Railroad Journal.

Saturday, May 31, 1856.

Grants of Lands for Railroads.

Extensive grants of lands to aid in the construction of railroads have been made in the States of Iowa, Florida, Alabama, Michigan and Wisconsin. Further grants will probably be made to some of the Territories.

The number of miles of railroad to which the grants apply will probably exceed 5,000, calling for about 20,000,000 acres. The greater part of the lands are very valuable and may be mostly selected on the lines of the respective roads.

The result will be to give us within about three years some 5,000 miles of railroads, that would otherwise not have been immediately built. These, in addition to the roads constructed entirely by private enterprise, will add within three or four years some 10,000 miles to the roads already in operation. Notwithstanding, therefore, the altered state of feeling in reference to railroads, their construction will be pushed forward without any abatement for several years longer. As soon as the grants are all made, we shall give a list of them, and the probable amount of land that will be called for.

The Locomotive.

No. 3.

By THEODORE KRAUSCH, Civil and Mechanical Engineer.

The size of the boiler is especially limited by the heating surface; but the proportion between steam and water space has an influence. The water space covers all the fire surface, and an extra quantity of water is required to diminish the variations of the temperature of the water, and of the water line by feeding water. The proportion between the steam and water space is a matter of importance: if the water space is too large in regard to the steam space, water will be drawn away with the steam, and great variations of the steam pressure, and loss of effective power will be the result. On the other hand, if the steam space is too large in regard to the water space, then there will be great difficulty in raising a constant and a sufficient steam pressure; and every little matter, as firing or feeding water, will affect extremely the steam pressure.

At present the following proportions are used: the steam space is equal to 0.4, and the water space 0.6 of the whole boiler space.

The size of the boiler, we said, depends on the quantity of steam consumed per revolution; but the common consumption of steam is almost always less. Engines with variable expansion only admit steam 4-5ths of the piston's travel, and such, with variable expansion, operate often by $\frac{1}{2}$ or 2-5ths closing, and still with steam of less density. The speed of the locomotive has great influence in these respects; the draft increases with it. When the engine is not in motion, no steam is consumed, but still generation going on, though only about 8 times less than when running. Similar

is the result when the regulator is partly or entirely shut (which arises from the graduation of the road); the steam escapes with less force.

The power of evaporation, therefore, can only be calculated for a certain standard. Low or high pressure has no effect on the power of evaporation; because one pound of steam requires about an equal degree of heat, but the same quantity of steam (especially if the pressure of it varies, or if it be working more or less expansively) shows a very different theoretical effect; therefore it is clear that the practical effect varies with equal power of evaporation. Now we come to examine the boiler with regard to its necessary constitution. The thickness of the iron is, in this case, the main point. Let us see what are the effects upon the boiler. First, the pressure of its own weight; second, the weight of water; third, steam pressure; fourth, irregular delivery of steam; and fifth, concussions.

An engine like the above requires a boiler of the largest size; and as to the effect of pressures, the following may explain: The quantity of water amounts to about 68 cubic feet, a weight equal to 4122.36 lbs.

The pressure of steam per sq. inch averages 100 lbs. when the pressure of the atmosphere is subtracted.

The cylinder part of the boiler has, then, in the aggregate to resist a pressure of 1,959,504 lbs. The steam pressure per sq. ft. amounts already to $100 \times 144 = 14400$ lbs. about 7 1-5th tons. The pressure upon the crown sheet ($4' \times 4'$) is equal to $16 \times 14400 = 230400 = 111$ tons. To use a theoretical rule for calculating the thickness of the boiler iron would not be advisable, but I mention here one that has proved itself very satisfactory in practice. Radius of cyl. part of boiler in inches, multiplied by steam pressure per sq. inch, the product being divided by the cohesiveness of sheet iron (9000).

The weight of boiler and its water is very trifling, of course, in comparison to the enormous effect of the steam pressure upon the boiler.

Knowing now how steam of 100 lbs. pressure per sq. inch affects the boiler, let us find the power which arises from such steam. If the diameter of cylinder is 20 in., the area of both pistons amounts to 628.32 sq. inches; consequently the pressure upon both pistons $628.32 \times (100 \text{ lbs. pressure per sq. inch}) = 62832$ lbs. loss by friction of piston, &c., &c. = $62832 \times 70 = 439824$ lbs., and the speed of piston amounts to 10 ft. per second, the theoretical effect = 439824 bs., or when divided by 550 = 799 horse powers.

The consumption of water in locomotive boilers proceeds very rapidly; the quantity of water consumed (in a given time) is much greater than in stationary boilers of equal proportions. This circumstance would lead us to suppose that arrangements would be made for a constant, regular supply of water, but such is not the case; and indeed to the advantage of engine drivers, they regulate the supply of water and fuel, and through them the production of steam.

Two pumps are applied for the supply of water to the boiler, each of which is able to feed the boiler to an over-plus. The diameter of pump plunger, generally used, is found by dividing the diameter of steam cylinder by 9. The quantity of water received per stroke, by the above pro-

portion, is proportioned to the quantity of steam, which one cylinder contains; about 1 : 160. The reason for such a proportion is the loss attendant upon the fast operation of the pumps.

Let us see what effect the pumps exert upon evaporation. The pumps are in action, supplying thus cold water; the temperature of the water in the boiler is lowered through this; consequently the steam pressure is affected in like manner, and of course the more, the smaller the volume of water in the boiler. The action of the pumps is stopped, as soon as the production of steam is not greater than the consumption, and are they put in action again, when the production is greater than the consumption.

The act of supplying fuel diminishes the pressure of steam; because cold air is drawn through the fire-door into the fire-box and through the tubes; the consequence is the same as that occasioned by feeding cold water; therefore the pumps are customarily stopped a short time before, and kept stopped for a short time after the supply of fuel is made.

From the foregoing facts, in regard to feeding, we learn that greater intelligence and observation must be exercised in the government of a locomotive, than a stationary engine.

New Bridge Projects.

The success attending the Rock Island Bridge, has drawn public attention towards various other projects of the kind. Among these the most prominent may be considered one across the Mississippi at St. Louis, and another across the Ohio at Louisville. Books of subscription to the latter work, we understand, have recently been opened in that city. No payments are required till after \$300,000 have been subscribed; and then but 20 per cent. every six months. It is stated that Indiana will be good for half the above amount.

Texas and Her Railroad Policy.

A correspondent, well posted up in Texan financial matters, writes us in reference to an article which appeared, on the above subject, in the *Railroad Record*, in its issue of the 12th inst. The article in question stated that, among the plans proposed for the construction of railroads, one contemplated the loaning of State bonds to the various companies for so many thousand dollars per mile, in the same manner as has been done by the State of Tennessee; while another, called the *State plan*, is "for the State to make the railroads."

We are assured that there is not, and never has been, before the people of Texas, any proposition whatever to loan her bonds to railroad companies; that she cannot legally issue bonds for any purpose, without a change in her Constitution; and that the people of Texas are opposed to the creation of a single dollar of indebtedness; it being their great boast, that the State is free from debt—a circumstance which has proved very beneficial in drawing a large emigration within her limits.

The nature of the "Loan Bill" is this: Texas has between two and three millions of dollars (set apart to Public Schools) invested in United States five per cent. stock, the interest alone being used for educational purposes. The advocates of the loaning policy wish the State to authorize the investment of the School Fund to be changed from

United States five per cent. stock to railroad bonds, bearing six per cent. interest, the roads being all within her own borders. As the State Constitution also requires one-tenth of the State taxes to be devoted to Public School purposes, a large increase to the School Fund will take place—not merely from the interest, but also from the increase of taxable property of every description. The measure, it is contended, would be mutually advantageous; the School Fund assisting the construction of railroads; and the latter increasing the value of property, and consequently the amount required to be appropriated for educational purposes.

The project appears to us eminently proper.

Manufactures of Troy, N. Y.

Few locations enjoy the advantages for manufacturing purposes, that are possessed by the City of Troy. At the head of navigation on the Hudson, intersected by railroads that place it in easy communication with the whole country, at the outlet of the Erie and Champlain Canals; on the edge of one of the finest lumber districts in the country, possessing an almost illimitable water power, it would indeed be surprising, if with a population of any character whatever, we did not observe a rapid development of manufacturing enterprise. And when it is remembered that much of its settlement is of New England origin, who have brought the Yankee constructiveness into the State with them, we look for all the productiveness we find.

The site of the city proper being contracted to a narrow space between the hills and the river, the enterprise of the place has found means to enlarge its borders by bridging the stream so as to bring in the extensive area of a level island and the shores of the opposite side. By this means, not only is room gained, but the trans-shipment of railroad passengers and freight is avoided.

The water power of Troy embraces the Wynantskill creek on the South, comprising twelve mill sites; the Poestenkill creek on the East, ten sites; and a considerable amount of power from the waters of two or three tributaries to these streams; in addition to which is that gained by dam across the Hudson river on the North.

The population of Troy is a trifle over thirty thousand. Last year, one of great depression in monetary matters, they produced ten million dollars' worth of manufactured articles besides paying half a million for the wages of mechanics engaged in the common incidental work for the town. This does not embrace the supplies of the community except to a very limited extent in the last item.

Articles designed for railroad use were manufactured to the amount of nearly four millions, of which the Albany, Troy, and Rensselaer Iron Works made two millions worth. One of the most extensive car and coach manufactories in the country is located here, that of Eaton, Gilbert & Co.; and the celebrated establishment of Stanley & Co. for the manufacture of car wheels.

Engineers' and Surveyors' Instruments are made probably more extensively in Troy than in any other part of the country.

The Messrs. GURLEY, who own these works are at this time employing over thirty men in their construction. Their machinery is driven by an engine of 25 horse power, a superb piece of work

put up by the Messrs. STORRUCK, and similar to the instrument in use of the assay buildings in this city.

They make use of six pocket furnaces in the foundry with the necessary complement of coal and metal bins. Their work is all taken from the foundry to the lathe without the use of the file. They keep 30 lathes busy with a planing machine, a tube drawing machine with arbors and dies of from $\frac{1}{2}$ inch to 4 inches; an engine for cutting racks and pinions; wire cutting and straightening machine for making surveyors' chains; and a dividing engine, besides the necessary steam-bakers for lacquering and the forges.

The comfort of the workmen is well provided for; and the Messrs. Gurley have secured the best means for enlisting in the interest those who are in their employ.

Delaware, Lackawanna and Western Railroad.

The celebration attending the opening of this road took place on Tuesday last. At 8 $\frac{1}{2}$ o'clock, A. M., a train containing about 150 invited guests on board started from Elizabethport. Crowds had collected at the various stations along the line to express their satisfaction on the occasion. At Staunton the party were received amid the firing of cannon and the hurrahs of thousands of spectators. A magnificent dinner was served up in the evening, at the "Wyoming House," followed by addresses from Judge Jessup, President of the Lackawanna railroad; Judge Porter, Judge Reynolds, President of the Lackawanna and Bloomsburgh, Messrs. Brisbane and Dodge of the Delaware, Lackawanna and Western, Messrs. Baldwin and Murray from the Syracuse and Binghampton road, Mr. Blair of the Warren road in New Jersey, Mr. Gale from the Cayuga and Susquehanna, Mr. Johnson from the New Jersey Central, Mr. Jackson from the New Jersey, Mr. Sloan from the Hudson River, Mr. Scranton, President of the Lackawanna Coal Works, Mr. Joseph Scranton, and Mr. J. J. Phelps. The party broke up about 12 $\frac{1}{2}$ o'clock.

On Wednesday morning, a committee consisting of Messrs. Vermilyea, Butler, Jackson, and Thompson were appointed to present resolutions expressive of their interest and enjoyment on this important occasion, in view of the opening of this great channel of communication with the Lackawanna coal fields.

The Committee reported the following resolutions, which were adopted with enthusiastic applause:

Resolved, That we have viewed with the greatest interest the magnificent and solid works which connect New York with a coal field of Pennsylvania of 200 square miles in extent, and containing a supply of coal equal to 25,000 tons per acre, and which cannot be exhausted in centuries.

Resolved, That the gratitude and thanks of the community are eminently due to the companies for the wisdom which planned their great avenues of transportation, and for the energy displayed in their completion, and for the skillful and successful adaptation of the Central Railroad of New Jersey to such connections and intercommunications with the Warren Railroad, and the Delaware, Lackawanna and Western, as will enable these roads to co-operate in the great business of transportation, and thus realize the large results so confidently and justly anticipated by the patriotic projectors of these important works, and by the public.

Resolved, That, as guests of the Delaware, Lackawanna and Western Railroad, we offer the Company our sincere thanks for the pleasure afforded us on this occasion, on which we have had high speed, with entire safety, with the opportunity of observing the costly viaducts and tunnels of these roads; of inspecting the various mines; of seeing the celebrated Delaware Water Gap and the Falls of Roaring Brook, and the extensive and picturesque views from the summits of the Pocono Mountain, with the other scenery of unrivalled grandeur in New Jersey and Pennsylvania.

The value of the above road can hardly be overrated. It is the first work to maintain uninterrupted communication in the winter season between New York and the coal fields, upon which a community of over one million of people are entirely dependent for fuel. The road also forms an important link in a great line of communication between New York and the Lakes. It also opens to this market a rich and extensive agricultural portion of Pennsylvania. From the kinds of business above named, there would seem to be no doubt of the value of the road as an investment, and none but that it will prove a most valuable auxiliary to the business of the city.

Attention is asked to the cards of KASSON & SON, which appear in another column.

The Industry of Massachusetts.

An abstract of the statistical information collected in accordance with the law of 1855, has recently been published, from which we learn that the value of the cotton manufactures of all descriptions last year was \$26,140,538, including calico, \$5,213,000, and bleached and colored goods, \$5,111,200. The total woolen goods are valued at \$12,105,514, including carpeting, \$1,362,819, and worsted \$1,448,740. The linen manufacture was \$1,440,000, and the silk, \$300,000. Among the iron products, we notice rolled and slit iron and nails, \$5,512,816; anchors, chain-cables, &c., \$915,840; and iron castings, \$8,256,538. Turnings to tools, &c., we have steam engines and boilers, \$3,255,000; machinery, \$489,500; edge tools and cutlery, \$1,200,279; tacks and brads, \$621,212; agricultural implements, \$1,658,495; iron railing fences, and safes, \$655,400. The manufacture of copper amounted to \$1,685,500; of brass articles \$1,504,050; of glass, \$2,648,125; of chemical preparations, \$1,124,765; of paper, \$4,141,847; of musical instruments, \$2,295,680; chronometers, watches, and jewelry, \$2,105,200; saddles, harnesses, and trunks, \$1,220,049; upholstery, \$1,876,800; hats and caps, \$1,926,105; cordage, \$2,478,410. The vessels and boats built were valued at \$4,773,611. There were built railroad cars and other vehicles worth \$2,352,955. The sugar refined was \$2,056,439; sperm oil and candles made, \$6,818,291; soap and tallow candles, \$7,720,533; chairs and cabinet ware, \$3,969,982; tin ware, \$1,451,240; white lead and other paints, \$910,190; leather tanned and curried, \$10,934,416; patent and enamelled leather, \$1,271,942; boots and shoes, \$37,489,923; bonnets, hats, &c., \$4,905,533; bricks, \$2,267,165; building stone, \$1,585,213; mechanics' tools, \$1,142,614; whale oil and bone, \$7,766,966. The last is the only article which shows a decrease in the amount produced, as compared with 1845. The decrease is about \$2,600,000.

We have in the above given only the chief

branches of the manufacturing industry of Massachusetts. Some of the principal agricultural productions were—

Sheep and wool.....	464,889
Horses, oxen, cows, and calves	15,423,521
Butter, cheese, and honey.....	2,161,845
Corn, Indian and broom.....	3,061,731
Rye	560,201
Barley.....	110,158
Oats.....	573,729
Potatoes	2,521,906
Onions.....	187,446
Turnips	116,351
Carrots.....	148,041
Beets.....	484,568
Other grain and root crops	286,202
Hay.....	8,702,317
Apples, pears, &c.	1,315,241
Cranberries.....	135,199
Swine	581,536
Milk.....	755,887
Poultry and eggs.....	52,688
Ice.....	693,100

The aggregate product is \$295,826,681, against \$124,735,264 in 1845, and \$86,282,616 in 1837. The total capital employed was \$120,693,258, against \$59,145,767 in 1845. The persons employed were 245,208, against 152,766 in 1845. In the aggregate product, however, it should be stated that many articles have been enumerated twice or oftener. For example, the same article may be included,—1st, in live stock, 2nd, in leather, and 3rd, in boots and shoes. In like manner, iron, copper, brass, &c., have been included in steam engines. Against this, on the other hand, it should be stated that many branches of industry have been omitted; while others have been rated below the reality. We can only arrive at comparative results at the best; but view it as we may, the industry of Massachusetts may be fairly regarded as a model to the world, in its extent, its progress, its variety, and the skill and intelligence requisite for conducting it. Let it be borne in mind too, that this is not concentrated at one or two points merely; but is scattered through every county and village in the State, as will be seen from a statement of the production by counties, in 1855, which was as follows:

Barnstable, \$3,092,442; Berkshire, \$12,756,264; Bristol, \$29,328,474; Dukes, \$762,232; Essex, \$39,848,019; Franklin, \$5,038,250; Hampden, \$12,120,444; Hampshire, \$7,022,878; Middlesex, \$58,205,633; Nantucket, \$1,608,800; Norfolk, \$24,244,054; Plymouth, \$12,884,702; Suffolk, \$48,188,956; Worcester, \$40,719,627.

East Tennessee and Virginia Railroad.

We had the pleasure, says the editor of the *Abingdon Virginian*, of a short ride on this new railroad last week—from New Market to Knoxville, and back again—and were highly delighted with the speed and accommodation of the cars, and with the beautiful scenery of the New Market Valley and the wild hills of Holston. We were not acquainted with the conductor, Mr. Joseph Sevier, but saw at a glance that he was kind and attentive to passengers, cautious and careful in the management of the train, and withal communicative and obliging to all who approached him. The cars are by this time, we presume, making regular trips as far as Col. Talbert's, some 33 miles East of Knoxville; and those who seem to know confidently anticipate reaching Russellville—30 miles East of Knoxville—by the 1st of July. This will leave a gap of about 75 miles between Bristol and Knoxville,—or rather all the gap between the Northern and Southern cities. This gap, it is hoped, will be filled up the coming year. In the meantime, the stage lines of Summerson, Kent &

Co., under the management of Mr. Wm. Gilliam, are an excellent substitute. They have good stock and careful drivers, and take passengers through with a rush entirely unknown to old time staging.

Railroads in South America.

It is only of late years that the attention of South American Governments has been turned to the subject of Railroads. If we are rightly informed, there are but two States in that portion of our Continent where the locomotive is now in use, viz: Chili and Brazil. But the Argentine Confederation and the State of Buenos Ayres, possessing the most magnificent countries for Railroads in the world, are making earnest preparations to take their place in the list of nations whose great resources are developed by means of the iron horse.

Brazil, carrying out her monarchical predilections, applied to English engineers to construct a short Railway from Rio de Janeiro to Petropolis; but the liberal Government of Chili, aiming to copy the example of the United States, and to imitate as much as possible the truest American energy and progress, turned her attention to our own State, and selected one of our most talented civil Engineers, Mr. Allan Campbell, son of Hon. Archibald Campbell, late Deputy Secretary of State, to take charge of the survey and construction of the Copiapo Railroad, the first work of the kind ever constructed south of the Equator. This road extending over fifty miles, from Caldera, on the Pacific, to Copiapo, in the interior, was completed in about eighteen months, and was subsequently extended into the river mining regions beyond.

The success of this first railway enterprise, induced the Chilean Government to assume the construction of a road, one hundred and ten miles in length, from Valparaiso to Santiago, a vast work, which traversed a spur of the Cordilleras. The surveys and location of the road were entrusted to Mr. Campbell, and under his superintendence the construction was commenced by the Government. It finally passed into the hands of private capitalists, and is now verging towards completion, according to Mr. Campbell's plans and specifications.

About two years since, after having surveyed the routes for several other projected lines in Chili, Mr. Campbell was invited, through an agent dispatched by the Argentine Republic, to make a reconnaissance for a railroad, between the Atlantic and Pacific oceans. Next to the Panama Railroad, a railway connection such as this must be considered one of the most important enterprises in the world. Not only would it do away with much of the dangerous navigation around Cape Horn, but would provide a safe and speedy means of transit for the vast productions of this portion of our continent to the Atlantic seaboard. At the present day, all the hides, wool, horns and tobacco, that form the principal staple exports of the Argentine Confederation, are brought hundreds of miles in ox carts, consuming months in the journey, and greatly enhancing the cost of the articles by the difficulty in getting them to market. The proposed termini of the Argentine Railroad, were Valparaiso, on the Pacific, and Rosario, an important town on the Parana River, some eighty leagues above Buenos Ayres, with which capital it is in constant communication by means of steamers. The line of a railroad from Valparaiso to Santiago, was one of those which had already been surveyed and located by Mr. Campbell, by direction of the Chilean Government, and was then being constructed. The road proposed by the Argentine Government was intended to connect with this. Mr. Campbell accepted the invitation thus tendered, and immediately entered upon the examination of the proposed line.

We have before us the result of his labors in an elaborate report presented by him to the Argentine Government last fall. It is a document which displays the greatest research, and the most indefatigable and able investigation. In the prosecution

of his survey he crossed the Andes three times: three times he traversed the whole Southern continent, undergoing the greatest hardships and dangers, and his explorations extended for the most part, through routes and passes never before visited.

In his report, Mr. Campbell states the whole distance from Valparaiso to Rosario to be 850 miles, and that a railroad is practicable for the entire distance, except for about 70 miles at the passage of the Andes, where it would be necessary to construct a wagon road. The elevation of the summit of the pass is 12,500 feet, but the railroad could be carried up on each side to a height of seven or eight thousand feet. The country, from the Eastern foot of the Andes to the Atlantic coast, a distance of five or six hundred miles, is one vast pampa or prairie, and a road could be built over it at small cost. The expense of the whole work, (including the wagon road over the Andes,) was estimated by Mr. Campbell at thirty millions of dollars, but he wisely discouraged the government from attempting at the present time to accomplish this gigantic undertaking which he justly conceived to be entirely beyond the means and wants of the country. He, however, pointed out a line between Rosario and Cordova as well adapted to the construction of a railroad, both by the character of the country and the amount of traffic already existing there, which line may at a future day be extended to the foot of the Andes. Mr. Campbell's suggestion was adopted by the government, and he was appointed to make the necessary surveys, which duty he accomplished in conjunction with his brother Mr. Alexander Campbell.

The custom of the early Spaniards of establishing their colonies far inland, whether arising from a sense of security, or from the inviting fertility of the soil, has left in the Argentine Country numerous settlements very remote from a market which is now reached only by long and expensive land carriage over the Pampas to the Parana river, or by a toilsome passage of the Cordilleras to the ports of other nations on the Pacific. The interior provinces of Cordova, Santiago, Tucuman, Salta, Jujuy, Rioja, Catamarca, San Juan, San Luis and Mendoza, containing in the aggregate 600,000 souls, are all in this condition. Cordova, the most accessible of all, is yet by the circuitous roads of the country more than 100 leagues distant from a market,—while the more remote, Mendoza, San Juan and Salta, lie from 200 to 300 leagues from those of Chili, Bolivia and Peru, from which they are also separated by a chain of mountains, from twelve to sixteen thousand feet high,—even at its lowest passes. Of the City of Cordova, Mr. Campbell thus speaks in his report:

"The City of Cordova, selected as the inland terminus of the railroad, lies in thirty-one degrees, twenty-six minutes south latitude, and is the centre and capital of the Province of the same name, the most populous and wealthy of the confederation. The Province now contains about 150,000, and the City 20,000 inhabitants. The latter is a place of considerable commerce, receiving the products of, and furnishing supplies not only to its own territory, but to some of the adjacent provinces. In the Sierra, a few leagues distant, are silver mines which have been worked for many years. These mines, though not rich, are very extensive, and being eligibly situated, it is believed they may be worked with profitable results. Copper is also found in the vicinity of Cordova, and some of the mines recently opened are now yielding favorable returns. The ore as yet discovered is not of a very rich description, but so abundant is the mineral, and such are the facilities for working it, that experienced and disinterested persons have given favorable opinions of these mines. There can be no doubt that the construction of a railroad would have a beneficial influence upon the mineral branch of industry.

"Cordova lies more than 100 feet below the level of the pampas, on the banks of the Primero river, a clear and rapid stream from which the low grounds of its valley are irrigated."

Rosario, the other terminus of the road, lies in latitude 32° 56' South, and stands upon the West shore of the Parana river, at an elevation of sixty-five feet above the water line. Vessels of large draft may lie close to the shore, there being a depth of from three to four fathoms, and in low water the natural advantages of loading and discharging are excellent. The following table exhibits the grades of the proposed road:

	Miles.
Level and under 3 feet per mile	60.08
From 3 to 5 feet per mile	31.06
" 5 to 10 "	60.21
" 10 to 15 "	36.83
" 15 to 20 "	22.58
" 20 to 25 "	13.11
" 25 to 30 "	5.83
" 30 to 35 "	6.02
" 35 to 40 "	4.07
" 40 feet per mile	7.14

Whole distance from Rosario to Cordova...245.93

Straight line, 240 miles; curved line, 7 miles. There is one single straight line of 81 miles, and another of 66 miles.

The cost of the road, Mr. Campbell estimates at only five millions of dollars, and on this subject he observes in his report:

"The sum of five millions of dollars (one million pounds sterling) or about \$20,000 per mile, may to those who are only acquainted with the costly roads of Europe, appear to be a low, perhaps an inadequate estimate; but when the facts in regard to this route are understood and considered, its efficiency will be acknowledged by all who are familiar with works of this character. Some of the important items which usually make up the greater part of the cost of railroads are here reduced to a very small sum. The land throughout the whole length of the road and at the stations is ceded, or furnished free by the government. There are but four miles of broken ground out of the 247, while for 200 miles the road follows the surface so closely as never to require more than three feet cutting and filling. There are but two bridges of any importance required, the three or four others not exceeding thirty feet span. Not a rock, not even a stone is encountered upon the route, and the cuttings are all in easy though firm earth. Although flat and smooth, the country is entirely free from swamps. As I have before remarked, there is probably no country of equal extent, where fewer physical impediments are met."

The Cart traffic between Rosario and Cordova now amounts to over half a million of dollars per annum, and when the railroad is built there is no doubt but that it will increase to a million. To stimulate foreign capitalists to embark in the construction of the road, the Argentine Republic, by a decree of the Executive authority, sanctioned by Congress, has granted free to any person or Company who will construct this road, the right of way throughout, all necessary ground at stations, and the land for half a league in width on each side of the road, or a strip of land seventy-five leagues long and one league wide, equal to seventy-five square leagues, or about 750 square English miles. This tract of land with a railroad running directly through its centre would possess considerable value, and so far would go to aid in re-implementing the stockholders.

So great an American work, planned and surveyed by an American Engineer, it would seem, should be constructed by American capital. But while these South American Governments acknowledge the superior value of our surveyors, they place their reliance for the execution of their projects upon English capital. An agent of the Argentine Government has already been dispatched to Europe to publish Mr. Campbell's report in London and negotiate for the funds wherewith to carry out the plans of the American engineer. There can be no doubt of the success of this agent; and though we should much prefer to see the Argentine country indebted not only to American genius for the design, but to American capital for the execution of this great enterprise, still we

cannot but rejoice that there is a prospect of its construction by even English means, as it will prove no small agent in civilizing those delightful and favored regions, and restoring order and tranquility to a country which has been incessantly agitated by revolutions for the last forty years.

Mr. Campbell has now returned home, and is at the residence of his father, Hon. Archibald Campbell, in Albany. The citizens of our Capital are not a little proud of their fellow who has gained himself so much distinction in South America. The Argentine presses speak of him only as the "very distinguished, able and illustrious American Engineer," and we trust he may be spared to carry out the great works he has planned, and demonstrate to these people that the executive talent of Americans is as well developed as their theoretical powers. Mr. Campbell's career in South America has been an honor to his country, and has done much to counteract a strong prejudice, that of late years has been growing up there against us.—*N. Y. Express.*

Railroads in New Brunswick.

With reference to the works projected in that Province, the *New Brunswick News* says:

"In answer to 'an Inquirer,' we have the best authority for stating that the Railway works will commence immediately after the Commissioners are appointed, about the 20th inst. Letters have been received from England authorizing the Government to draw for the first £50,000 as soon as they like, agreeably to the understanding entered into between the Delegates and the Barings, the latter having agreed to advance the money out of their own funds to the extent of £50,000 for this year's operations. The first work will be commenced or resumed at the Bend, and it is calculated that the branch will be completed before Christmas Day. Why not? Contracts are to be entered into in the Fall for commencing work on the St. John end of the line on the 1st of January next; the road will be let out in sections; and it is thought the line will be completed to Hampton Ferry by the end of 1857."

Lexington and Frankfort Railroad.

We have received a copy of the seventh report of this company, read at the stockholders' annual meeting on the 19th inst. The operations of last year have been on the whole satisfactory; the gross receipts showing an increase of \$2,272.89; and the working expenses a diminution of \$6,497.47. The amount of the former for the year ending 30th April last, was \$93,293.36, and that of the latter, \$49,628.15; leaving as net profits \$43,665.21. Hitherto the profits have been applied to construction purposes; but the road being completed, and its debts all funded, there has now, for the first time, been found a surplus on hand. Of this, there was applied in November last, to the Renewal Fund, recently created, the sum of \$4,604.71; and \$3,019.79 from the last six months' earnings. It is the design of the Board to apply in future \$4,000 semi-annually, for this purpose.—Such a policy will secure the punctual payment of the debt at maturity. From the balance of net earnings two dividends of three per cent. each have been paid, amounting to \$25,000. One per cent. of this, however, was from surplus of previous year, leaving five per cent. as the actual profits. Since opening the road, the sum of \$56,593.96 has been applied to construction from earnings. Two bonds, purporting to be executed by the Lexington and Ohio Railroad Co., and appearing to be secured by a mortgage on the road, have recently made their appearance quite unexpectedly. The aggregate amount claimed is about \$35,000. Payment is of course resisted, and a suit is now pending in court relative to the claim.

The earnings for last year were—

Passengers.....	\$46,878.14
Freight.....	42,895.86
Mails and rents.....	3,489.36
Total.....	\$93,263.36

Appropriated as follows:

Current expenses.....	\$49,628.15
Int. on debt.....	7,815.44
Nov'r dividend.....	12,896.52
Sinking, renewal, and contingent funds.....	8,604.71
	78,944.82

Balance.....\$15,318.54

GENERAL ACCOUNT.

To cash.....	\$22,760.09
Construction.....	637,071.93
Lon: rolling mill.....	145.53
Bi'lls receivable.....	1,644.94
Deferred interest.....	4,295.00
Telegraph stock.....	285.00
Real estate.....	3,389.22
Bonds receivable.....	5,000.00

\$674,591.71

Cr.

By stock.....	\$430,055.55
Fifteen year bonds.....	95,000.00
Ten year bonds.....	35,000.00
Bills payable.....	28,099.60
Sinking fund.....	4,000.00
Dividend No. 1.....	789.45
Dividend No. 2.....	407.07
Renewal and contingent fund.....	4,604.71
Stock profits.....	56,593.98
Profit and loss.....	20,041.45

\$674,591.71

Chicago and Galena Railroad.

The following table exhibits the monthly earnings of the Galena and Chicago Railroad Company in each month of the past fiscal years:

	1854-'55.	1855-'56.
May.....	\$119,395	\$214,106
June.....	123,874	222,554
July.....	97,858	185,920
August.....	104,122	210,966
September.....	149,770	262,320
October.....	184,851	312,371
November.....	146,496	237,832
December.....	111,201	145,398
January.....	96,367	97,174
February.....	73,887	93,100
March.....	127,880	127,492
April.....	174,908	193,000

Total.....\$1,506,710 \$2,310,333

The company's estimate for the fiscal year just closed was but \$2,000,000. The gross income actually exceeded that estimate \$310,333—or about fifteen and a half per cent. The actual net earnings of the Company during the last fiscal year will not vary much from the following:

May 1, 1856. Total gross receipts.....	\$2,310,333
Operating exp's, 40 pr. cent. \$924,133	
Int. on debt, Co's. estimate....	175,000
Two div'dns, 5 per cent. each.	470,000

1,569,133

Surplus, May 1, 1856.....\$741,200

Surplus, May 1, 1855.....315,754

Total surplus, May 1, 1856.....\$1,056,954

Scioto and Hocking Valley Railroad.

At an election, held in Portsmouth, Ohio, on the 21st inst., the following gentlemen were chosen officers of this road:

Directors—J. Riggs, O. A. M. Damarin, and G. Johnson, of Scioto; J. W. Laird, of Jackson; J. K. Will, of Vinton; F. Case, and J. Webster, of Hocking; E. A. Spencer, and W. J. Richart, of Perry.

E. A. Spencer, President; Geo. Johnson, Vice

President; Thos. Dogun, Treasurer; J. W. Collins, Sec'y; and T. Kendall, Supt.

Pittsburg and Connellsville Railroad.

The Philadelphia *American* makes the following statement as to the condition and prospects of this road:

The company owning this work contemplate putting under contract for construction that part of the eastern division of the road extending from the city of Cumberland, Md., to Meyer's Hills, in Somerset county, Pa., a distance of thirty-six miles. The contractors are said to be responsible men, and the terms favorable to the company, as the work is to be paid for in bonds of the city of Cumberland, a subscription of \$200,000 being secured therefrom, and in other securities at par, with a considerable proportion in the stock of the company. As regards the means of the corporation, they are said to be, in addition to the Cumberland subscription, \$200,000 in the hands of boroughs, \$404,000 in Allegheny county bonds, \$996,000 in its own bonds, guaranteed by the city of Baltimore, \$247,000 in uncollected individual stock subscriptions, and \$50,000 in cash. The floating debt amounts to \$591,000. The great tunnel at Sand Patch Summit, on the eastern division, is not quite half completed, but operations are progressing vigorously, and have been for two years past, \$100,000 having been expended upon it. This road will, when completed, form part of a new route between Pittsburg and Philadelphia, and will also be of much importance to Pittsburg and the southwestern counties of Pennsylvania.

Railroad Earnings.

The receipts of the various roads for April, as far as published, are:

	1855.	1856.
Baltimore and Ohio.....	\$336,711	\$512,250
Cleveland and Toledo.....	102,810	130,230
Cleveland and Pittsburgh..	40,500	51,134
Chicago and Rock Island..	117,785	132,220
Covington and Lexington..	15,577	26,577
Erie	506,597	613,670
Galena and Chicago.....	174,908	193,810
Hudson River.....	140,586	199,800
Illinois Central.....	113,444	190,320
Indianapolis and Cincinnati	31,193	40,792
Michigan Central.....	235,485	280,802
Mich. South and North Ind.	245,872	298,710
Milwaukee and Mississippi.	33,008	35,420
Macon and Western.....	27,052	29,772
New Albany and Salem...	62,874	66,302
New York Central.....	684,081	707,963
New York and Harlem.....	77,875	89,365
Pennsylvania Central.....	355,349	610,969
Reading	402,476	410,480

WATERTOWN & ROME R. R.

The earnings of the Watertown and Rome railroad for the month of April, 1856, were—

Passengers.....	\$13,753.45
Freight	16,696.07
Other sources.....	1,625.46

Total	\$32,074.98
April, 1855	28,723.35

Increase..... \$3,351.63

Immense Castings.

We learn, says the Philadelphia *Times*, of the 21st, that one of the two shafts ordered for the new Collins steamer *Adriatic*, recently launched at New York, has just been completed at the Reading Steam Forge. It is a monstrous mass of iron—its weight in the rough having been forty tons. When finished it weighed thirty-three tons. The other is now in the lathe, and will be ready for shipment to New York in a week or two. These shafts are said to be the heaviest work of the kind by ten tons, ever known to the United States or any other country. It is also stated that no other forge in this country has the capacity to manufacture such immense pieces of iron work. The time consumed in forging each of these shafts, was

twenty days, and eighteen days more were required to finish the first one in the lathe. In addition to this work, a pair of cranks, weighing sixteen tons each, in the rough, and twelve tons when finished, are now being made at the same establishment, also for the *Adriatic*. They are to have a stroke of twelve feet.

Thomaston and Barnesville Railroad.

We are gratified to learn that there is an undoubted prospect of the completion of this road during the present season. Mr. John D. Gray has the contract for laying the track. The cross-ties are already delivered, and a portion of the stringers. The iron is also on the way, and the means provided for its payment. When completed, it will, according to contract, be worked by the Macon and Western Railroad. This has been a great undertaking for the citizens of one county. But Upton is hard to beat in many respects, and the perseverance of her citizens in carrying out this work, is highly commendable, and we are much gratified that they will soon reap the reward their enterprise entitles them to.—*Sav. Republican*.

Brunswick and Florida Railroad.

The Brunswick and Florida Railroad is designed to save twelve hundred miles of the distance from New York to New Orleans and Mobile. It is also designed to avoid the exceedingly dangerous navigation through the South Florida Keys and the Gulf Stream. As a connection with the projected and very practicable Pacific Railroad, upon the El Paso line, it is an important work. It starts from the harbor of Brunswick in Georgia, (which is the best South of Norfolk, and has 13 feet of water upon its bar at low tide) and will run through Florida to the best harbor on the Gulf. Iron is already laid upon 14 miles of the road—the grading is finished for 26 miles—the iron for 32 miles is paid for and delivered upon the line—the bridge across the Satilla river is nearly completed—and the road progresses to its western terminus at the rate of half a mile a day. These facts give a guarantee that this truly National enterprise will be vigorously prosecuted to early completion—and success.

The influence of the road upon the value of real estate in Brunswick, was shown on the 15th inst. An auction sale of city lots of 25 feet front and from 60 to 150 feet in depth, brought that day the sum of \$89,425—an average of \$366.66 per lot, of the 234 lots sold. Gentlemen from all parts of Georgia and Florida were the purchasers. Among them, the Governor of the former State bought 14 lots as a site for a residence.

Directors of the Marysville and Benicia Railroad Company.

The following gentlemen compose the directory of this company: John C. Fall, S. C. Tompkins, George W. Plume, G. M. Hanson, M. Harbin, J. W. McCorkle, John A. Paxton, Chas. Lindley, G. W. P. Bissell, Thomas O. Larkin, Chas. B. Macy, H. A. Breed and B. W. Mudge.

Memphis and Little Rock Railroad.

The Little Rock *Republican* in its issue of the 13th, notices this road thus—

We mentioned last week the gratifying fact that the line of this road was definitely fixed and located. Since then, Mr. F. E. Whitfield, the agent of the road, has been here, and we learn from him that the line adopted gives entire satisfaction to the Company and all concerned. He informs us that it was the design of the Company to put the third division between this place and White river under contract at an early day. When this shall have been done, and our people see "gangs" of hands at work on the road, we have no doubt but that all the necessary pecuniary aid will be obtained without delay. We are all ready for the enterprise, so soon as proper assurances are given that the work will be consummated without delay. It is a work of vast importance and of vital interest to this community and is fully appreciated.

We learn from Mr. Whitfield that the resources

of the Company are ample to complete the first division of the road from Memphis to the St. Francis river, and they expect to have it in running order by the first day of January next. From the same source we learn that there are between four and five hundred men engaged in grading, track-laying, &c., on this division.

Evansville, Indianapolis, and Cleveland Straight Line Railroad.

The annual election of Directors and officers of this company, on the 2d inst., resulted in the choice of the following Directors for the ensuing year:

Henry D. Allis, Vanderburg county; John J. Chandler, Evansville city; John A. Reitz, Lamasco city; Jeremiah Smith, Winchester; James W. Cockrum, Gibson county; Alexander Leslie, Pike county; John C. Steen, Daviess county; Joseph Lyons, Green county; John H. Johnson, Owen county; Hannibal R. Stevens, Morgan county; Oliver H. Smith, Indianapolis.

The new Board was organized by the unanimous election of the following officers:

Oliver H. Smith, President; Henry A. Allis, Vice President; James Greene, Sec'y and Treasurer; and D. H. Kennedy, Chief Engineer.

Green Bay, Milwaukee and Chicago Railroad.

The annual election for Directors of this company (the Lake Shore railroad) was held on the 20th, and resulted in the choice of the following gentlemen:

Directors—Charles K. Watkins, C. B. Hall, J. W. Haskins, E. Button, J. T. Moody, Milwaukee; J. V. Ayer, Kenosha; E. F. Bishop, New York; J. W. Stewart, Bridgeport, Conn.; E. C. Scofield, New York.

The new Board subsequently organized, and re-elected the following officers:

President—C. K. Watkins, Milwaukee. Vice President—J. V. Ayer, Kenosha. Secretary—A. G. Leland, Milwaukee. Treasurer—C. E. Scofield, New York. C. B. Hall, appointed Superintendent.

Knoxville and Kentucky Railroad.

At a meeting of the stockholders of the Knoxville and Kentucky railroad, held on Tuesday, the following named persons were chosen Directors for the next twelve months:

W. M. Churchwell, T. C. Lyon, A. L. Maxwell, and O. P. Temple, of Knox.

J. J. Jarnagin, and R. M. Longmire, of Anderson.

R. D. Wheeler, of Campbell.

We understand that several of the stockholders increased their stock to a considerable amount.

Grand Trunk Railway.

We learn that this line is now nearly completed to Berlin, the first locomotive having arrived in that place on the 21st inst.

Expansive Valve Motion for Steam Engines.

A new expansive valve motion for steam engines was lately described at the Institution of Mechanical Engineers, Dublin. In this motion a single eccentric only is used on the driving axle; this works the rod of one of the valves direct, and the rod of the second valve is worked by the eccentric through the intervention of a loose ring on the driving axle, having two arms projecting at right angles to each other, to one of which the second valve rod is attached, the other arm being connected with the eccentric. By this means a similar motion is given to both valves, but corresponding to the relative positions of the two cranks at right angles to each other. The eccentric is molded upon a transverse slide, which is capable of being moved backward and forward across the axle by means of a handle, answering to the ordinary reversing handle or lever, and acting through the medium of a pair of racks and pinions. By moving the transverse slides the throw

of the eccentric is altered or reversed, thereby enabling the engine to be worked expansively or reversed.

Susquehanna Canal Co.

From the recent report of this company, we learn that their receipts from toll last year were \$211,341.26, against \$180,349.78 in the previous year. The total receipts from all sources were \$220,592.01. The receipts were sufficient to meet the interest on the bonded indebtedness of the company, current operating expenses, and settle other claims to the amount of \$17,000. The company, at the commencement of the year, had a balance in cash and bills receivable of \$100,098.25, and at the close of the year the balance stood at \$108,095.11. The report concludes:

As the company now pays its expenses of management and interest upon its debts, leaving some surplus, it is not promising too much to assure the stockholders that they may now look forward to some return for their long suspended investment.

Wisconsin Land Grants.

The terms of the Wisconsin Land Grant bill which will shortly become a law, invest two railroad routes in this State with unusual importance. The grant to a new road leading from Fond du Lac northerly, to our State line, there connecting with two railroad routes in Michigan, leading respectively to Marquette and Ontonagon, makes the Air-Line road from this city to Fond du Lac of the first importance to the interests of Milwaukee. So, too, the grant for a line from Madison or Columbus, to Lake St. Croix and Superior City, by way of Portage City, gives additional value to the Milwaukee and Watertown road, the route of which runs through Columbus to Portage, and is the shortest and most direct line from Portage to this city. This now bids fair to become the mail railroad thoroughfare in the State.—*Milwaukee Sen.*

**KASSON'S
LOCOMOTIVE EXPRESS**
FOR THE RECEIPT AND TRANSPORTATION OF
**LOCOMOTIVES,
PASSENGER AND BOX CARS
OF ANY GAUGE**
To the Western and South-Western States.
PROPRIETORS—WM. M. KASSON & SON,
90 Exchange st., BUFFALO.
24 Broadway, NEW YORK.

Brass Cocks.

MONAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cops, &c., for Locomotive and Stationary Engines.
They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

By SAMUEL HATCH, Boston.

4022

Six Railroad Locomotives at Auction.

ON WEDNESDAY, June 25th, at 12 o'clock, on the premises at the shops of the Boston and Lowell Railroad Corporation, in East Cambridge,

Six second hand Locomotives and Tenders which are deemed too light for the use of that Company. Three of said engines weigh 16 tons each with fuel and water in, and are of the following distinctive dimensions—cylinders, 12 inches diameter, 18 inches stroke of piston, arranged with inside connection, 2 driving wheels of 5 feet diameter, 4 truck wheels, 30 inches diameter, with boilers, furnaces, &c., in due proportion. They were built by the Locks and Canal Company of Lowell. The other three engines are still lighter, having cylinders of 11 in. diameter and 10 inches stroke of piston, 2 driving wheels, 5 ft. in diameter, also of inside connection; they were built by the same Company.

The above engines are suitable for light service either of passenger, freight or gravel trains, and having been built by the Locks and Canal Company whose character for excellence of manufacture stood so deservedly high, are strongly recommended for their qualities to purchasers. Terms at sale.

KASSON'S

RAILROAD IRON EXPRESS, NEW YORK AGENTS, DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

W. M. KASSON & SON.

N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay.
Insurance at low rates of premium, will be effected when desired.

Consulting Engineer.

THE undersigned may be consulted upon the location, construction, equipment, and management of railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron.

Also upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches, and in its most difficult application.

A long and intimate connection with the construction and management of our most important American railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable railroad companies to avoid errors of location, construction and management which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainment, and competent Superintendents can be recommended or supplied to railroad companies for immediate service on surveys and construction and on management.

ISAAC R. TRIMBLE,

Consulting Engineer,
118 Park Place, BALTIMORE.

221f

MEMPHIS & OHIO RAILROAD.



Notice to Contractors.

ENGINEER'S OFFICE M. AND O. R. R.
Memphis, Tenn., April 11, 1868.

SEALED PROPOSALS will be received at the Engineer's Office of the Memphis and Ohio Railroad until the 1st day of June, at noon, for the grubbing and clearing, graduation, masonry and bridging of forty miles of the North-rn division of this road, (through Henry and a portion of Carroll county) commencing at the Tennessee river and running South.

The entire of this work will be earthwork, and generally of a very heavy character. The excavation consists of a sandy clay and sand, of a very favorable character for handling.

The country traversed by this line is densely populated, very healthy, provisions cheap, and the work very easy of access at all seasons of the year by means of Tennessee river navigation, the crossing point of which stream is within eight or ten hours run of Paducah, on the Ohio river.

It is believed that, all things considered, no work in the West offers greater inducements to Contractors of means and energy.

The work to be commenced as early as practicable and finished by 1st January, 1868. Good reference will be required of Contractors as to ability to carry out their contract.

Plans, profiles, estimates, together with all necessary information as regards to the works can be seen at the Company's Office in Memphis, Tenn., on and after May 15th.

W. D. PICKET,
Engineer M. and O. R. R.

6117

Passenger and Freight Cars FOR SALE.

4 FIRST CLASS (60 seats) PASSENGER CARS.
35 BOX FREIGHT CARS, 28 ft. long.
11 PLATFORM

The above are for a 4 ft. 8 1/2 in. gauge, and are well and thoroughly made.

WILLIAMS & PAGE,
44 Water st., Boston, Mass

TO CONTRACTORS.

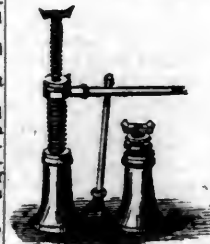
PETTES' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

N. DAVIDSON, 9 Spruce st., N. Y.

4117

BALL'S PATENT JACK SCREW.



For sale by

No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8 1/2 inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Notice to Contractors.



OFFICE OF STATE ENGINEER BURNETT,
Orange Mill Post Office.
St. Johns River, Fla., August 20th, 1868.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1868, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Land, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANCY,
1866 State Engineer, State of Florida.

Notice to Contractors.

CHIEF ENGINEER'S OFFICE M. AND P. R. R.
Norfolk, Va., May 6th, 1868.

THE undersigned has for contract 2,000 cubic yards of Bridge Masonry, situated near Norfolk and Petersburg, respectively, and on the line of the Norfolk and Petersburg Railroad. Plans and specifications of the two bridges near Petersburg may be seen at the Division Engineer's office there, or at this place, and like information may be had about the work contiguous to Norfolk, at this office.

WILLIAM MAHON,
Chief Engineer.

1m20

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern,
68 lbs. per yard, apply to
VOSE, LIVINGSTON & CO.,
9 South William st.
NEW YORK, May 9th, 1886.

BUSINESS CARDS.

BOSTON RAILROAD SUPPLY STORE,
No. 44 Water Street, Boston, Mass.

WILLIAMS & PAGE,

MANUFACTURERS' AGENTS AND COMMISSION
MERCHANTS for the sale of Engines, Cars, Locomotives,
Planers, Iron Rails, Wheels, Axles, Fins, Car Trimmings,
and every article used in equipment and repairs of railroads.
THOS. S. WILLIAMS, PHILIP S. PAGE,
Late Sup't Boston & Me. R.R. Late PAGE, ALDEN & CO.

REFERENCES.

JAMES HAYWARD, President | GEO. H. KUHN Esq.
Boston and Maine R.R. | LAWRENCE, STONE & CO.
Capt. WM. H. SWIFT, | DANA, FARRAR & HYDE.
G. M. BEEBE, RICHARDSON & CO.

To Civil Engineers.

WHITE'S PATENT SILVER FOUNTAIN PEN CASE
is particularly recommended to Engineers engaged in
field work.

This is the only fountain pen we know of, that will not leak
in the pocket, or feed too fast in using. The feed of this is perfectly
under the control of the writer, who may use it without
danger from blots or discoloration of the clothes. Price \$3.
They are adapted to all styles of pen. They will be sent by
mail to any address upon the receipt of the price.

Address N. DAVIDSON & CO.,
Sole Agents for the Manufacturer and Patentee,
4m10 9 Spruce st., N. Y.

Augustus Schwaab,

CIVIL ENGINEER, MACON, GEORGIA,

IS prepared to execute work in all the branches of his pro-
fession; all kinds of surveys, railroad surveys and loca-
tions, plans, estimates, topographical maps and reports for
same, surveys of plantations and swamp lands, and designs
and estimates for drainage of lands, water works and river
improvements. All kinds of contract work measured and
reported in detail; plans and specifications furnished for bridges,
private and public buildings. He has held responsible posi-
tions on the construction of Georgia railroads for the last
seven years, and has given his attention to all the details of
railroad construction, from the surveys to the erection of the
largest depots and workshops, which gives him great facility
to furnish railroad companies with reliable and practical de-
signs of any kind they may want, and if required to super-
intend the execution of them. The best references and recom-
mendations can be produced.

CINCINNATI.

HEWSON & HOLMES,

AUCTIONEERS AND STOCK BROKERS,
Have regular sales of Stocks, Bonds, and other Securities.

WEDNESDAY AND SATURDAY,
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3. Base 12 ft. Slopes 1 1/2 to 1. 17. " 24 " 1 1/2 to 1	18. " 24 " 1 1/2 to 1
4. " 14 " 1 1/2 to 1. 19. " 24 " 1 1/2 to 1	20. " 24 " 1 1/2 to 1
5. " 15 " 1 1/2 to 1. 21. " 24 " 1 1/2 to 1	22. " 24 " 1 1/2 to 1
6. " 15 " 1 1/2 to 1. 23. " 24 " 1 1/2 to 1	24. " 24 " 1 1/2 to 1
7. " 15 " 1 1/2 to 1. 25. " 24 " 1 1/2 to 1	26. " 24 " 1 1/2 to 1
8. " 16 " 1 1/2 to 1. 27. " 24 " 1 1/2 to 1	28. " 24 " 1 1/2 to 1
9. " 16 " 1 1/2 to 1. 29. " 24 " 1 1/2 to 1	30. " 24 " 1 1/2 to 1
10. " 18 " 1 1/2 to 1. 31. " 24 " 1 1/2 to 1	32. " 24 " 1 1/2 to 1
11. " 18 " 1 1/2 to 1. 33. " 24 " 1 1/2 to 1	34. " 24 " 1 1/2 to 1
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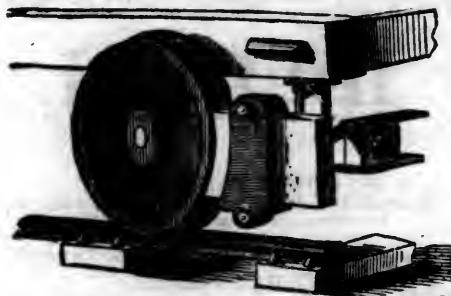
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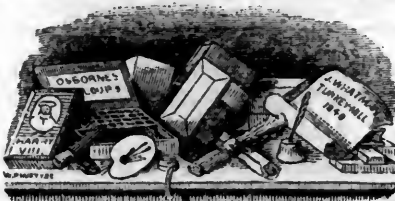
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2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVEETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, Washington, D. C.
CHARLES MONROE, Esq., Baltimore, Md.
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
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HON. H. F. FRENCH, Associate Judge, Superior Court, Exeter, N. H.
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 Spruce St.

New York, Saturday, June 7, 1856.

Cincinnati, Hamilton and Dayton Railroad.

We give in another column an advertisement of the sale of second mortgage bonds of this road.—The road has a stock subscription of \$2,100,000, and is earning a good income upon its entire cost. The security for the bonds is ample and unquestioned, and there is no reason why they should not command a good price. The road is earning as much, if not more, per mile, than any other in Ohio, and the business of which, from its local resources, and from the very numerous and favorable connections it forms with other roads, must rapidly increase.

Camden and Amboy Railroad and Delaware and Raritan Canal Co's.

The necessity for constructing some public thoroughfare, superior to the common road, across the State of New Jersey, so as to unite the cities of New York and Philadelphia, had been early felt, and measures had been adopted to accomplish this object. The formation of the country—penetrated as it was by the Delaware from the south, and the Raritan from the north-east, leaving scarcely thirty miles' space between them;

added to the circumstances that this section was unusually level, early suggested the idea of a canal to unite those rivers, both for purposes of commerce and national defence. An act was accordingly passed in 1804, followed by one twenty years later, incorporating a company for the construction of a canal, but in both cases, although aid had been asked from Congress, as well as from the citizens of New York and Philadelphia, the project fell through, and the undertaking was abandoned. The charter under which the Delaware and Raritan canal was constructed, dates from February, 1830. The provisions of that act authorized the company, with a capital stock of \$1,000,000, in shares of \$100 each, to construct a canal "from the waters of the Delaware river, to the waters of the Raritan." The Company might organize on a subscription of 5,000 shares, if made within one year. Directory to consist of nine stockholders, a majority of whom should be citizens of the State. The canal to be at least 50 ft. in width, by 5 feet in depth; and the feeder to be not less than 30x4. Rates of toll not to exceed four cents per ton per mile for merchandise, and five cents per mile for passengers. Shares to be considered personal estate. Work to be commenced in two, and finished within ten years. In case of its being three years obstructed for want of repairs; canal to revert to the State. Right to change route granted; also to declare any amount of dividends. No rival route to come within five miles at any point. Company might increase their capital \$500,000. Legislature reserved the right of subscribing one-fourth the stock by the State. (This was subsequently repealed.) At the expiration of 30 years from completion, the canal and its fixtures to be appraised by parties appointed for that purpose, when the State might take it from the company, on payment of cost. A transit duty of eight cents per ton on all merchandise, and the same for every passenger transported, to be paid into the State Treasury. Returns of business and payments of dues to be made quarterly.

The Camden and Amboy railroad was also chartered in February, 1830. Capital, \$1,000,000; which might be increased \$500,000. Shares, \$100 each. Company might also organize in one year—on subscription of 5,000 shares. Directory to consist of nine persons; a majority being residents

in the State. The route was defined to extend "from the Delaware river, at some point between Cooper's creek and Newtown creek in Gloucester county, to a suitable point on Raritan Bay." Road to have one or more tracks. Company authorized to build a lateral branch to Bordentown. Rates of toll might be considered optional; as these might run to any figure not exceeding eight cents per ton per mile for freight, and ten cents per mile for passengers. Road to be forfeited in case it was allowed to get out of repair three years.—Dividends optional. State to have the right of taking the work, after 30 years, by paying the cost of same, as decided by appraisers. Quarterly returns to be made to the Legislature. Transit duties to consist of ten cents for every through passenger; and fifteen cents for every ton of merchandise carried. By the 24th section of the charter, it was enacted that "if the State of New Jersey should authorize the construction of any other railroad for the transportation of passengers across this State, from New York to Philadelphia, and which should commence and terminate within three miles of the commencement and termination of said roads authorized by this act," then the payment of the above duties should cease. Provided, any other road to be built should be liable to a like tax. The company were prohibited from carrying on Banking operations.

The following supplements to these charters have since been passed:

FEBRUARY, 1831.—The thirty years' duration of the Delaware and Raritan Canal Co. extended 20 years longer.

FEBRUARY, 1831.—Camden and Amboy company authorized to transfer to the State 1,000 shares capital stock, the latter not being required at any time to pay any instalments thereon. Dividends to be payable on these as on other shares. State to appoint one Director who should be present at meetings; but with no power to vote. By another supplement passed the same month, the two companies were empowered to consolidate. Rates of fare for passengers between New York and Philadelphia not to exceed three dollars.

MARCH, 1832.—Another thousand shares of stock authorized to be transferred to State. No competing line between the cities of New York and Philadelphia, to be built without consent of the

companies. Transit duties and dividends to State fixed at \$30,000 per annum. Surplus fund limited to \$100,000. A lateral road from New Brunswick to Spottswood authorized. (Never undertaken.)

FEBRUARY, 1835.—Company empowered to build a lateral road from main line to South river in Middlesex.

MARCH, 1837.—Rights granted to construct a railroad from New Brunswick to Trenton. Same duties to State as on the Southern line. Passenger fares limited to five cents per mile.

MARCH, 1842.—Transit duties on both Canal and Railroad fixed at ten cents for passengers, and fifteen cents per ton for freight. State Treasurer to receive one-half of any sum above three dollars charged for through passengers.

APRIL, 1846.—State Directors required not to be stockholders in either work. Company required to make annual reports of the number of passengers, &c., carried.

FEBRUARY, 1848.—Company authorized to subscribe for stock in the Belvidere Delaware railroad, to any amount not exceeding ten thousand shares.

The Delaware and Raritan canal extends from Bordentown, on the Delaware, to the city of New Brunswick, a distance of 43 miles. At Trenton it is fed by a branch canal $22\frac{1}{2}$ miles long. The latter work proceeds along the Delaware river whence it receives its supply, and is about 60 feet wide by 6 feet in depth. The main line was constructed 75 by 7 feet; but has since been deepened to 8 feet. The locks are each 220 feet long, permitting the passage of vessels of 500 tons.—There are 15 locks in all, having a total descent of 115 feet. Estimated cost of the work, \$700,000.

The main line of the Camden and Amboy railroad leaves the village of South Amboy, which is connected by a line of steamboats with New York, and proceeds by a very direct route, passing by the villages of Spottswood, Jamesburg, Hightstown, &c., to Bordentown, on the Delaware, whence it proceeds on the eastern bank of the river to Camden, opposite Philadelphia. Its total length is $61\frac{1}{2}$ miles. From Bordentown a branch line follows the course of the Delaware to Trenton, whence it is continued to the city limits of New Brunswick, about $3\frac{1}{2}$ miles south of the viaduct over the Raritan river. Total length of main line and branches, 92 miles, 41 chains. At Trenton another connection with the city of Philadelphia is made by the Philadelphia and Trenton railroad, now principally owned by the C. and A. Co. For twenty miles from Bordentown the railroad follows the bank of the Delaware and Raritan canal.—The total length of bridging is 3,900 feet. The longest bridge (over Rancocas creek) is 497 ft.

Part of the road was graded for a double track. The original superstructure was of various descriptions; part consisting of an edge rail 42 lbs. per yard, laid upon locust chairs, and fastened to heavy stone blocks; part consisting of the same rail laid upon the ordinary cross-ties now in use; and part the flat bar resting upon continuous wooden sills. The last was superseded at an early day, by a more substantial superstructure; and the road has all since been relaid, with various sizes of T rail weighing from 65 to 90 lbs. per yard.

The books of both companies were duly opened, and a large amount of stock subscribed towards the railroad project; but the canal met with but little public favor, under the dread of competition. After various attempts had been resorted to, a consolidation of the two interests was finally agreed on, and the work accordingly put under contract, and completed in January, 1838. For many years, however, its receipts were small and unable either to complete the work and provide the needed equipment, or pay dividends. Of the road, fourteen miles, extending from Bordentown to Hightstown, were opened in October, 1832; and the remaining distance to Amboy in December following. In the winter of 1833, a section of 16 miles below Bordentown was completed; and in the spring of 1834, the whole line between Camden and Amboy was put in operation. The Trenton branch was commenced in 1837, and finished in the latter part of 1838. Beyond the above, we have but few facts concerning the company's early history; as they published no reports till 1840; and none from that date till 1848.

PHILADELPHIA & TRENTON RAILROAD.

This road was chartered by the Pennsylvania Legislature in 1832, with a proviso that the State might at any time after 30 years purchase the work at a fair valuation. Capital not to exceed \$1,000,000, nor dividends twelve per cent. per annum. Company to pay a tax of eight per cent. on all dividends above six per cent. Empowered to bridge the Delaware at Trenton; and purchase the Turnpike between Trenton and New Brunswick. They subsequently applied to the New Jersey Legislature for the right to lay down rails between the above named places, but were refused. They proceeded however, with the undertaking on their own responsibility. At this time, in order to neutralize the effects consequent on two competing lines for the through business, a number of stockholders in the C. and A. Co. purchased a large amount of the stock in the Philadelphia and Trenton road, in order to obtain a controlling influence in the latter work. In 1835 the Board of Directors of the C. & A. road were authorized to take steps to overcome the competition between the rival lines, by any arrangement they might see fit to adopt. In April, 1836, a contract was agreed upon, by which equal dividends were to be paid among all the companies; and in the early part of 1837, the Joint Companies purchased \$825,000 of the stock of the Philadelphia and Trenton road—payable in sterling bonds. The latter company at once commenced the payment of dividends, which they had hitherto been unable to do. The C. and A. Co. began the construction of the line between Trenton and New Brunswick, in June, 1838; and on the 1st of January, 1839, the road was opened for passengers and freight, having occupied in its construction a period of only seven months.

In April, 1843, a running arrangement was made with the New Jersey Railroad and Transportation company, to last five years, and thereafter until due notice should be given. By the terms of this contract, the sum of four dollars was to be charged for first class through passengers, and three dollars for second class. Two-thirds the through passengers were also to go by this route, or any deficiency to be made up to the New Jersey Company.

The Camden and Amboy company had been required to provide ferry-boats between Philadelphia and Camden. Subsequently, a Ferry company was chartered, to whom the railroad company sold their property and rights, taking payment therefor in stock of the new company. The amt of this in 1838 was \$63,550.

The same year, the Joint Companies embarked in the business of coal mining, on lands convenient to their own works; but the attempt soon fell through and had to be abandoned.

Since then, in accordance with the acts of the Legislature, the Joint Companies have invested in the Freehold and Jamesburg, the Belvidere Delaware, and Flemington railroads. The amount of subscription to these three works was, at date of last report, \$1,175,000.

The various loans made have been—

In 1833, loan of \$800,000, at six per cent. Matures in 1863. Net proceeds of sale, \$832,615.—Of the above issue, \$248,000 were bought up by the company in 1834, and re-sold in 1837-'39, during the construction of the branch line.

In 1834, sterling loan for £210,000, at five per cent. Matures in 1864. Redeemable in London. Proceeds of sale, \$978,203.

In 1837, sterling loan for £225,000, at six per cent. Principal matures in 1864. Loan made for building branch road between Trenton and New Brunswick. Cash realized from sale, \$1,023,498.

In 1836, sterling loan for £185,000, at five per cent. Redeemable in 1863. Amount realized, \$824,444. Proceeds applied to purchase of stock in the Philadelphia and Trenton railroad. This loan has since been converted into dollar bonds at \$4.80.

In 1840, bonds for \$367,000 were issued as an extra dividend to the stockholders, on account of the application of earnings to a like amount for construction purposes. Interest, six per cent.—Principal matures, 1864.

The companies' indebtedness on the 1st of Jan. last, was—

Sterling loan at 5 per ct.	£210,000
" " 6 "	800,000
" " 5 "	185,000
Total	\$620,000
—Equal, at \$4.80, to.	\$2,978,000
Loan at 6 per ct.	800,000
" " "	267,000
" " "	800,000
" " "	1,700,000
" " "	292,000
" " "	1,175,000
Total	\$8,110,000

An additional loan of \$2,500,000 was some time since authorized, of which, we believe, \$900,000 have been negotiated. The floating debt, at last report, was \$257,200; but this was more than balanced by similar debts due from other companies. The cost of road and equipment, at same date, was \$4,877,981; and of canal, &c., \$8,768,542; making a total of \$8,636,523.

The capital paid in to the road is \$1,500,000; and a like sum to the canal. The company own \$1,000,000 of the Belvidere Delaware railroad stock.

The following table shows the gross and net receipts of the railroad and canal, with the dividends paid from 1833 to the present time:

	Gross Receipts.	Net Earnings.	Rate of Div'd per ct.	Gross Receipts of Canal.
1883...	\$518,864	\$206,959	6	
84...	514,253	249,777	6	\$11,604
85...	659,467	360,463	6	47,141
86...	783,969	430,291	12	54,801
87...	732,138	353,747	8	67,194
88...	755,083	414,763	10	63,085
89...	670,328	386,910	7	68,304
1840...	565,540	320,904	6	69,891
41...	678,711	372,682	6	33,956
42...	646,700	365,739	6	90,354
43...	713,369	391,244	7	103,829
44...	780,709	401,474	8	132,677
45...	882,751	322,348	9	167,811
46...	1,022,253	415,303	10	162,026
47...	1,160,883	408,465	12	255,254
48...	1,152,263	489,342	12	228,088
49...	999,024	363,712	11	.....
1850...	1,111,692	363,302	10	.....
51...	1,285,403	518,046	15	.....
52...	1,388,835	478,114	15	.....
53...	1,744,207	598,733	*12	382,248
54...	1,682,486	552,457	12	474,940
55...	1,501,787	701,229	12	516,940

*Besides an extra dividend of 12 per cent. in company's bonds.

Useful Information for Engineers.*

No one is better able to give practical information to working engineers than Mr. Fairbairn, and with a laudable desire to impart his knowledge he has delivered lectures at the educational institutions in Lancashire and Yorkshire, the substance of which is now published, accompanied by numerous explanatory appendices, containing the valuable results of many carefully conducted experiments. The construction of boilers, boiler explosions, the combustion of fuel and the prevention of smoke, iron ship-building, the properties of steam and the construction of the steam engine, form the principal topic of the lectures. We wish indeed that Mr. Fairbairn had put this information in another form, and instead of republishing what he said to the working engineers some years ago, that he had presented the matter, embodied with the results of more recent knowledge and experience, in a shape more adapted to consecutive reading and serious study. From the circumstances under which the lectures were delivered, the matter is necessarily in a great degree elementary; yet, there are mixed up with the elements, some considerations of the abstruse speculations of physical science, which are advanced with too much confidence as established facts. It is with Mr. Fairbairn as with many other men who have raised themselves to a position of high eminence without much previous academic training, that, feeling the merit of high mathematical attainments in their investigations, they are disposed to pay too much deference to the speculations of others who possess the kind of knowledge they desire, and who can invest with perplexing formulæ the simplest of questions, and talk authoritatively on the results of their calculations. Mr. Fairbairn has established his claim to rank among the most eminent of our engineers, by his great practical knowledge, gained by experience, aided by application of such scientific principles as are directly connected with the material matters with which he has had to deal; and when he departs from that position, and steps into the domain of physical investigations, regarding the nature of heat and the properties of steam, he ceases to be an original teacher, and gives merely a *refacimento* of the opinions and crotchets of others. There is, however, enough

* Useful Information for Engineers; being a Series of Lectures delivered to the Working Engineers of Yorkshire and Lancashire; together with a Series of Appendices, containing the results of experimental inquiries into the strength of materials, the causes of boiler explosion, &c. By W. Fairbairn, F.R.S., F.G.S., &c. London: Longman & Co. 1856.

of original matter in the work to render it a valuable addition to the library of the practical engineer, whilst the information at second hand which it contains, relating to the properties of steam and the new theories of heat, may be considered a clear statement of the known facts, and of the speculative opinions on those interesting subjects.

We shall select for notice more particularly the facts connected with that branch of the subject with which Mr. Fairbairn may be considered to be best acquainted. Commencing with the construction of boilers and the strength of boiler plates, he shows the fallacy of the opinion generally received that the rolling of such plates gives greater tenacity in the direction of their length than of their breadth.—Experiments, the results of which are recorded in the following table, proved that the strength by rolling was equally distributed:

Description of Iron.	Mean breaking weight in tons in the direction of the fibre.	Mean breaking weight in tons across the fibre.
Yorkshire plates	25.77	27.49
Yorkshire plates	22.76	26.37
Derbyshire plates	21.68	18.65
Shropshire plates	22.82	22.00
Staffordshire plates	19.56	21.01
Mean	22.51	23.10

The effect of heating the plates was also proved by experiment not to have the deteriorating influence commonly supposed, if the temperature was not raised above 600°, which is that of a dull red heat in the dark. Some experiments with cast iron gave similar results, from which it was inferred "the infusion of heat into metallic substances such as cast and wrought iron, does not produce any serious diminution of their strength up to a temperature of 600°."

The rivetting of boiler plates was a long time supposed to add to their strength, but the contrary effect is clearly shown to result from the piercing of iron plates, unless the plan of double rivetting be adopted, by which means the weakening effect of the piercing is almost, if not altogether, compensated.

Mr. Fairbairn is a strong advocate of high-pressure steam, on account of its economical advantages, and one of the points he frequently endeavors to enforce is, that, with proper precautions in the construction of the boiler, high-pressure steam may be safely employed. The form of boiler he most strongly recommends in this publication is the cylindrical, with spherical ends and two internal flues. It may be remembered that, at the meeting of the British Association at Liverpool, in 1854, Mr. Fairbairn advocated flat-sided boilers as affording more convenient and better means of fixing internal stays than a cylindrical surface presents. It may be that the lecture was delivered before experiments with flat-sided boilers have proved their superior advantage, or it may be that he has returned to the former preference of the cylindrical shape. We incline to the latter opinion, from the circumstance that the use of thick plates and stays is represented to be very injurious. As Mr. Fairbairn is justly esteemed a great authority on all questions of boiler explosions, we are somewhat surprised to find him expressing the opinion, that by increasing the amount of surface in a boiler by additional flues and tubes, the internal pressure is increased. That it may not be supposed we misrepresent his statement, we quote the following passage:

"To show the amount of strain upon a high-pressure boiler, 30 feet long 6 feet diameter, having two centre flues, each 2 feet 3 inches diameter, working at a pressure of 50 lbs. on the square inch, or 7,200 lbs. per square foot, we have only to multiply the number of square feet of surface 1030, exposed to pressure by 7,200, and we have the force of 8,319 tons, which a boiler of these dimensions has to sustain.".... "This is however

inconsiderable when compared with the locomotive and some marine boilers, which, from the number of tubes, present a much larger extent of surface to pressure. Locomotive engines are usually worked at 80 to 100 lbs. on the inch, and taking one of the usual construction, we shall find at 100 lbs. on the inch, that it rushes forward on the rail with a pent-up force within its interior of nearly 60,000 tons."

Among the causes that are assigned to account for the bursting of boilers, the supposed explosion of hydrogen gas, generated by contact of water with red-hot boiler plates is a favorite assumption, when the circumstances seem to admit of no satisfactory explanation by the gradually accumulated pressure of steam. Mr. Fairbairn denies the operation of such a cause, and it seems extraordinary that any one having pretensions to scientific knowledge should for a moment have entertained such a notion. Even admitting the circumstances to be the most favorable possible for the generation of hydrogen gas, there would be no explosion capable of producing such destructive effects. The decomposition of water, when injected on red-hot iron, is produced by the absorption of the oxygen by the metal to form an oxide of iron; and as no explosion of hydrogen can occur without a large admixture of oxygen, the very generation of the hydrogen would necessarily deprive it of explosive power. It is not probable, however, that any large quantity of water would be decomposed on contact with the red-hot boiler plates, encrusted as they generally are, in a manner to prevent such chemical combination from taking place. But, even admitting the possibility of the generation in the boiler of an explosive mixture of the two gases, it would require a temperature approaching a white heat to produce an explosion. An erroneous notion of the impulsive force of an explosion of mixed hydrogen and oxygen, also obtains, arising partly from the destructive consequences of such explosions of large volumes of the gases in coal mines. In the course of some experiments we instituted to ascertain the force of exploded hydrogen and oxygen, the result showed that it did not in reality exceed eight atmospheres, which is an amount of pressure that all well-constructed high-pressure boilers ought to bear.

The consideration of the prevention of boiler explosions forms an important portion of Mr. Fairbairn's "Useful Information." He is inclined to attribute most of the accidents that occur to the inefficient action of the safety valves, and he recommends several means of producing a sufficient discharge of steam, when from any cause it is raised to a dangerous amount of pressure. The plan he adopts in the construction of boilers, is the introduction of one or more lead rivets, which melt when the temperature is raised above the safety point, and afford an outlet for the steam, and thus sufficiently indicate the danger, if it do not altogether remove it. The plan is a modification of the fusible metal safety plugs, but it is only brought into action in cases of extreme danger. The fusible metal safety plugs, as usually constructed, are attended with great inconvenience, as they allow the whole of the steam in the boiler to escape after having been melted; but Mr. Fairbairn admits their superiority as a means of safety. An American invention, which was some years ago submitted to one of our most eminent Engineers, effectually prevented that inconvenience, for as soon as the temperature which caused the dangerous pressure was lowered, the metal solidified and prevented the further escape of steam. The practicability and security of the safety valve was admitted, but the objection raised to its adoption was, that the safety valves then in use were quite sufficient for the purpose, if properly made. It is in this manner that useful inventions are too frequently "pooh-poohed" by practical men, who dislike to depart from the beaten track unless they lead the way.

Mr. Fairbairn, who has taken a prominent part in the construction of iron ships, naturally prefers them to those made of wood, and he shows by variety of facts and illustrations, the superior ad-

vantages of metal plates in naval structures. Even for war ships he contends that iron is a much better material than wood, and he considers the experiments made by the Admiralty, to try the effect of shot on such ships, were unsatisfactory and fallacious. We should not, however, follow Mr. Fairbairn into this branch of his subject, and shall conclude our notice of this really useful work with an extract relating to a subject more immediately connected with the Engineering profession.

ADVANTAGES OF HIGH-PRESSURE STEAM.

"Taking into consideration the superior economy of high steam, *worked expansively*, it is quite evident, that in all future constructions, either of boilers or engines, we must look forward to the use of a greatly increased, instead of a reduced pressure of steam. Indeed, I am so thoroughly convinced of the advantages inseparable from this application, as to urge upon you the necessity of preparing for greatly increased progress and greatly increased pressure in all the requirements, appliance, and economics of steam as a motive power. It must appear obvious to every reflecting mind, that steam generated under pressure, and compressed into one-fifth or one-sixth the space that it formerly occupied, and that again applied to an engine of little more than one third the bulk, must be a desideratum in the appliance of an agent so powerful, and so extensively used. Look at our locomotives of the present day, and me whether we are, or are not successfully progressing in effecting a closer alliance between the two sister sciences of mechanics and physics; and tell me whether or not the community is not secured equally well from risk, and greatly benefitted by the change? Let us calculate, for example, the duty performed, and the force applied to one of our largest class of locomotive engines traveling with a train at the rate of 45 miles an hour, and we shall find the amount of power given out to exceed that of 700 horses, or as much as would be required to drive the machinery in some of our largest factories. And why not work our factories upon this principle? and why not propel our largest ships by engines of this description? There is no reason why it should not be done, and that with greatly increased economy, by introducing a well directed system of condensation along with that of highly attenuated steam.—*Civil Engineer and Architect's Journal.*

The Concord (N. H.) Railway.

The fifteenth annual report of the Directors of this road has been published, and it represents the finances of the company to be in a most flourishing condition. The company has no funded debt, and a floating one less than \$10,000, having paid \$21,447 from the earnings of the past year.

The earnings for the year to April 1st, 1856, were.....\$335,949
Running expenses same time.....199,495

Net income.....\$136,454
Taxes on \$1,500,000 capital stock.....\$10,470
New first class locomotive.....8,925
Two dividends of three per cent. each.....90,000
Paid Northern road balance due on contract for through business.....5,342

115,007

Balance.....\$21,447
This has been applied towards reducing the floating debt for construction of depots at Manchester of.....29,689

Balance of indebtedness only.....\$8,242

It will be seen that the actual net earnings of the road the year past were over 8 per cent. Out of this, however, must be deducted the State tax of about $\frac{2}{3}$ of one per cent.

In reference to the future prospects of the road the Directors speak as follows:

This result of the year's business, taken in connection with the present condition of the road, and its equipment, furnishes us good reason to rely confidently on the value of our stock, and affords full assurance of a fair return on its investment. The water power on its line, which is now unoccupied, is greater than what has been already improved; and it must be early brought into use. The population of the Union doubles in twenty-five years, and its manufacturing business increases in about the same ratio. This business, for many years to come, must be done in New England, and there is no location for this purpose so favorable as is found on our line of route. These circumstances render it quite certain that the valley of the Merrimac, will shortly present one of the most densely peopled and thriving interior districts in the country, and will afford a permanent and profitable business to our road.

Hamilton and Pt. Dover Railway.

A correspondent of the *Hamilton Spectator* states that a few days ago the rate-payers of Caladenia confirmed a resolution of the Council, to take £10,000 in the above named company's stock. Bonds of the Municipality are to be issued for the amount subscribed.

Railroads and the Sabbath.

One of the most cheering features of the times is the rapidly increasing number of railroads which have ceased to run their trains on the Sabbath. A large portion of the more prominent of these thoroughfares are now quiet on that day. Their officers and men can enjoy the privilege of joining their families and going with them to the house of God. The public are no longer tempted by them to desecrate sacred time, nor aided and abetted by them in doing so. This is as becomes a Christian people. The Sabbath is acknowledged in our statute books, our legislative bodies, and all our public affairs; why should it not be also honored by the great corporations which are invested with so much power for good or evil to the public? We believe that the sentiment of the country is reaching a higher and more healthy tone on this subject, and we cannot but hope that it will make itself felt in abating what has been a most formidable evil.

Our object in introducing this topic at present, is to express the earnest wish that that great thoroughfare, the Pennsylvania railroad, might be put upon the Sabbath-keeping basis. We would also add the Camden and Amboy Company, but we fear they give but little heed to remonstrances or persuasions from any quarter. We are aware that it was the desire of many of the warmest friends of the Pennsylvania road, at the outset, to make it a Sabbath-keeping concern, but that their purpose was defeated by a formal vote of the stockholders. If we are not mistaken, however, the ground upon which that action was secured was, that inasmuch as rival roads ran their trains daily, to intermit a day on this road would be fatal to its interests. This plea, we are happy to say, to a considerable extent no longer applies, since two of the great routes with which the Pennsylvania road has to compete have suspended their Sunday trains. Both the Erie and the Central roads—the great connecting links between New York and the West—are now quiet on the Sabbath. The Baltimore and Ohio road, the only remaining competitor, would probably join in the good movement, provided the Pennsylvania Company would follow the excellent example of her New York sisters. From what we know of the character and influence of several of the leading gentlemen connected with the Pennsylvania road, we are persuaded that they could accomplish the greatly to be desired change, were they steadfastly to set themselves to work in the right way.

The reasons for such a measure are too obvious to require more than a passing mention. One of the most prominent is, that by requiring Sabbath labor the Company at once excludes from its service the most conscientious and reliable employees. Men of piety and a high grade of moral

principle will not consent systematically to break God's commandments. They regard the Sabbath as a divine institution. It is an honor to them that they do. It shows them to be men of principle. It should secure for them respect and confidence. It is one of the surest indications that they have the qualities which ought to be sought for in the men to whom are entrusted the safety and the lives of so many thousands. We submit the question, whether, as a matter of policy, it is wise to persevere in a course which must exclude such persons from these responsible positions, and render it necessary to supply their places with a class who, as they obviously do not fear God, will also most probably not regard man.

Soulless, too, as corporations proverbially are, it becomes those who have their management to consider how far they have the moral right to interfere with the quiet and comfort of hundreds of good citizens who wish to enjoy a Christian Sabbath. Sunday trains are the harbingers of evil to whatever town and villages they enter. The peace and quiet which has prevailed on the Lord's day from time immemorial, flies before the shriek of the locomotive; and in their stead come the clatter of the train, the hurrying and rush of porters, passengers, omnibuses, cake and apple venders, and the confluence of village idlers. Ministers and congregations who have hitherto enjoyed the privilege of worshipping God unmolested, can no longer do so. The soulless corporation can vex the righteous souls of the devoutly disposed at their pleasure, by fixing their hours of arrival and departure just when the stated services of the sanctuary are in progress. Were an individual to disturb a worshipping congregation, the law would lay its hand upon him; but one of these great companies can disturb congregations along hundreds of miles of its track, systematically, every Sabbath day with impunity. However much they may have the legal right to do this, all good men must admit that morally the thing is a great wrong.

Nor can those who furnish facilities and offer inducements for traveling on the Sabbath to thousands who would otherwise quietly stay at home, free themselves from responsibility for the evils which ensue. The sin of Sabbath-breaking, the deterioration of moral principle, and the injury to the public good thereby, which necessarily go hand in hand, does not attach alone to the Sunday passengers. It belongs, in a large measure, to those who throw the temptation in the way, and afford them the means for doing the wrong. Just in so far as the overthrow of the Sabbath would be fatal to the best interests of the country—just so far as their co-operation can go, are Sabbath-breaking railroad companies aiding to bring about this dire calamity.

The plea that the loss of one day's earnings every week would materially reduce the profits of the company—even if it were worthy to be weighed against the moral question as to the right or wrong of the thing, we do not believe to be a sound one. More than a year ago we published in our columns statements from the *Railroad Journal*, showing conclusively that in almost all cases Sunday trains were run, all things considered, at a loss. Such, we believe, has been the fact with the New York roads.

It is gratifying to know that on the Pennsylvania road the usual day trains are suspended, and only those run which leave at ten o'clock on Sabbath evening. But, unfortunately, those which have left either end of the route the previous night, are on the road during half the Sabbath, carrying all their evils with them. That would be a blessed consummation, if, from the close of every Saturday till the beginning of every Monday, there should be along the entire three hundred miles of this great route no stir of toil, traffic, and travel, but the quiet of a peaceful Christian day of rest.

What we have said with reference to the Pennsylvania railroad will apply with equal force to numbers of others, many of whose chief directors and stockholders in various parts of the land are

readers of this journal. We humbly trust that these suggestions may avail with all such to secure their earnest efforts for the inauguration of an era for Sabbath-keeping railroads over our whole country.—*N. Y. Presbyterian.*

Main Trunk Railway.

Hon. E. C. Cabell, President, and Col. P. F. Winter and Hon. James T. Archer, Directors in the Pensacola and Georgia railroad company, of Florida, passed through Macon last week for Savannah, to confer with the Main Trunk and Brunswick railroad interests, upon the matter of a Florida connection. We saw and conversed with these gentlemen upon the progress of the Florida roads, and the state of feeling and legislation there upon a Georgia connection. We think it is clearly their opinion, that all connection is precluded west of the Alabama, but a connection east of that river, which can be accomplished by twenty miles of road to the Georgia line, over a flat pine country, is every way practicable. From Tallahassee to that point, the line of road is now under actual contract for grading by parties whom we know to be able and responsible. From Tallahassee to St. Marks, a distance of twenty miles, the old road is now more than half re-graded and re-laid with new and heavy iron, and will be entirely re-laid in the course of a few months. St. Marks, which admits of ten to eleven feet draught of water, it is supposed, would at least answer temporarily for a Gulf depot. We believe it to be as good or better than Cedar Keys, the Gulf terminus of the Ferdinand road, now in course of construction. But an ultimate and permanent Gulf station is confidently looked for in what is called the "East Pass," southward from Tallahassee about forty miles.—A recent survey by United States officers establishes that seventeen feet draught can be brought over the bar at this point, and fourteen to within a hundred and fifty feet of the shore, which is bluff, high and healthy, affording an excellent site for a town. It is believed that a harbor as well protected and with as good holding ground can be found here, as at any other point on the whole Gulf coast. The State of Florida is in their opinion compelled alike by policy in the concentration of her large land fund, and by good faith to all her sectional divisions, to prosecute her lines of road already marked out by legislation, without regard to those of Georgia, and they certainly will be completed. But they think also that some modification in the Georgia plans might be adopted, to prevent ruinous competition of two expensive lines, and, in fact, to harmonize their interests. These are some views gleaned from some conversations with these gentlemen, for which, however, they are not to be held responsible, as we are writing upon the memory of several disjointed chats after the lapse of nearly a week.—*Macon Telegraph.*

Indiana and Illinois Central Railroad Co.

At the annual election held in Indianapolis on the 7th inst., the following gentlemen were elected Directors for the ensuing year, viz: A. L. Roache, John G. Davis, M. G. Bright, F. Clark, R. J. Gathing, Geo. W. Spidler, Jas. Johnson, G. Bailey, Wm. Martin, J. R. Hammett, Henry Prather, and Robert Hopkins.

The following officers were then elected: A. L. Roache, President; Wm. Martin, Vice President; James M. Sharpe, Secretary; and John S. Spann, Treasurer.

Madison and the Madison and Indianapolis Railroad.

The *Republican Banner*, of Madison, Ind., of April 30th, says:

An arrangement has been made with the city of Madison, by which she agrees to relinquish to the Madison and Indianapolis railroad company all her interest in the Columbus and Shelbyville road, whenever the company shall secure to her the sum of twenty-four thousand dollars. The city also consents that the company may, if it desires take up, remove, and sell, for its own proper use and benefit, all the materials used in the construction of said road.

Commerce of the Port of New York for 1856.

The following statement will show the imports and exports at the Port of New York for 11 months of 1855-6, compared with the corresponding period for 1854-5.

Import of Foreign Goods at New York.

	1855-6. From July 1, '55.	1854-5. From July 1, '54.
July.....	\$16,240,000	\$20,034,000
August.....	16,458,000	22,819,000
September.....	13,915,000	14,103,000
October.....	15,551,000	10,949,000
November.....	11,933,000	8,593,000
December.....	15,416,000	9,277,000
January.....	15,523,000	12,855,000
February.....	15,964,000	12,014,000
March.....	20,146,000	10,090,000
April.....	19,963,000	9,033,000
May.....	18,283,000	11,576,000

Total, 11 mo's... \$179,392,000 \$141,343,000
Increase this year..... \$38,049,000

Export of Domestic Produce from New York.

	1855-6. From July 1, '55.	1854-5. From July 1, '54.
July.....	\$3,961,000	\$3,768,000
August.....	4,281,000	4,487,000
September.....	5,229,000	3,772,000
October.....	6,614,000	4,672,000
November.....	8,344,000	4,660,000
December.....	8,820,000	5,508,000
January.....	5,258,000	4,997,000
February.....	5,409,000	3,155,000
March.....	8,044,000	4,808,000
April.....	5,229,000	4,350,000
May.....	5,563,000	5,072,000

Total 11 months... \$66,752,000 \$49,249,000
Foreign re-export'd 4,361,000 8,577,000

Together..... \$71,113,000 \$57,826,000
Increase this year..... \$12,287,000

Export of Specie from the Port of New York.

	1855-6. From July 1, '55.	1854-5. From July 1, '54.
July.....	\$2,923,000	\$2,922,000
August.....	2,600,000	4,548,000
September.....	1,832,000	6,547,000
October.....	1,188,000	3,359,000
November.....	1,012,000	3,538,000
December.....	987,000	57,000
January.....	105,000	156,000
February.....	1,204,000	2,124,000
March.....	2,584,000	2,299,000
April.....	2,217,000	3,313,000
May.....	3,813,000	5,320,000

Total 11 months... \$20,465,000 \$34,183,000
Decrease this year..... \$13,718,000

Exports Recapitulated—11 months.

	1855-6. From July 1, '55.	1854-5. From July 1, '54.
Domestic Produce...	\$66,752,000	\$49,249,000
Foreign re-exported...	4,361,000	8,577,000
Specie.....	20,465,000	34,183,000

Total..... \$91,578,000 \$92,009,000

Customs Revenue of U. S. at New York.

	1855-6. From July 1, '55.	1854-5. From July 1, '54.
July.....	\$3,787,342	\$4,015,745
August.....	4,293,795	5,214,630
September.....	3,523,379	3,439,493
October.....	3,329,195	2,402,115
November.....	2,171,708	1,651,024
December.....	2,984,942	1,505,920
January.....	3,683,656	2,560,038
February.....	3,592,583	2,707,016
March.....	4,405,022	2,417,427
April.....	3,973,375	2,023,131
May.....	3,447,157	2,404,482

Total 11 months... \$39,189,770 \$30,440,026

The receipts of gold from California for the past eleven months of the year have been \$37,756,515, against \$38,812,354 for a corresponding period of 1855.

The several items of import and export for eleven months of the fiscal year, viz: from July 1, 1855, to May 31, 1856, compare as follows with the corresponding period of the two preceding years:

	1855-6. From July 1, 1855.	1854-5. From July 1, 1854.
Goods imported.....	\$179,392,000	\$141,343,000
Produce exported....	65,752,000	49,249,000
Foreign re-exported..	4,861,000	7,974,000
Specie exp'd N. York.	20,465,000	34,183,000
Specie from Boston...	10,013,000	10,185,000

	1853-4. From July 1, '53.
Goods imported.....	\$175,120,000
Produce exported.....	51,488,000
Foreign re-exported....	5,913,000
Specie exported New York.....	29,123,000
Specie from Boston.....	6,236,000

During the foregoing period, the following is the approximate value of cotton exported for eleven months to foreign countries from all parts of the United States:

Export of Cotton, July 1 to May 31.				
Eleven		Average		Export
mos.	Bales.	value.		value.
1854.....	1,994,000	\$40.80		\$81,355,200
1855.....	2,183,000	38.70		84,082,100
1856.....	2,755,000	40.50		111,577,507

Increased export value over last year..... \$27,435,400

Cotton Crop Movement from September 1.

	1856.	1855.
Receipts at the ports....	3,360,000	2,479,000
Exports to Great Britain..	1,640,000	1,272,000
Exports to France.....	447,000	389,000
Ex. other foreign ports....	459,000	232,000
Total exports.....	2,546,000	1,893,000
Stock on hand.....	350,000	202,000

From July 1 to August 31, the export was:
In 1853-4..... 182,000 bales.
In 1854-5..... 290,000 bales
In 1855-6..... 200,000 bales.

Mobile and Ohio Railroad.

We learn that the track of this road is now laid to Wahalak, Kemper Co., and the cross-ties to Macon, Nexabee Co. At the latter point, 200 miles distant from Mobile, the inhabitants are preparing for a grand celebration on the 4th of July next, when it is expected the cars will reach that place. The officers of the road are said to be applying every energy to the prosecution of this great undertaking.

Lexington and Big Sandy Railroad.

A. C. Mitchell, Esq., has been elected Chief Engineer of this road, in place of J. B. Westbrook, deceased. Mr. Mitchell has for some time past performed the active duties of the office, and is said to be well fitted for the position.

Virginia and Tennessee Railroad.

This work is expected to be completed to Abingdon by the 1st of July; and to the State line by the beginning of October next. From that point, there will only remain some 50 or 60 miles to complete the connection with Knoxville, which is expected to be done early next year. The importance of this great route we have often referred to.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.	---	---	---	---
Androsburg & Kennebec	56	642,343	1,473,080	2,245,020	190,605	---	---	---	South Western	92	1,067,496	466,500	1,624,920	253,306	141,168	8	---	---
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600	---	---	---	---	Tennessee and Alabama	30	244,496	---	679,906	In progr.	---	---	---	---
Portland, Saco & Portsmouth	51	1,367,000	119,237	1,486,237	269,330	124,038	6	90	Tennessee and Mississippi	288	170,931	---	175,740	In progr.	---	---	---	---
Boston, Concord & Montreal	93	1,808,093	1,059,512	2,771,310	233,234	120,534	---	---	Memphis and Charleston	288	2,103,177	953,275	3,563,362	176,484	102,016	---	---	---
Cheshire	35	2,085,925	899,313	3,179,687	390,221	143,555	2	79 1/2	Mobile and Ohio	153	2,568,555	1,802,921	4,536,412	199,932	109,236	---	---	---
Concord	35	1,145,000	---	---	---	---	---	---	Miss. Central	188	64,534	---	628,308	In progr.	---	---	---	---
Northern, N. H.	82	2,768,400	---	---	---	---	---	---	N. O., Opelousa & G. W.	55	2,930,425	671,645	2,657,565	In progr.	---	---	---	---
Con't & Passumpsic Riv.	61	1,048,145	767,608	1,412,576	162,687	55,173	2 1/2	4 1/2	Vicksburg, Shreveport & Tex.	---	111,760	---	---	In progr.	---	---	---	---
Rutland & Burlington	120	2,233,376	2,662,396	5,878,428	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---	---
Vermont Central	117	6,000,000	3,550,230	8,463,566	820,119	214,793	---	---	East Tennessee and Va.	16	626,425	928,593	1,033,781	In progr.	---	---	---	---
Boston and Lowell	27	1,830,000	325,635	2,188,595	499,764	140,877	6	65	Nash. and Chattanooga	151	2,319,330	1,497,081	3,843,694	816,000	112,177	---	---	---
Boston and Maine	83	4,076,974	150,000	4,179,535	854,426	339,060	6	92 1/2	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	264,978	138,064	---	---	---
Boston and N. Y. Central	74	2,240,300	1,518,671	3,463,181	59,917	8,740	---	---	Lexington and Frankfort	29	430,055	158,099	337,071	93,293	48,635	6	---	---
Boston and Providence	55	3,100,000	359,132	3,877,154	558,671	219,690	---	---	Lexington & Big Sandy	---	---	---	428,067	In progr.	---	---	---	---
Boston and Worcester	68	4,500,000	655,428	4,865,418	1,008,004	404,461	6 1/2	86	Lexington and Danville	---	540,117	61,525	707,468	In progr.	---	---	---	---
Cape Cod	47	681,690	290,598	997,252	119,221	55,527	3	49 1/2	Louisville and Frankfort	65	698,238	669,051	1,589,566	244,014	96,902	6	---	---
Connecticut River	52	1,591,110	273,241	1,802,244	286,033	103,787	5 1/2	48	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.	---	---	---	---
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	647,281	305,998	---	---	Bellefontaine and Ind.	118	1,881,635	2,025,292	2,852,652	268,298	140,823	---	---	---
Fitchburg	67	3,540,000	153,700	3,765,998	681,163	225,071	---	---	Clev., Col. and Cin.	141	4,547,020	1,227,857	4,613,722	290,295	732,066	9	103	---
North Eastern	30	800,242	252,585	962,521	In progr.	---	---	---	Cleveland and Toledo	200	2,676,425	2,689,301	5,124,629	736,272	396,980	10	76 1/2	---
N. Bedford and Taunton	21	500,000	---	---	---	---	---	---	Clev. and Mahoning	103	---	---	628,533	In progr.	---	---	---	---
Old Colony and Fall River	87	3,015,100	292,650	3,362,949	663,499	259,738	6	87	Clev. and Pittsburgh	295	2,780,744	3,043,992	5,587,469	561,877	309,518	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	284,726	87,313	---	---	Cin., Hamilton & Dayton	60	2,153,900	1,321,218	2,967,757	508,271	278,012	---	---	---
Western, Mass.	155	5,150,000	5,966,420	10,495,965	1,659,673	633,013	7	91 1/2	Cin., Wilm. & Zanesville	131	1,126,450	1,131,256	2,326,459	In progr.	---	---	---	---
Worcester and Nashua	46	1,141,000	205,561	1,361,271	294,780	75,760	2	43	Columbus and Xenia	55	1,484,550	149,000	1,481,733	356,366	187,513	10	86	---
Worcester and Worcester	43	1,510,020	335,461	1,806,696	311,430	138,057	---	---	Dayton, Xen. & Belpre	63	437,838	422,668	860,496	In progr.	---	---	---	---
Hartford and N. Haven	72	2,359,000	939,000	3,313,932	730,012	352,799	10	20	Dayton and Michigan	140	1,076,692	393,011	1,185,826	In progr.	---	---	---	---
Hart's Prov. and Fishkill	120	1,845,610	2,090,124	4,060,899	288,685	119,611	---	---	Dayton and Western	35	310,000	500,000	733,769	In progr.	---	---	---	---
Housatonic	110	2,000,000	474,177	2,429,066	330,792	18,351	---	---	Eaton and Hamilton	42	454,690	904,499	1,155,135	171,929	65,000	---	---	---
Naugatuck	67	1,031,800	573,995	1,577,107	238,266	---	---	---	Little Miami	65	2,963,921	1,171,786	3,648,172	681,562	336,708	---	---	---
N. York and N. Haven	62	2,992,150	2,264,656	4,906,784	968,025	341,697	---	---	Mad River and L. Erie	206	2,451,660	2,572,932	4,444,661	In progr.	---	---	---	---
N. Haven and N. London	60	738,258	738,165	1,450,318	88,007	30,315	---	---	Central Ohio	138	1,520,927	3,485,076	4,233,448	Recently opened.	---	---	---	---
N. London, W. & Palmer	66	609,200	1,073,671	1,684,383	124,044	66,331	---	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	---	---
Norwich and Worcester	66	1,222,300	773,489	2,597,183	304,236	88,458	2 1/2	30	Pittsburg, Mayfield & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---	---
Albany Northern	32	439,000	1,825,098	1,840,696	117,716	9,904	---	---	Sandys, Mass. & Newk.	127	1,350,000	2,206,357	3,562,357	323,968	164,479	---	---	---
Black River and Utica	35	643,330	317,859	974,323	In progr.	---	---	---	Scioto & Hocking Valley	135	403,975	509,050	888,868	In progr.	---	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,871	1,601,183	2,819,096	172,476	66,333	---	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---	---
Buffalo and N. Y. City	92	798,439	2,597,849	3,401,868	288,392	31,896	---	---	Tol. Wabash & St. Louis	242	2,500,000	4,530,000	---	In progr.	---	---	---	---
Buffalo and St. Line	99	1,300,000	1,040,000	2,494,364	679,750	356,763	10	---	Cin., Log. and Chicago	255	4,196,979	1,006,126	2,080,433	In progr.	---	---	---	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	60,506	---	---	Evansville & Crawford	109	706,945	1,177,596	1,844,541	127,400	64,562	---	---	---
Canandaigua & Niagara F's	91	1,315,000	2,279,854	3,495,332	1,812,087	603,942	---	---	Ind. and Cincinnati	68	1,213,723	1,442,859	2,178,461	356,012	193,142	7	58	---
Cayuga & Susquehanna	35	687,000	606,689	1,187,667	135,433	48,449	---	---	Indiana Central	66	611,400	1,261,179	1,907,911	350,176	134,375	---	---	---
Hudson River	144	3,788,468	9,250,362	12,787,896	1,812,087	603,942	---	---	Ind., Clev. & Pittsburgh	63	824,167	1,011,971	1,671,544	---	---	---	---	---
Long Island	95	1,875,148	688,949	2,565,986	301,793	110,946	---	---	Jeffersonville	60	1,014,252	694,000	---	---	---	---	---	---
New York Central	534	24,154,860	14,627,742	38,522,913	5,653,581	3,162,128	8	92 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	284,149	112,830	---	---	---
New York and Erie	464	10,023,968	25,126,669	33,439,431	5,488,968	2,627,118	---	---	New Albany and Salem	288	2,635,121	6,281,448	6,643,189	645,877	371,402	---	---	---
New York and Harlem	138	5,717,100	4,069,769	8,786,203	1,635,677	234,126	---	---	Peru and Indianapolis	73	---	668,314	---	---	160,000	---	---	---
Northern, N. Y.	113	1,633,022	4,406,874	5,470,714	620,133	136,734	---	---	Terre Haute and Ind.	73	974,800	604,355	1,502,166	267,512	189,702	10	---	---
Oswego and Syracuse	35	399,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and Rock Is'd	182	3,141,500	2,387,155	5,214,162	In progr.	---	---	---	---
Potomac and Watertown	29	467,200	294,189	749,683	In progr.	---	---	---	Chicago and St. Louis	220	---	---	1,077,312	In progr.	---	---	---	---
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7	---	Chicago, Burl. and Quincy	138	1,476,300	1,511,557	2,761,429	722,580	379,821	20	---	---
Saratoga and Whitehall	48	500,000	395,000	---	71,909	21,089	---	---	Chic., St. Paul & F'd do Lac.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---	---
Syracuse & Binghamton	80	768,369	1,578,804	2,272,777	159,484	22,503	---	---	Galena and Chicago	298	4,234,800	1,189,804	5,866,263	1,506,710	942,231	17	112	---
Troy and Boston	27	487,830	377,079	1,109,827	156,363	55,184	---	---	Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	727,952	---	---	---
Watertown and Rome	97	1,370,778	700,979	2,068,063	404,374	172,474	3 1/2	---	Peoria and Oquawka	93	569,889	816,644	1,388,342	In progr.	---	---	---	---
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,366	75,834	---	---	Ohio & Miss. (West Div.)	147	1,780,296	3,292,408	4,870,588	Recently opened.	---	---	---	---
Camden and Amboy	94	3,000,000	11,407,200	8,636,523	2,017,127	961,941	12	125	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.	---	---	---	---
Camden and Atlantic	60	369,820	1,522,181	1,729,642	122,417	50,080	---	---	Detroit and Milwaukee	185	838,000	1,128,994	1,966,969	In progr.	---	---	---	---
New Jersey Central	30	3,482,850	600,000	4,310,111	961,514	500,747	10	121 1/2	Mich. Central	282	6,032,444	5,993,013	10,066,165	2,215,263	879,656	10	97 1/2	---
New Jersey Central	63	2,000,000	2,266,176	8,683,149	363,728	171,603	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	97 1/2	---
Morris and Essex	53	1,187,805	375,000	1,636,550	226,893	102,474	6	---	Green Bay, M' & Ch.	155	764,074	442,726	1,193,785	In progr.	---	---	---	---
Albany Valley	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee and Miss.	109	1,826,428	2,427,898	3,578,757	691,643	417,443	17	83 1/2	---
Cataw. W. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	62,450	---	---	Milwaukee & Western	72	354,861	132,000	514,238	In progr.	---	---	---	---
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Milwaukee and Horicon	15	554,200	---	854,109	In progr.	---	---	---	---
Del. La. & Western																		

Cincinnati Stock Sales,
By KIRK & CHEEVER.
For the week ending May 27th, 1856.
BONDS.

	BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	-----	80 1/2
Covington & Lexington, 2nd Mort. 7 per ct.	-----	64
Ohio & Mississippi, 2nd Mort. 7 per ct.	-----	46
Indianap. & Cin., 2nd Mort. 7 per ct.	-----	77
Hillsboro' and Cin., 7 per ct. 1st Mort.	-----	50
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	-----	58
Covington & Lexington, 10 per ct. Income	-----	67
Indianapolis and Cincinnati Dividend	-----	70

stocks.

Cin., Wilm. and Zanev., 15.—Cin., Ham. and Dayton, 62.—
Col. & Xenia, 86.—Cincinnati & Chic., 5½.—Central Ohio, ...
—Covington and Lexington, 14.—Dayton and Western, 17.—
Eaton and Hamilton, 23.—Fort Wayne and Southern, none.
Indiana Central, 50.—Indianapolis and Cincinnati, 37.—Little
Miami, 93.—Mad River & Lake Erie, 15.—Marietta & Cin.,
14.—Ohio and Mississippi, 8.—Hillsboro' and Cincinnati, 14.—
—Peru and Indianapolis, 17.—Bellevue and Indiana, 40.—
Cincinnati, Harrison and Indianapolis, 10.

By HEWSON & HOLMES.
For the week ending May 28th, 1866.

\$4,000 Little Miami, 6 per ct, 1st Mortg.....	80	(& int.
2,000 Ohio & Mex., 7 per cent, 1st Mortg.....	65	"
4,000 Cov'g & Liss., 7 per ct. 2nd Mortgage.....	65	
2,000 Cinc. & Ham. and Dayt. 7 per ct. 2d Mortg.....	80	"
2,000 Marietta & Cin., 7 per ct. Domestic.....	38	
1,000 Indiana Central, 10 per ct. Income.....	95	
1,000 Fayette Co., Ky., 6 per cent.....	75	

200 Shares Ohio & Mississippi		7%	66
29	64	8	
84	64	8	66
100	64	15	
148	64	6	
20	64	93	
25	64	83	
35	64	60	
38	64	60	
46	64	60	
106	64	20	66
		20	

The following amounts have been subscribed by various towns, to the Hannibal and Naples railroad:

Town of Griggsville, \$20,000; Salem, \$10,000; Barry, \$20,000; city of Hannibal, \$75,000; private subscription, \$25,009—making in all, \$150,000. The vote for Pike county to take \$50,000 in stock has not as yet been had, but we presume will take place soon.

**Extract from De Coppet & Co's Money
Circular for the European Steamer of the
4th Inst.**

[TRANSLATED.]

NEW YORK, Tuesday, June 2nd. 1856.

Since our advices of May 27th, the event, the anticipation of which had kept our Stock Market in an unsettled state, has been consummated: the English Ambassador has been tendered his passports. The conciliatory tone of the dispatches, and the forms which have accompanied this act, it is considered, deprive it of whatever might have been deemed wounding to the English Government. In consequence, this news has been received without producing even a momentary depression upon our most sensitive stocks, the effect having been anticipated. The transactions of the week, until to-day, were upon a moderate scale, but under the influence of an easier money market, a better tone prevails among stocks, and to-day there is a general rise with increased activity. The last steamer from Europe brought a few orders as well for the sale as the purchase of State and City securities. State Stocks:—Virginia 6s and Missouri 6s were done at some advance. New York being in very limited demand, prices are weak. California 7s have been more offered and declined $\frac{1}{8}$. Some Bonds of the lately authorized loan of this State, for \$1,500,000, 7s, redeemable 1875, have appeared in our market. For City and County Bonds, we notice a retail demand for Chicago 6s, Milwaukee 7s, Cincinnati 6s, St. Louis 6s, without change offering. San Francisco 6s being more freely offered sold at a decline. In Railroad Bonds, the late inaction has somewhat been interrupted by a few private sales of Ohio and Pennsylvania Income, Galena and Chicago 1st and 2nd mortgage, and Milwaukee and Mississippi 1st mortgage. At the Stock Exchange, Illinois Central Construction and Freeland were done to a fair

CITY SECURITIES.		Int't payable.	Off'd	Asked	CITY SECURITIES.		Int't payable.	Off'd	Asked
New York 7 per ct.-----	1887	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	Divers	87	88
Do. 5 do.-----	1885-86	May,	94	95	New Orleans, 6 per ct. p. R.R. X	X	Do.	75	80
Do. 5 do.-----	1870-'76	August,	94	95	N. Orleans, 6 per ct. p. municip. X	X	Jan'y, July	91	92
Do. 5 do.-----	1860	November,	94	95	Philadelphia, 6 per ct.	X	Jan'y, July	72	74
Albany, 6 per ct. coup.-----	1871-61 X	Feb'y, August,	97	97	Pittsburgh, 6 per ct. coup.	X	Divers	79	80
Alleghany, 6 per ct. coup.	1870-'80	Jan'y, July	97	98	Quincy, 8 per ct. coup.	1868	Jan'y, July	90	90
Baltimore, 6 per ct.	1879-'80	Quarterly	97	98	St. Louis, 6 per ct. coup.	X	10. Feb'y, Aug	90	90
Boston, 5 per ct.	Long	Jan'y, October	98	99	Rocketer, 8 per cent. coup.	X	Divers	90	90
Boston, 6 per ct. coup.	Long	Jan'y, July	100	101	St. Louis, 6 per ct. coup.	X	Do.	78	79
Camp'd'd, 7 per ct. p. W.W. 1879	X	Do.	101	101	St. Louis, 6 per ct. coup.	X	Do.	79	80
Cincinnati, 6 per ct. coup.	1880	Divers	80	80	Sacramento, 10 p. ct. p. C. 1862-'74 X	X	Do.	75	78
Chicago, 6 per ct. coup.-----	1873-'77 X	Jan'y, July	90	90	S. F. disc'o, 7 p. c. p. 1865, pay. N. Y. X	X	May, Novemb.	80	80
Do. 7 per ct. coup.	1880	Jan'y, July	100	100	Do. 10 p. ct. coup.	1871 X	Do. do.	90	90
Detroit, 7 per ct. p. W.W. 1873-'78	X	Feb'y, August	100	102	Do. 10 do. pay. N. Y.	X	Jan'y, July	104	104
Dubuque, 8 per ct.	Long	March, Sept.	101	105	Do. 6 per ct. pay. N. Y. 1875 X	X	Do. do.	57	59
Jersey City, 6 p. ct. p. W.W. 1877	X	Jan'y, July	94	97	Wheeler, 6 per ct. coup.	X	Divers	67	67
Louisville, 6 per ct.	1880-'83	Divers	70	70	Do. p. ct. p. Mun. 1874 X	X	March, Sept.	80	81
Memphis, 6 per ct. coup.	1882 X	Jan'y, July	70	70	Zanesville, 7 do.	X	April, October	97	97

amount at a trifling decline, and a few Erie 7s, 1875, and New York Central 6s and 7s, at a fraction advance. In Railroad Stocks there has been a fair degree of activity. Exchanges on Europe are rather dull. Principal transactions on London 109 $\frac{1}{4}$ to 109 $\frac{3}{4}$, on Paris, 5.16 $\frac{1}{4}$ to 5.17 $\frac{1}{4}$. Money is in better supply at 6 to 7 for call loans. Paper is less offered at 8 to 10 per cent.

DE COPPET & CO.

American Railroad Journal.

Saturday, June 7, 1856.

Cleveland and Pittsburgh Railroad.

The Cleveland and Pittsburgh Company are rapidly completing the important portions of their road. The graduation of the whole is nearly completed. The requisite amount of iron has been purchased, and is rapidly going upon the road. It is the expectation of the company to have the whole line running at an early day the coming fall.

The unfinished portions will all form very important connections—with Pittsburgh, Wheeling, and the line of the Steubenville railroad. The Pittsburgh extension will open the lower end of the trunk line, as well as the New Philadelphia and Wheeling Branches; to Pittsburgh, the great centre of trade of the sections they traverse. There is also a very large trade in fabrics of various kinds between Pittsburgh and the Lake at Cleveland. For almost all kinds of manufactures of iron, Pittsburgh is the most important manufacturing city in the interior. Wheeling is another large manufacturing town having very large trade with Lake Erie. The greater part of this trade will pass over the above branch when completed and the main line. At Steubenville, the Wheeling branch will form a connection with the Steubenville and Indiana railroad; and at Wheeling with the Ohio Central, and the Baltimore and Ohio roads. All these will form very valuable and important connections. The construction of the extension of the Marietta road to Wheeling is already commenced. Through this road communication will be had with all Southern Ohio and Cincinnati. The extension of the Tuscarawas Branch to the line of the Steubenville and Indiana railroad will add largely to the business of the former. The completion of the several branches now in progress will open unbroken communication by railroad between Pittsburgh and Steubenville, Wheeling, and all that part of Ohio dependant upon the latter.

Pittsburgh has been completely cut off from railroad communication with the Central and Southern portions of Ohio, by the bend of the river. This inconvenience is soon to be remedied by the completion of the unfinished portions of the C. and P. line.

The formation of all these connections will add very highly to the value of the above road. They will form a line which has, heretofore, been incomplete. The Main Trunk is, however, already doing a very excellent business, and is earning from \$65, to \$75,000 per month. Upon the completion of the unfinished links, the Company expect their earnings to go up to \$100,000 per month, which will be a large revenue upon the entire cost of the road. The finances of the Company are in good condition. Having no floating debt, the net earnings can hereafter be ap-

plied to cash dividends, which have for some time past been paid in stock.

The main line of the road runs through one of the longest settled and most populous portions of the State. It also has a very large coal trade, chiefly to the Lakes, and which is steadily and rapidly increasing. The carriage of coal will soon become a leading branch of business and will give the Company a traffic quite up to the capacity of the road. This business may be done when other kinds do not press. The road, in fact, would seem to have all the elements to make it a first class work. Its finances have been placed in good condition, and the management of the road is reported to be excellent.

Consolidation of the Pittsburgh and Chicago Line.

There is, we understand, some opposition to the carrying out of the terms proposed for the consolidation of the roads that are to compose the above line, the details of which we recently gave. The opposition comes, we presume, mainly from the stockholders in the Ohio and Pennsylvania railroad. This road is in operation, and is doing a good business. It is feared by some, that as a portion of the consolidated line is yet incomplete, the earnings of the Ohio and Pennsylvania portion may be taken for the purpose of completing the unfinished link, or applied to the common stock of the consolidated line, a portion of which represents capital not yet productive. With the consolidation, we presume that sufficient means will be provided for the completion of the Fort Wayne and Chicago road, which would, of course, obviate the objection urged, and leave the question to be settled entirely by the probable productiveness of the several works that are to make up the new concern.

There is no doubt to our minds that the whole line should be under the control of one interest, as they all form parts, commercially, of one line. As distinct lines, it appears to us that the Ohio & Indiana and Fort Wayne & Chicago occupy quite as strong positions as the Ohio and Pennsylvania. There is a very strong tendency to the Lakes, in the trade of all Northern Ohio and Indiana. The Ohio and Pennsylvania road feels the effects of this tendency more strongly than either of the other roads. The Ohio and Indiana railroad has a convenient connection with Cleveland, over which a considerable portion of its trade and travel must always pass. In connection with the Fort Wayne and Chicago and the Cleveland and Columbus railroads, it will also form a pretty direct and expeditious route between Chicago and Cleveland, between which there must always be an enormous passenger traffic. As a portion of the great route from Central Ohio to Chicago, the Fort Wayne and Chicago must have a large passenger as well as freight traffic. If there appears to be a present advantage on the side of the Ohio and Pennsylvania railroad, it must be quite evident that that is merely a temporary one which will at once disappear, upon the completion of the whole line.

We believe that a line of railroad extending from Pittsburgh to Chicago under the control of one interest would be one of the best paying routes in the country. Chicago is soon to be the greatest interior distributing point for merchandise in the country. The above road and the

Pennsylvania Central are based upon the greatest manufacturing centres. A line connecting such points of distribution and production has all the possible elements of success and must be productive if any railroad can be.

Long Dock Company.

The Erie Company have at last made arrangements by which they will shortly be enabled to overcome one of the greatest obstacles to the final success of their great enterprise. We refer, of course, to the lack of sufficient accommodations at their eastern terminus. By the terms of the contract entered into with the Long Dock Company, and that recently made with the contractors, the tunnel through Bergen Heights, on the west side of the Hudson, is to be completed by November, 1857, or sooner if possible. This magnificent enterprise will be 4,000 feet long, and of sufficient capacity to admit a double track through its entire length. Its eastern end will open into that part of Jersey City near the city limits of Hoboken—a place which is at present almost unoccupied; but can be graded at a moderate expense. It is designed to run a pier from this point into the Hudson river, so as to give a depth of 20 feet of water, enabling the heaviest vessels to load and unload at all times. The river frontage here will be about 1,100 feet in length; and the total landed property owned by the company will include some 2,500 lots of ground.

It is well known that by their original charter, the company were prohibited from building the road at any point within the limits of New Jersey. A quarter of a century ago, even in this State, legislators were under the impression that whatever benefitted one's neighbor injured himself to an equal degree. This narrow and very erroneous idea obliged the Erie company to construct an immense and very costly pier, 25 miles up the river, when the natural terminus of their road should have been immediately opposite to this city. Probably not less than a million of dollars has been sunk in building this gigantic work, or rather gigantic failure; for the thing, after several years' trial, has been found, several months in the year, to be almost unserviceable. During the greater part of the winter season, the river at this point is so obstructed with ice, that navigation has to be suspended. In this condition of things, an arrangement was made about 8 years ago with the Paterson and Hudson River, and Paterson and Ramapo Co's., by which the passengers and part of the freight were to be carried over these roads between Sufferns and Jersey City. More advantageous as this was, it was still found to work inconveniently. The Erie had a wide, and the other roads a narrow gauge, thus requiring a change of cars at the junction. In 1852, the Erie company made a lease of the other two roads for an annual rent of eight and seven per cent on their respective costs. Immediately afterwards they proceeded to change the gauge, and built a second track from Paterson to the junction with the New Jersey road, at Bergen Hill. A considerable sum, we believe about \$30,000, was spent in widening the cut through that ridge, and laying down an additional rail into Jersey City.

A fresh obstacle here presented itself—the want of depot accommodations. To the present these have been limited to that space required for the business of the old Paterson road. Except in the

winter season, the heavy freight had still to come by way of Piermont. At the same time the company had pledged themselves to close the construction account, as one of the conditions on which their last loan could be obtained.


There was only one course left—a course that should have been adopted at the commencement of the enterprise. Last winter, a number of gentlemen deeply interested in the success of this great work, applied to the New Jersey Legislature for a charter of incorporation, under the title of the Long Dock Company, with power to construct a new road through Bergen Hill, the necessary piers, run a line of ferry-boats, and lease the whole to the Erie company. A satisfactory arrangement was made with the New Jersey Railroad Company, and a charter obtained. Since then a lease of the property and rights has been duly executed to the Erie company, and the work has been let to contractors who are immediately to commence operations with a large force.

By the terms of the contract, the Long Dock Company are to receive ten per cent. per annum on the capital stock, which is \$800,000, together with interest on any sum which it may be necessary to borrow for the completion of the work. The Erie Company, on the other hand, have the privilege at any time of taking possession of the work, on payment of cost. This they will doubtless do at the earliest day that an easier money market will enable them. In the meantime the annual rent, say \$100,000, will bear no comparison with the immense advantages that such a work will afford them. Their whole business will be brought to one point, instead of being scattered over two or three, necessarily creating much delay, confusion, and loss. The rent to the New Jersey Company and the costs of ferriage, to say nothing of other disadvantages under which they now labor, would almost equal the annual charge for the new work.

Whether as regards the City of New York, the eastern shore of New Jersey, or the Erie Company, this work will be one of the most magnificent enterprises undertaken in many years. To the business men of this city it will give greatly increased facilities for receiving produce from the West, and forwarding commodities in the same direction. It will rapidly draw around the works a large and active population, and cause the value of landed property to advance in a corresponding degree. As the Company will have considerable property to dispose of, this advantage will tell very materially in their favor. The cities of Hudson, Hoboken, and Jersey City will doubtless be consolidated at an early day. Brooklyn is now built up; and the large overflowings of New York may be henceforth expected to pour into New Jersey, until the whole heights west of the Hudson, for several miles, shall be crowned with human habitations. Several leading lines of railroad already concentrate there, and others are in progress. Among those required may be stated a connection with the Delaware, Lackawanna, and Western railroad at Elizabeth, which must be made at an early day.

To the Erie company this will afford facilities that may be fairly pronounced unequalled. With a river frontage of nearly one-fourth of a mile, with unobstructed navigation for the largest class of vessels at all seasons of the year, with a direct

connection with New York, the largest and most enterprising city on the continent, with a business increasing at the rate of a million per annum, and capable of almost indefinite extension, we shall look forward with eagerness for the completion of this work so indispensable to her own great and rapidly growing business, and so much called for by the wants of this city.

 We learn that the Directors of the Grand Trunk Railway in Canada, and of the St. Lawrence and Atlantic Railway, as well as of all the branch lines connected therewith, have resolved to give a thorough trial of the system of car ventilation invented by Mr. Henry Ruttan. This, if successful, will insure one complete line of railway travel from Portland to Montreal, and thence to Michigan, in comfortably ventilated cars, pure and warm in winter and free from dust in Summer. Mr. Ruttan's system differs somewhat from Mr. Foote's system, on trial on the New York and Erie, and Michigan Southern roads, and is quite different from any other system known. It is, we believe, the oldest system of car ventilation, and improvements recently introduced are believed to have overcome all objections.—The inventor has been extremely successful in ventilating buildings on the same system.

Grants of Public Lands to Railroads.

Among the bills which have recently become law, granting alternate sections of the Public Lands to railroad companies, we notice the following—

In WISCONSIN—to aid a line from Fond du Lac, on Lake Winnebago, northerly to the State line of Michigan, 165 miles; and also from Madison or Columbus, via Portage City, to the St. Croix river or Lakes, between townships 25 and 31 (near St. Paul, Minnesota,) about 250 miles; thence easterly to Barfield, on Lake Superior, about 60 miles.

In MICHIGAN—to aid a line from Little Bay de Noquet to Marquette, and thence to Ontonagon; and from the two last named places to the Wisconsin State line; also from Amboy, by Hillsdale and Lansing, and from Grand Rapids to some point on or near Traverse Bay; also from Grand Haven and Pere Marquette to Flint, and thence to Port Huron.

In FLORIDA—to aid a line from St. John's river, at Jacksonville, to the waters of Escambia Bay, at or near Pensacola; and from Amelia Island on the Atlantic to the waters of Tampa Bay, with a branch to Cedar Key on the Gulf of Mexico; and also a railroad from Pensacola to the State line of Alabama, in the direction of Montgomery.

In ALABAMA—to aid a line from Montgomery, in this State, to the boundary line between Florida and Alabama, in the direction of Pensacola, and to connect with the road from Pensacola to the above line.

The terms and conditions on which these lands are donated to the several States are similar to those on which lands in Iowa and other States have been granted. The grants embrace six alternate sections on each side of the line; but in case any of these have been already disposed of, the agent to make selections within a distance of fifteen sections. The lands to be applied exclusively to construction purposes. Remaining sections and parts of sections to be sold for not less than double the minimum price. United States troops

and property of the General Government to be for ever transported free. The lands to be disposed of *pari passu*, with the completion of each twenty miles. U. S. mails to be transported at such price as Congress may by law direct, the Postmaster General having meanwhile power to determine the same.

Memphis and Charleston Railroad.

The annual meeting of this company was held at Huntsville, on the 7th of April. From the sixth annual report just published, we learn that the road has made steady progress during the past year, while those sections in operation have shown largely increased receipts. A loan of \$300,000 tendered by the Legislature of Alabama was vetoed by the Executive of that State. In the circumstances in which the Board felt themselves placed, they were obliged to dispose of \$250,000 of their first mortgage bonds, at a lower price than they had been previously held at.—There are now about \$1,000,000 of capital invested in the finished road, which, for want of proper connections, will not afford next year a gross revenue of more than \$525,000, or \$288,750 net.—Could the road be only completed, these sums would swell to \$1,200,000, and \$660,000 respectively.—With a very small outlay, this can be accomplished. At date of last report, the grading and masonry from Stevenson to Decatur, 83½ miles, and from La Grange to Pocahtontas, 25¼ miles, had been sufficiently advanced to commence laying down the rails. This was begun in April last year, and completed from La Grange to Pocahtontas in September. From Decatur to Stevenson, track-laying was delayed over ninety days, by the burning of bridges over the Etowah river, on the Western and Atlantic railroad, and the Tennessee river, on the Nashville and Chattanooga road. The connection between Stevenson and Decatur was consequently prevented till March of the present year. One hundred and nine miles of new track have been laid and put in operation since last annual meeting, affording an outlet to Charleston from the great Tennessee valley. The length of road completed on the eastern division is 129 miles, extending from Tusculumbia landing to Stevenson, where a connection is made with the Nashville and Chattanooga railroad, and on the western division, 88 miles, including the Somerville branch of 13 miles. The remaining link to be completed, from Tusculumbia to Pocahtontas, is 71 miles. The greater part of the grading of this section had been just put under contract, at date of last report. Since then it has progressed steadily, with but slight intermission from the failure of contractors. It is believed that every section is now in the hands of able and reliable men. The cross-ties, rails, chairs and spikes have been purchased, and are now being delivered. The iron is to be paid for in the company's securities at satisfactory rates. Contracts have also been made for laying the rails from Tusculumbia to Pocahtontas, and the work of putting them down was to commence in May.

The actual and estimated cost of the eastern division, according to the Engineer's report, will be \$2,760,595, of which the sum of \$2,149,643 has been expended, leaving \$610,952 yet to be applied. The company's present liabilities on this division, are \$413,897, of which \$100,000 will be settled by bonds. Adding for twelve months' interest on funded debt \$49,000, this would make the amount

necessary to finish and equip the road and pay floating debt, \$973,850. The resources applicable to this division are—

Cash and cash assets.....	\$167,325
Bills receivable and individual dues....	48,803
Probable balance to be collected from stockholders.....	27,028
In the purchase of iron rails, chairs, and spikes, provision is made to use in Co. bonds and city of Memphis bonds....	120,000
Co. bonds to be taken by contractors west of Tusculumbia.....	75,000
Co. bonds contracted to be used in purchase of equipment during the year.....	\$112,500
Estimated net earnings of road to 1st of March, 1857.....	180,000
	<u>\$680,657</u>

Leaving balance yet to be provided...\$293,193 to complete, equip, and pay floating debt of the eastern division of the road.

The grading and masonry on this division is now completed; except about six miles near Big Bear creek. Those sections being heavy it will be necessary to keep a large force upon them during the spring and summer, in order to secure their completion in time to lay the track over them next fall. Most of the cash means, at the command of the Board, will be necessary to pay liabilities maturing at an early date.

In order to secure the rapid progress of track-laying west from Tusculumbia, and keep the grading forces near Bear creek, pressing their contracts to an early completion, with the heavy duty and freight on iron, it will be necessary to raise upon the first mortgage bonds of the company, \$150,000 to \$200,000; the Board of Directors must now appeal to the stockholders to come forward and meet this, the last call to complete a great work, in which all of you are much more deeply interested than the mere amount of stock or bonds of the company you may hold.

On the western division the total cost, estimated and actual, will be \$2,455,367, of which \$1,651,041 have already been expended, leaving \$804,325 yet to be expended. The present liabilities are \$131,872, to which adding \$59,850 for interest, gives a total of \$995,547. The assets applicable to this division are—

Cash on hand.....	\$22,056
Bills receivable, and other available means.....	300,956
Tennessee bonds on Somerville Branch.....	135,000
" yet to be received on main road.....	170,000
Tennessee bonds on bridges.....	40,000
Company bonds provided to be taken by contractors.....	150,000
Probable balance that will be collected by stockholders.....	35,000
Estimated net earnings of road to 1st of March, 1857.....	160,000
	<u>\$1,013,012</u>

Leaving an excess of means of.... \$17,464

From the foregoing estimate, it will be seen that there is a small estimate excess of available means on this division of road, over the amount required to finish and equip it. Although the estimated amount exceeds that of the last report by \$136,585, the excess is principally for equipment, to meet the necessities of the rapidly increasing business, and the urgent demands for a machine shop at Memphis, to keep the machinery on the road in order.

For the prosperous condition of this division of your road, you are in a great degree indebted to the liberal, wise, and consistent policy of the State of Tennessee,—she having, at the late session of her Legislature, granted to your company \$185,000 of additional aid, to supply the deficit created by the division of your original State aid with the Somerville branch.

COST OF THE WHOLE ROAD.	
Eastern Division, as per Engineer's Report	\$2,760,595
Western Division	2,455,367
Making entire cost.....	<u>\$5,215,962</u>
Amount expended, as per Treasurer's Report:	
Eastern Division.....	\$2,149,643
Western "	1,651,041
	<u>\$3,800,684</u>
Balance required to finish and equip.....	\$1,415,278
Add to this present liabilities:	
Eastern Division.....	\$413,897
Less amount arranged in Company bonds	100,000
	<u>313,897</u>
Western Division	131,372
Prospective interest on Company and State bonds.....	108,850
	<u>\$1,969,398</u>

Deduct from this the available assets, as per Treasurer's Report:	
Eastern Division	\$630,657
Western "	1,013,012
	<u>1,693,669</u>

Will leave balance to be provided of...\$275,728

—to complete and equip the whole road, and pay off the entire floating debt of the Company; and making the entire cost of construction and equipment \$18,175 per mile.

This shows a deficit of means in the amount necessary to complete the whole work of \$275,728.

To meet this the company have on hand \$350,000 seven per cent. first mortgage bonds left, after deducting those sold and hypothecated. The amount of this issue is \$1,600,000. The company's liabilities, when the road is finished, will consequently be—

Capital stock paid in.....	\$2,241,468
Earnings to be declared in stock div....	584,751
	<u>\$2,826,219</u>
Co's. 1st Mort. Bonds.....	\$1,600,000
Tenn. State Bonds.....	1,105,000
	<u>2,705,000</u>

In all.....\$5,531,219

The above includes equipment, interest, discount on bonds, real estate, &c. The road will consequently cost, when completed, but \$19,272.54 per mile, which, considering that it is a first-class work, and built over a very broken country, is certainly a very moderate outlay.

The report states that some steps have been taken to ascertain what means could be obtained for building the Chattanooga extension; but so far with little prospect of success. Until the people along the line lend a hand, it is not considered advisable for the company to proceed further in the matter.

The report of the Superintendent of Transportation on the eastern division shows the receipts for the year ending 1st of March, to have been—

Passengers.....	\$24,210
Freight.....	25,651
Mails.....	4,933
	<u>\$54,794</u>

—Against \$40,705 for 1854. This division was without any outlet, during the year, except at stages of high water. Consequently the receipts were light. The working expenses were \$36,088, or 65 per cent. of gross earnings. On the western division the business was—

Passengers.....	\$39,988
Freight.....	159,825
Mails.....	7,023

Total	<u>\$256,836</u>
Working expenses.....	115,972

Net gains.....\$140,863

For the whole road—

Gross receipts.....	\$311,631
Working expenses.....	152,059

Net profits.....\$159,572

The western division shows a gain of \$76,014 over 1854. Of the net profits \$11,070 were applied as a sinking fund. The net earnings show a profit of 12½ per cent. on cost. When it is considered that as yet no through connection has been made, this result must be considered as highly gratifying.

The following is an abstract of the company's GENERAL ACCOUNT.

Engineering expenses.....	\$114,993
Right of way, real estate, &c.....	31,107
Grading and masonry.....	1,289,845
Cross-ties	126,194
Track-laying, trestles and bridging.....	400,369
Depot and other buildings.....	144,228
Iron account.....	1,320,576
Equipment.....	308,951
Contingent, salaries, &c.....	64,421
Discount, interest, commissions, &c.....	228,113
Bills and accounts receivable.....	494,084
Express and transportation.....	152,060
Cash on hand.....	189,382

	<u>\$4,864,322</u>
Capital stock	\$2,179,440
Co's. bonds.....	642,000
Hypothecated bonds.....	104,800
State of Tennessee.....	760,000
Profit and loss.....	234,450
Suspense account.....	11,071
Bills and accounts payable.....	545,269
Memphis office.....	74,933
Receipts from transportation.....	312,360

The rolling stock consists of six locomotives, 2

passenger, 1 baggage, 29 box freight, and 25 platform cars on the eastern division; and 8 locomotives, 7 passenger, 3 baggage, 45 box freight, and 82 other cars on the western division. Additional equipment will be needed soon. Three new locomotives have recently been received from Norris' locomotive works in Philadelphia.

The officers for this year are—Samuel Tate, President; W. W. Wright, Principal Engineer on eastern, and J. L. Meigs, Principal Engineer on western division; W. J. Ross, Superintendent of eastern, and B. Ayres, Superintendent of western division; Samuel Cruse, Treasurer of eastern, and W. B. Waldron, of western division. The directors are—Samuel Tate, George P. Beirne, J. J. Donegan, Wm. Echols, Saml. Elliott, Wm. Dickson, Saml. P. Walker, Danl. B. Turner, and Chas. W. Hunt—by the stockholders; J. W. Scruggs and Henry W. Conner—by City of Charleston; and John Trigg and E. McDavitt by the State of Tennessee.

Bargan Hill Tunnel.

The ceremony of breaking ground on this undertaking took place on the 4th inst., in the presence of a large concourse of spectators. Addresses were delivered on the occasion by Mr. Ramsdall and others. A large force of men will at once be set to work upon it.

Progress of the Magnetic Telegraph Lines throughout the World.

Mr. Marshall Lefferts recently read a paper before the American Geographical and Statistical Society, which contains some very interesting data upon this subject.

It will be seen by the following table of the telegraph lines in the world, that the United States is far in advance of every other nation:

United States.....	35,000
Great Britain.....	9,200
Germany and Prussia.....	5,000
France.....	4,500
Austria.....	3,500
Turkey.....	1,200
Russia.....	2,800
India.....	500
Spain.....	450
Denmark and Sweden.....	800
Italy.....	1,900
Switzerland.....	1,000
Holland and Belgium.....	1,000

A company has been formed in England, which has engaged to finish the submarine line between Newfoundland and Ireland, and have it in full operation by January, 1855. A new cable has been prepared to run between Cape Race and the main land, and will soon be laid, if no disaster prevents it.

There are already lines extending from London to Sebastapol, soon, it is expected, to be carried to Corsica, Sardinia, into Africa, thence through Asia, so that when the submarine line between this country and England is laid, direct communication can be had with the great cities of the Eastern Hemisphere. Another line of telegraph is proposed from San Francisco along the coast of North America to Behring's Straits, thence to St. Petersburg, in Russia. The number of messages sent annually over the telegraph lines of America is 14,736,000. Twenty thousand a month are sent between this city and Boston. The New York press pays \$30,000 annually for messages. Fifteen thousand words are sometimes sent for one edition.

Brunswick and Florida Railroad.

At a meeting of the stockholders of the Brunswick and Florida Railroad Company, held at Brunswick, Ga., on the 15th inst., the following parties were chosen Directors for the ensuing year: C. F. Welles, jr., Athens, Pa., George E. Gray, Albany, N. Y., Henry G. Wheeler, N. Y., Chauncey Vibbard, Albany, Samuel J. Beals, New York, Henry S. Welles, New York, Levi J. Knight, Georgia.

At a subsequent meeting of the Board Colonel Charles F. Welles was elected President and Sam'l J. Beals Vice President.

We learn that contracts for grading, bridging, and cross-ties for 70 miles west of the Saltilla river, and reaching to the Altopia, were made.

We learn that contracts were also made with responsible planters living along the line of the road, to extend the road 55 miles to Thomasville, (a distance of 1:8 miles to Brunswick,) with a branch to Albany seventy miles in length.

We also learn that the company declined to avail themselves of the provision made by the State for the construction of the *Trunk Line Railroad*, which was intended to occupy, in part, the route of the B. and F. railroad and to connect with roads running respectively to Brunswick and Savannah. The Brunswick Company claim to be able to build a railroad to the Western boundary of the State; and holding the charter

for such work, they do not choose to divide any of the advantages they possess with their neighbors. Should they persevere in their present determination, it may embarrass the operations of the Trunk Line Company.

Meeting of the Stockholders of the North-East and South-West (Ala.) Railroad.

We have not yet been able to obtain the official proceedings of this meeting—the Secretary having left for Tuscaloosa soon after the adjournment—but such items of interest as we have been able to collect will be found below.

There was a quorum of the stock represented, and the old Board of Directors unanimously re-elected. Dr. L. C. Garland was re-elected President of the company, but declined acting only in a nominal capacity, as his engagements as President of the University of Alabama would not allow him to perform any of the active duties of President of the road. Col. E. D. Sanford the able and energetic Chief Engineer, was continued in his office by a unanimous vote. The new Board unanimously resolved to prosecute the work—subscriptions sufficient to bind the stock having been obtained on the lower division.

Messrs. Alfred Battle, R. F. Houston, Wm. S. Mudd and S. L. Creswell, the committee appointed to examine into the character and amount of subscriptions obtained, reported upwards of six hundred subscribers, composed of the most substantial men in the country, and out of whom there is not considered more than a dozen, and these for small amounts, that were at all doubtful.

The committee also reported grading contracts closed to the amount of \$345,000—all to be paid in stock, and \$574,000 in solvent cash subscriptions, but as the cash subscription, a large portion of which is applicable to grading and cross-ties, will provide for more than its amount in grading and ties, by letting out the work for half cash and half stock, the resources of the company on this division will amount to something upwards of a million of dollars. As proof that this plan of letting out contracts for half cash and half stock is feasible, Mr. Sanford received soon after the adjournment of the meeting, a proposition from one gentleman to take contracts to the amount of one hundred thousand dollars, and a short time before the meeting a proposal from another gentleman to take \$20,000 in the event that the enterprise was prosecuted. The cash subscription of \$574,000 only embraces that subscribed upon the present plan, and does not include all of the cash subscriptions of this part of the road, and those which have not been renewed have not been released, but will be held binding when the original plan of providing for the grading and \$600,000 cash subscription shall have been worked up to.

The terms of subscription in accordance with the above report were found to have been fully complied with, and the stock made absolutely binding on this division—so that there is no longer any doubt of the speedy prosecution and ultimate completion of the work.

Mr. Sanford has also appointed the agent of the company, and authorized to re-organize the corps of Engineers, and proceed to let out contracts with as little delay as possible.

The unquestioned and avowed policy of the company, as determined by an unanimous vote of the Directory is, to prosecute the enterprise thro' to Chattanooga as soon as practicable. The most cheering news having been received recently from the upper part of the road, there is no doubt of obtaining the amount upon that part of the line required to bind those subscriptions already made. The stockholders seemed determined to build their end of the road whether this end was built or not.

It is also the settled policy of the company to preserve their perfect independence of all other companies from Chattanooga to the Mobile and Ohio railroad—the Directory being opposed to "entangling alliances" of any kind and with any company.

This, we believe, embraces about all the information which we have been able to obtain, and is enough to give satisfaction to the friends of the enterprise, who have been hoping and working ever since the enterprise was first thought of.—Enough is known to put its ultimate completion beyond doubt.

No other road was ever commenced with more certain prospects of success, for no other road ever received from the people along its line such aid and support as this one has received, but notwithstanding so much has been done, much, very much yet remains to do and we hope every friend will grow still warmer in its favor and all the vacillating and lukewarm be induced now that the road is certain to be built, to lend a helping hand to the good work and in the end reap its benefits and profits.

We congratulate the citizens of Tuscaloosa, Greene and Sumpter on the success which has crowned their efforts. They have now taken a step which will place them abreast with the most enterprising and prosperous section of the Union and make this, which was before, the garden spot of Alabama, the garden spot of the nation. With such energy, perseverance and talent as Mr. Sanford will bring to bear upon the work, it will not be long until there will be heard no more, a complaint of low rivers, hard times and no money.—Every branch of business will prosper, every species of produce will find a market and labor will be always in demand at remunerative prices. The great tide of travel will ebb and flow through our midst, for this is the nearest route from the North East to the South-West and with this tide of travel will come the most abundant prosperity.—*Alabama Whig.*

Submarine Telegraph between America and Europe.

The bill for the formation of a Transatlantic Telegraph company, which was some time ago introduced into the Canadian Parliament, has passed its second reading in the Lower House, and the committee to whom it was referred have recommended its final passage. The telegraphic line for which provision is thus made, will begin at Quebec, and following the course of the St. Lawrence, reach to the eastern extremity of Labrador. A submarine cable will then convey the wire to the southernmost coast of Greenland, thence up the eastern coast to the point nearest to Iceland, and thence across the strait to that island, which the line will traverse from west to east. Finally, another submarine cable will stretch away to the Faroe Islands, and thence to the northernmost extremity of Scotland. There will be but three or four stations in crossing the Atlantic, and the cables, whose junction will form the ocean line, will vary from a hundred to five hundred miles in length. Quebec and London will form the two termini of the line, which it is stated can be completed in less than eighteen months.—*Exchange.*

La Salle and Lafayette Railroad Company.

At a meeting of the stockholders of this company, lately held in this city, the following gentlemen were elected officers for the ensuing year: Alexander Campbell, President; R. B. Mason, Vice President; Churchill Coffing, Secretary.—The Board of Directors consists of Alex. Campbell, Alex. Cruickshank, R. G. Parks, A. B. Hitchcock, David Brown and Churchill Coffing.

This a very important line of road, and we hope to see it speedily completed. It is to connect La Salle and the country west with Cincinnati and the different points on the Ohio, an almost air-line route, diminishing the distance over one hundred miles from the route now traveled. The survey has been completed, and the estimates are very favorable to its cheap construction. The grade is an easy one, being almost entirely through a prairie country. It is mostly through a thinly set-

ted portion of the State, which only requires the facilities of a railroad to develop its agricultural and mineral resources. On the line are many valuable deposits of bituminous and cannel coal, which can only be brought into market on the completion of the road.—*La Salle Press*.

Wabash Valley Railroad.

The agent of this road informs us that freight is now coming from the Ohio river, via the Peru and Indianapolis and Jeffersonville Railroads without transshipment or change of cars.

On Monday last 500 barrels of Pork were received here from Louisville, Ky.; and there are now about 1,000 barrels of Flour in the warehouse, received from Jefferson, on the Ohio river, opposite Louisville.

We believe that this arrangement will be hailed with pleasure by our business community. Henceforth is open to us a chain of railroad connections, widely ramified through the richest portion of the West and South-west, whose varied products are thus brought directly to the shores of Lake Erie. New fields of enterprise, new facilities of intercourse, are open, whose magnitude will receive a daily increase, and whose future importance can scarcely be foreshadowed even by the most sanguine.

Let the reader take a map, and see for himself the simple facts of the case.

1. The Toledo, Wabash and St. Louis Railroad extends to the Indiana Western Line, connecting at that point with the Great Western Railroad of Illinois from Danville to Springfield, and continuing west by the G. W. railroad to Naples, Illinois, whence, when completed, it will strike the Mississippi river at a point opposite Hannibal. The total length of this road will be 464 miles.

2. We also have a short and quite direct communication with Cairo, Ill., via G. W. railroad and the Chicago branch of the Great Illinois Central railroad, distance from Toledo, 537 miles.

3. Then we have an almost direct connection with St. Louis, via the Toledo and Illinois railroad and the Paris branch from Paris, Illinois; thence, via the Terre Haute and Alton railroad. Distance from Toledo 424 miles. This route brings us fourteen miles nearer to Terre Haute than by the canal, and seventy-three miles nearer to St. Louis, than by the former route of the Chicago and St. Louis railroad. The immense saving of time, money, and transshipment which this road offers, cannot fail to make it the great route to St. Louis from the East.

So much for our South-western connections, with St. Louis and the great valley of the Mississippi. Let us now turn to the South and see what splendid prospects are opened to us in that direction.

1. We have at Peru, Ind., by the T. W. and St. Louis Railroad, a connection with the Peru and Indianapolis railroad to Indianapolis, 253 miles distant from Toledo.

2. At Indianapolis, direct communication is made, via the Madison and Indianapolis railroad, to Madison, on the Ohio river, a distance of 86 miles from Indianapolis.

3. At Indianapolis, connection is also made with the Jeffersonville railroad on the Ohio river, opposite Louisville, Kentucky, a distance of 108 miles from Indianapolis.

This brings Louisville 47 miles nearer Lake Erie than by any other route.

4. Also from Indianapolis, via the Indianapolis and Cincinnati Railroad, to Lawrenceburg, Ohio, on the Ohio river, 18 miles below Cincinnati, and 90 miles distance from Indianapolis.

Let us recapitulate:		Miles.
Distance from Toledo to Mississippi river	.....	464
Do. do. St. Louis, Mo.	.....	429
Do. do. Indianapolis, Ind.	.....	223
Do. do. Madison, Ohio	.....	309
Do. do. Louisville, Ky.	.....	331
Do. do. Lawrenceburg, Ohio	.....	313
Do. do. Cairo, Ill.	.....	237

Total,..... 2,300

—Making a grand total of over two thousand miles of railroad connections through the choicest portions of three giant States, whose most natural route of travel and freight to the East, will be via the T. and St. Louis railroad to Toledo, thence to be forwarded to the East and to the North.

Let us look at some of the magnificent resources which are thus thrown open to us. We have a very direct route (via the T. and St. Louis and G. W. railroad, of Ill.) to the Mississippi river, half-way between Rock Island and St. Louis, and beyond the river across Northern Missouri to Kansas and the "unknown West."

We can now get our sugars and merchandize directly from St. Louis without delay or transfer at Chicago, and without the still longer journey by boat up the Ohio river.

Turning to the South, we find a large triangular portion of country, covering some 3,000 sq. miles (bounded by the Ind. and Cin. and the Ind. and Jeff. railroads and the Ohio river) of the finest and best cultivated land of Southern Indiana, which finds in the T. W. and St. L. railroad a more direct outlet to the North and East than by any other route.

Louisville, also, has occasion to rejoice with us in the completion of this chain of railroads; we can now shake hands with her enterprising merchants. They need no longer "go around the corner" to get their goods to us, and to the East. They now can send their merchandise "straight through" from the waters of the Ohio to the shores of "Old Erie." No need now of boating up the Ohio to Cincinnati, for her goods can take a "short cut" by railroad, and the train which brings to us her iron, her tobacco, and her manufactures, will meet on its way the train which conveys to her the merchandize of the East, and the lumber, &c., which we can furnish.

The T. W. and St. Louis railroad has inaugurated a new era of active enterprise to the citizens of Toledo. Admirably governed by men of vast experience and far-sighted liberal policy, fully equipped with the means and appliances of railroad travel, running through a populous, well-cultivated country, we have the best grounds for believing that this road will be one of the most favored routes of travel, and that every year of its future existence will identify it yet more strongly with the interests, the growth and welfare of Toledo.—*Toledo Blade*.

Railroad Mortgages—Important Legal Decision.

An important legal decision was made in the Erie Co., Ohio, Common Pleas, before Judge Fitch, at its late term. It was in the case of Henry Grinnell and others, Trustees of the Sandusky, Mansfield and Newark Railroad Co. The points decided were as follows:

1st. That a railroad company, authorized to borrow money for the construction of its road, has, as an incident to that power, and without an express grant in its charter, the power to secure such loan by a mortgage.

2d. That a mortgage of the road and its income is, in effect, a mortgage also of the franchises of the company, and upon a sale of the road under the mortgage, the franchises will pass to the purchasers.

3d. That where two or more railroad companies become suited and consolidated into one company, under the statutes of Ohio, and such original companies had, prior to the consolidation, given mortgages on their respective roads, the rights and liens of the respective mortgages must be respected and preserved, due regard being had to the consolidation.

4th. That after such consolidation, no one of the mortgages, upon the original roads can be enforced by a separate sale of its original line, but all such original mortgages must be enforced by a sale of the consolidated roads, and the respective liens on the parts to be adjusted in the distribution of the proceeds of the whole, upon the report of a master, so as to give each mortgagee so

much of the proceeds as may be estimated to arise from the part covered by its lien.

A plank road between Hoboken and Paterson, N. J., has recently been opened. Length about 15 miles. Cost, \$130,000. Steepest grade, 176 feet per mile.

Louisville and Sandusky Railroad.

The important railroad which our enterprising neighbors in New Albany are constructing towards Lake Erie, is (says the Louisville Courier) progressing. It is an improvement in which Louisville should take interest. The amount already paid to contractors for construction is \$141,000; for the right of way \$15,000; for engineering \$24,913; making an aggregate outlay, so far, of \$181,357. Twenty miles of the road are now graded and ready for the superstructure, and it is hoped before the summer is over, that the track will be laid, and cars running upon at least 35 or 40 miles of the road.

It is now ascertained, beyond any reasonable doubt, that the cost of construction from New Albany to the junction of the Ohio and Mississippi railroad, will be, on the average, \$1,000 a mile less than the estimate. The whole cost of preparing the road bed and superstructure for the iron, for a distance of 72 miles, where it connects with the Ohio and Mississippi railroad, will be \$786,000. The probable cost of the iron for the track, \$576,000. Rolling stock, depots, &c., \$188,000. Making whole outlay for 72 miles, \$1,650,000.

The resources of the company are, so far as they can be made available in the construction of this 72 miles of road—

First cash subscription, \$86,000; but deducting \$10,000 for bad debts, and it leaves it \$76,000.—The city subscription of \$400,000 may be reasonably estimated to produce \$280,000, unless by gross mismanagement, the credit of the city shall become greatly impaired. The Clark County Plank-road stock may be safely put down at what it cost—say \$63,000. The real estate subscription of \$283,000 may be safely put down at \$181,000 cash. Then we may estimate first mortgage bonds, \$720,000, endorsed by Mad river and Lake Erie Railroad Company, worth in the market, say \$600,000. Second mortgage bonds to be received at par by contractors on construction account.—\$200,000 of stock subscription in the road to be taken by the contractors at par. All this put together makes, of available means, \$1,600,000, being only \$50,000 short of the amount necessary to build and fully equip the road a distance of 72 miles, to the junction of the Ohio and Mississippi road.—*Eaton Register*.

TO CONTRACTORS. PETTESS' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

4122 N. DAVIDSON, 9 Spruce st., N. Y.

Consulting Engineer.

THE undersigned may be consulted upon the location, construction, equipment, and management of railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron.

Also upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches, and in its most difficult applications.

A long and intimate connection with the construction and management of our most important American railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable railroad companies to avoid errors of location, construction and management which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainment, and competent Superintendents can be recommended or supplied to railroad companies for immediate service on surveys and construction and on management.

ISAAC R. TRIMBLE,
Consulting Engineer,
118 Park Place, BALTIMORE.

KASSON'S LOCOMOTIVE EXPRESS FOR THE RECEIPT AND TRANSPORTATION OF LOCOMOTIVES, PASSENGER AND BOX CARS OF ANY GAUGE

To the Western and South-Western States.
PROPRIETORS—WM. M. KASSON & SON,
90 Exchange st., BUFFALO.
24 Broadway, NEW YORK.

OFFICE CINCINNATI, HAMILTON AND DAYTON R. R. CO. }
Cincinnati, June 1, 1856.

TO THE STOCKHOLDERS.—GENTLEMEN: At the Annual Meeting, held on the 6th ult., it was recommended by the Stockholders that a circular be issued, inviting proposals for the remainder of the Second Mortgage Bonds of this Company, of which 511 have heretofore been sold. Proposals, will, therefore, be received until the 20th day of June for 439 of the Second Mortgage Bonds, of \$1,000 each, payable on the 1st day of May, 1856, and bearing interest at the rate of 7 per cent per annum, payable semi-annually, in New York, at the office of the Ohio Life Insurance and Trust Company. Payment for the Bonds to be made—one-fourth of the 1st day of July, and the remainder in three monthly installments thereafter, with privilege of paying all on the 1st of July. The accumulated interest to be adjusted on the delivery of the Bonds.

The mortgage provides for the issue of 1,250 of these Bonds. The Board of Directors have, however, withdrawn 300 from the market, indefinitely, and it is not supposed they will be offered for sale for many years to come. The Bonds heretofore sold, of this issue, have netted the Company 50 cents and upward, on the dollar, with the exception of 46, which were sold in London, netting 88 cents in New York.

The object in disposing of these Bonds is to discharge the floating debt of the Company, and to provide for the scrip issued for dividend number five; thus enabling the Company to resume the payment of regular cash dividends.

The following figures will show the condition of the Company:

EXPENDITURES.	
For Construction Account.....	\$2,470,125 63
For Equipments Account.....	517,632 35
For Real Estate Account.....	228,483 85
For Railroad and other Securities.....	384,570 48

Total.....\$3,600,812 21

RECEIPTS.	
From Capital Stock.....	\$2,153,900
From 1st Mortgage Bonds.....	500,000
From 2d Mortgage Bonds of present issue, heretofore sold.....	511,000—3,164,900 00

Leaving a debt to be provided for, of.....\$435,912 21

When the 439 Bonds now offered shall be sold, the whole bond debt of the Company, (1st and 2nd mortgages,) will be \$1,450,000—on which the annual interest will be \$101,500. For the security of the principal of these Bonds it will be seen that there has been invested in Construction and Equipment more than double the amount of the whole mortgage debt, without counting the real estate or other assets; beside which, a sinking fund has been provided for the redemption of a portion of the Bonds by the action of the Stockholders. The property mortgaged was all acquired previous to the issue of the Bonds.

For the prompt payment of the interest, the means are as follows:

Gross receipts of the Company for the year ending March 31st, 1856.....	\$508,271 71
Less working expenses, for same period.....	220,258 84
	\$278,012 87
Amount of annual interest as above stated.....	101,500 00

Showing an annual surplus, after payment of the interest of.....\$176,512 87

The Cincinnati, Hamilton, and Dayton Railroad is sixty miles in length—has fifteen miles of double track in use—and including side tracks, has upward of ninety miles of iron laid. No road in the country is more substantially built or completely furnished. It occupies the position of a trunk road—is located in the Great Miami Valley, the most densely populated and richest portion of Ohio—the important cities of Cincinnati and Dayton being the termini of the road. It connects at Hamilton with the Junction road, now in progress to Indianapolis, and with the Eaton, Richmond and Chicago road, nearly completed to Loganport and in progress to Chicago. At Dayton it connects with the Mad River and Lake Erie road to Sandusky—with the Dayton and Michigan road, finished to Piquette and in progress to Toledo and Detroit—and with the Greenville and Miami road, finished to Union and in progress to Fort Wayne.

The road was opened for business in the Fall of 1851, since which time seven eighths of its earnings have been from local traffic. The past year its earnings averaged \$8,471 71 per mile. These earnings will doubtless be increased fifty per cent, when the various connecting roads, referred to above, are fully extended and completed.

The Company is under no pecuniary obligations to other Roads, either for subscriptions, indorsement of Bonds, or otherwise. For a full and detailed statement of the condition of the Company, reference is made to the Annual Report of the Directors, accompanying this Circular.

Proposals for the Bonds will be received in New York by EDWIN LUDLOW Esq., Cashier of the Ohio Life Insurance and Trust Company, and in Cincinnati at the Office of the Company. S. S. L'HOMMEDIEU, Pres't.

KASSON'S RAILROAD IRON EXPRESS, NEW YORK AGENTS, DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

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INSURANCE at low rates of premium, will be effected when desired.

Notice to Brick makers.

THE undersigned wishes to contract for One Million Three Hundred Thousand of hard burnt brick, best quality, and of the ordinary dimensions, to be delivered as follows:

At Petersburg, Va.....	600,000
At the Entrance Lock of the Dismal Swamp Canal near Norfolk, Va.....	200,000
And at Suffolk, Va.....	500,000

The brick to be inspected at the point of delivery. Parties proposing may bid for the supply of either or all of the three lots, stating the time within which they will deliver the quantity proposed for.

They will send the undersigned a sample of the brick they would agree to deliver and define in their bid its dimensions.

WILLIAM MAHONE,
Chief Engr Norfolk and P. R. R.
Norfolk, Va., May 31st, 1856. 4123

To Railroad Contractors.

ENGINEER'S OFFICE BLUE RIDGE RAILROAD, }
Anderson, S. C., May 16th, 1856.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock, M., on WEDNESDAY, July 16th, 1856, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad; commencing at Knoxville. There are several heavy jobs of Masonry, among them the Masonry for the Bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 5th of July.

WALTER GWYNN,
Chief Engr Blue Ridge R. R.



Hover & Horner,
PATENTERS AND MANUFACTURERS OF
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SIGNAL LAMPS,
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OF EVERY DESCRIPTION,
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Orders by Post, or otherwise, will be punctually attended to.

By SAMUEL HATCH, Boston. 4122

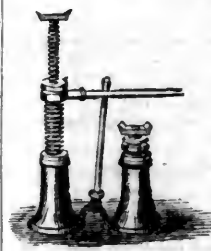
Six Railroad Locomotives at Auction.

ON WEDNESDAY, June 25th, at 12 o'clock, on the premises at the shops of the Boston and Lowell Railroad Corporation, in East Cambridge,

Six second hand Locomotives and Tenders which are deemed too light for the use of that Company. Three of said engines weigh 16 tons each with fuel and water in, and are of the following distinctive dimensions—cylinders, 12 inches diameter, 18 inches stroke of piston, arranged with inside connections, 2 driving wheels of 6 feet diameter, 4 truck wheels, 30 inches diameter, with boilers, furnaces, &c., in due proportion. They were built by the Locks and Canal Company of Lowell. The other three engines are still lighter, having cylinders of 11 in diameter and 10 inches stroke of piston, 2 driving wheels, 5 ft. in diameter, also of inside connection; they were built by the same Company.

The above engines are suitable for light service either of passenger, freight or gravel trains, and having been built by the Locks and Canal Company whose character for excellence of manufacture stood so deservedly high, are strongly recommended for their qualities to purchasers. Terms at sale.

BALL'S PATENT JACK SCREW.



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No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

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TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8 1/2 inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V books, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.
We can sell them on terms that would make them a bargain to the purchaser.

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Notice to Contractors.

OFFICE OF STATE ENGINEER BUREAUISTA, }
Orange Mill Post Office.
St. Johns River, Fla., August 20th, 1856. }

SEALED PROPOSALS will be received at this office until the 20th day of August, 1856, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANOLY,
State Engineer, State of Florida.

Notice to Contractors.

CHIEF ENGINEER'S OFFICE N. AND P. R. R. }
Norfolk, Va., May 6th, 1856. }

THE undersigned has for contract 3,000 cubic yards of L. Bridge Masonry, situated near Norfolk and Petersburg, respectively, and on the line of the Norfolk and Petersburg Railroad. Plans and specifications of the two bridges near Petersburg may be seen at the Division Engineer's office there; or at this place, and like information may be had about the work contiguous to Norfolk, at this office.

WILLIAM MAHONE,
Chief Engineer.

1m20

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern,
55 lbs. per yard, apply to
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New York, May 9th, 1856. 1m20

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largest depots and workshops, which gives him great facility
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Also a variety of CITY, COUNTY, and RAILWAY
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16t

JAMES WINSLOW

RETIREs this day from the firm of WINSLOW, LANIER
& CO. The business will be continued under the same
name by R. H. WINSLOW and JAMES F. D. LANIER, at
No. 52 Wall st. Either of the partners will sign in liquidation.
R. H. WINSLOW.
J. F. D. LANIER.
NEW YORK, May 1, 1856. 1m20 JAMES WINSLOW.

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SHEET NO.	1. General Table for all Bases	13. for Base 18ft. Slope.	1 1/2 to 1
2.	For Side Hill Cuts and Fills 15.	" 20 "	1 1/2 to 1
3.	Base 12 ft. Slopes 1 1/2 to 1 16.	" 24 "	1 1/2 to 1
4.	" 14 " 1 1/2 to 1 17.	" 24 "	1 1/2 to 1
5.	" 15 " 1 1/2 to 1 18.	" 26 "	1 1/2 to 1
6.	" 15 " 1 to 1 19.	" 28 "	1 1/2 to 1
7.	" 15 " 1 1/2 to 1 20.	" 30 "	1 to 1
8.	" 16 " 1 1/2 to 1 21.	" 30 "	1 1/2 to 1
9.	" 16 " 1 to 1 22.	" 30 "	1 1/2 to 1
10.	" 18 " 1 1/2 to 1 23.	" 32 "	1 to 1
11.	" 18 " 1 1/2 to 1 24.	" 32 "	1 1/2 to 1
12.	" 18 " 1 to 1		

The Tables are printed in clear, bold type on tinted paper;
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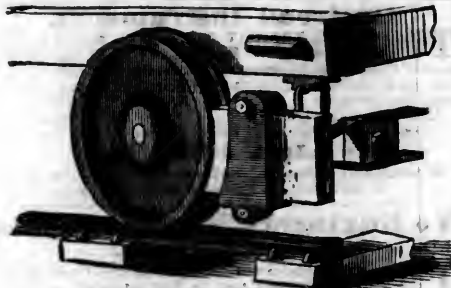
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1717

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are now prepared to apply this improvement on trial to cars in any part of the country, and no sales will be pressed until entire satisfaction is given.

The Brake is now in use on the HUDSON RIVER, HARLEM, BOSTON & LOWELL, and RUTLAND & BURLINGTON RAILROADS, and we invite Railroad Companies generally, through their Agents, to examine the practical working of this new and decided improvement upon all Brake Blocks now in general use. Please address **C. DINSMORE, Agent.**
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Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned soil is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried either in wagons, or interrupted water (as in sections in-

crosses the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

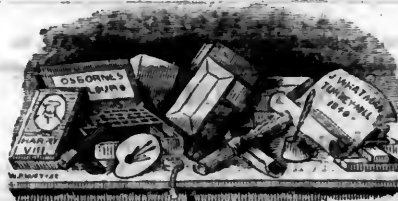
It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to—

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
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All goods packed with care, and forwarded to any part of the United States.

Successor to H. L. Lipman,
129 Chestnut St., Philadelphia.

Mar 15, 1854

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD,
Hanover Building, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

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MENAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

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Office Nos. 8 and 10 Wall st.,
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TO THE
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CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT.

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY Laid DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST; that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, **GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.**

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, } Washington, D. C.

CHARLES MONROE, Esq., } Baltimore, Md.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 24.]

SATURDAY, JUNE 14, 1856.

[WHOLE No. 1,052, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, June 14, 1856.

Baltimore and Ohio Railroad.

The magnitude of this undertaking may be judged of from the following considerations:

It was the earliest work of the kind projected in the United States.

It is 379 miles in length, and its construction extended over a period of nearly a quarter of a century.

It traverses a section of country almost throughout of the most wild and rugged character, presenting every physical obstacle that can well be imagined. In its course it scales summits from 100 to over 2,600 feet in height, penetrates ridges by tunnels from 80 to 4,100 feet in length, and crosses at numerous points great and rapid rivers.

Its early commencement and great importance constituted its builders the pioneers in many of the most valuable improvements connected with the railroad enterprise. For many years this road was a sort of text-book to companies in all parts of the country, communicating from year to year the results of experiments in construction, in locomotion, and general management of the utmost consequence.

The main line leaves Baltimore and crosses the Carrollton viaduct, 80 feet long, over Gwynne's

Falls, and after passing a few miles to the South-west, enters a cut nearly half a mile long, and in some places 76 feet deep. This was one of the severest obstacles encountered in the early construction of the road. Nine miles from Baltimore it connects with the Washington Branch, after crossing the Patapsco river by what is called 'The Thomas Viaduct,' 700 feet long, and 66 feet above the bed of the river. The road now follows for some distance the course of the Patapsco, crossing it at Patterson's Viaduct. Ellicott's Mills, 14 miles from Baltimore, is a flourishing village, containing several cotton and other factories. After crossing the same river several times, the road passes under a hill by a tunnel 400 feet long. Parr's Ridge, 44 miles from Baltimore, which divides the waters of the Patapsco from the Potomac, is crossed by a grade of 82 feet to the mile, with a cut of 50 feet in depth at the summit. Previous to 1838, this was crossed by planes having an inclination of 360 feet per mile. The line thence follows the Monocacy river, crossing it by a bridge 330 feet long, and 40 feet above the river bed. At this point, 57 miles from Baltimore, the Frederick Branch, three miles long, leaves the main stem. Thence to the Point of Rocks, 70 miles from Baltimore, the country is smooth, and the line direct. The above named obstacle is formed by the Catoctin mountain which here overhangs the Potomac, leaving but a few feet of passage way. The right of way through this pass was long disputed by the Chesapeake and Ohio Canal Company. Two miles further another cliff occurs, also requiring considerable excavation. For three miles east of Harper's Ferry the road lies along the foot of a lofty precipice. The road here crosses the Potomac, close to its junction with the Shenandoah, by a bridge about 900 feet in length. Here a connection is made with the Winchester and Potomac line. The scenery at this point is grand in the extreme. This valley is left by passing through a tunnel 80 feet long. The road then leaves the Potomac, following Elk creek for some distance, and traversing what is called 'The Valley of Virginia,' until it strikes the North Mountain, 108 miles from Baltimore. This ridge is passed by an excavation 66 feet deep. A few miles farther, at Port Frederick, the road again enters the Potomac valley, follow-

ing its course for 28 miles to Doe Gully, where a large bend in the river is cut off by a tunnel 1,200 feet long. Paw Paw Ridge is in like manner passed by a tunnel of 250 feet. Two others occur near Cumberland, but of smaller dimensions. Sixteen miles east of Cumberland, the south branch of the Potomac is crossed by a bridge 400 feet long; and ten miles farther the main stream, which is here nearly 700 feet in breadth. The road now re-enters Maryland, having been located in Virginia from Harper's Ferry to this point. Cumberland, 179 miles from Baltimore, is the centre of the coal business. The Company have here very extensive accommodations provided. Thence to Piedmont, 28 miles, the route follows the Potomac which has cut a deep gap through the Knobby mountain. Twenty-one miles west of Cumberland, the road again crosses for a short distance into Virginia. The bridge is 320 feet long. At Piedmont the Company have a large and commodious engine house. From this point the road ascends for 17 miles, eleven of which have grades of 116 feet to the mile, to the 'Altamont Summit.' This point which is the highest on the road, is 2,626 feet above tide-water, and separates the waters running into the Chesapeake from those flowing into the Ohio. The scenery in passing up Savage river to this point is exceedingly sublime. The 'Everett' tunnel, 300 feet long, is passed in ascending the mountain. Further on is an excavation 108 feet deep. Crab Tree creek is crossed by an embankment 67 feet deep. West of this summit the road strikes the upper waters of the Youghiogheny river following its course for about 19 miles to 'Cranberry Summit.' This point is crossed at an elevation of 2,550 feet. Here the road finally leaves the State of Maryland. The next twelve miles are a continuous descent having the maximum grade at several points. The McGuire and Redemer tunnels here passed are 500 and 400 feet long respectively. Cheat river is crossed by a bridge of iron and timber 300 feet long. In ascending Cheat river hill most formidable difficulties have been encountered. Kyer's Run is crossed 76 feet above water, Buck Eye Hollow 180 feet, and Tray Run at 150 feet above water. In the second and third of these cases solid walls of masonry were constructed to within 46 and 58 feet respectively

of the track, and on these a substantial frame of timber securely erected. These structures have since, however, been replaced by cast-iron viaducts. At the head waters of Cheat river, Cassiday's summit is crossed at a point 1,856 feet above tide level. The steepest grades in ascending to and descending from this point are one in fifty, or 105½ feet per mile. Here, at 80 miles from Cumberland, the great western coal field is first touched, the Cumberland coal field being left 35 miles behind. The road here reaches the Kingwood tunnel, which is 4,100 feet long, and the greatest work of the kind in America. It is through a compact slate rock, in part overlaid with lime-stone and in part substantially arched with brick. Previous to opening the tunnel the road was carried over the ridge at grades of *over five hundred feet per mile*. Thence it descends into the valley of the of the Racoon creek, and two miles further on passes through Murray's tunnel, 250 feet in length. A few miles farther, at Grafton, the Parkersburg or North-western Virginia road diverges to the left, close by the junction with which the railroad crosses the Monongahela river, by a viaduct 650 feet long, and 39 ft. above low water. The bridge consists of three iron arches resting upon substantial stone piers, and is said to be the largest work of the kind in America. Its course thence is to the North-west. Below Fairmount the road leaves the valley of the Monongahela, following the course of Buffalo creek for about 28 miles. The summit, dividing the waters of the Monongahela from those of the Ohio, is passed by several deep cuts and a tunnel 350 feet long. Several other tunnels are passed, the most important of which is the Broad Top tunnel which occurs within a short distance of the south-western angle of Pennsylvania. The road ascends to this point through a cut of over 60 ft. deep and at a grade of 80 feet per mile. Previous to opening the tunnel, a temporary track was laid over the ridge by which trains were enabled to pass it by a sort of zig-zag course—one of the greatest triumphs of engineering skill in the whole undertaking. The length of this temporary road is 12,000 feet. For the next 20 miles, the road skirts the Pennsylvania border leaving it at the Welling tunnel, which is 1,250 feet long, and 28 miles from Wheeling. Thence it follows Grave creek for 17 miles, passing through another tunnel, 400 feet in length. At Moundsville it approaches the Ohio river, and continues along its margin with but few interruptions till it reaches its north-western terminus at WHEELING.

The total number of tunnels is 14, having an aggregate length of 12,694 feet. There are also 186 bridges having an aggregate length of 15,088 feet. Total length of bridging and tunnelling 27,782 feet, or about *five and a quarter miles*.

The Baltimore and Ohio railroad, like the other great lines leading from the seaboard to the Lakes and the Ohio, was projected in order to secure the advantages of the Western trade. The success attending the Erie canal led Pennsylvania, Maryland, and Virginia to construct similar works. The Chesapeake & Ohio canal had been projected with the above mentioned object in view; but, owing to the character of the country traversed, proved impracticable. In 1826 and '7, steps were taken by several leading citizens of Baltimore to secure the construction of a railroad between the

city of Baltimore and some eligible point on the Ohio river. A charter was accordingly obtained, in the early part of 1827, conferring on the company the necessary powers and privileges, fixing the capital at \$5,000,000, with the right of organizing on the subscription of one-fifth that sum; and authorizing the United States, States, and corporations to subscribe to the stock. Among the most prominent early friends of the enterprise may be mentioned Charles Carroll of Carrollton, Philip E. Thomas, first President, George Brown, William Patterson, Thomas Ellicott, J. B. Morris, J. V. L. McMahon, and others. The required subscription of \$1,000,000 having been obtained, the Company was duly organized in April, 1827. The surveys were at once undertaken, under the superintendence of Col. S. H. LONG and JONATHAN KNIGHT—names since so widely known in the history of our internal improvements. Several able members of the Topographical Corps were also detailed to the service by the General Government. Among these were Capt. McNeill, Joshua Barney, Isaac Trimble, Walter Gwynn, and others. A report of the preliminary surveys was made in April, 1828; and the road located to the Point of Rocks during the ensuing summer. On the 4th of July, ground was broken at Baltimore by the venerable CHARLES CARROLL. Shortly afterwards the first section, extending to Ellicott's Mills, was put under contract. The remaining distance to the Point of Rocks was not let till the following year.

At the close of 1828, the capital subscribed amounted to \$4,000,000, of which \$3,000,000 had been taken by individuals, \$500,000 by the City of Baltimore, and \$500,000 by the State of Maryland, an act to that effect having passed the Legislature in the beginning of the year. An application for aid made to Congress the same year, proved unsuccessful.

The first division of the road was opened for the transportation of passengers, on the 22nd of May, 1830; the motive power being horses and mules for some time afterward. Among the other experiments made in locomotion on this road, was one of propelling a car by *wind*, which attracted some attention.

At an early date in the company's history, ROSS WILANS was appointed superintendent of the construction of machinery. Mr. Wilans had about that time patented some improvements for the prevention of friction in cars. Since then his name has been associated with the progress of railroad machinery as second to none in the country. In 1830 the road was extended farther within the limits of Baltimore; in the following year the branch road to Frederick was completed; and in April, 1832, the main line was opened to the Point of Rocks, 70 miles from Baltimore. We have already alluded to the difficulty experienced in passing this, occasioned by the opposition of the Chesapeake and Ohio Canal Company. The matter was finally compromised by authority of the Legislature, and the company permitted to proceed with their work.

In 1831, application was made for authority to build a branch line from Baltimore to Washington; but much difficulty as well as delay was experienced in procuring the requisite legislation, on terms which could be accepted by the Company. The final act was passed in March, 1833; and still

plated that one-fifth of the gross earnings, (that never being less than 25 cents per passenger) should be paid as a tax to the State. Authority was given to the City of Baltimore and to the Company owning the turnpike between Baltimore and Washington, to subscribe to the stock. Shortly after obtaining the requisite authority, the work was put under contract. Preliminary surveys of the line had been made in 1831, under the charge of BENJAMIN H. LATROBE, the Company's present Chief Engineer. Towards the construction of this branch the State of Maryland made an additional subscription of \$500,000. The road was opened in July, 1835, to Bladensburg, and in the month following to Washington.

Up to the early part of 1831, steam power had not come into use on the road. In January of that year the Company issued an advertisement to the inventive genius of the country, offering the sum of Four Thousand Dollars for the most approved engine of American manufacture which should be put on the road on or before the ensuing 1st of June; and Three Thousand Dollars for the next best—the engines being required to burn coal or coke; not to exceed three and a-half tons in weight, capable of drawing 15 tons on a level road, 15 miles an hour; flanges to be inside the rails; wheels not to exceed 4½ feet diameter, and pressure of steam not over 100 lbs. to the inch; to have two safety valves, one being "completely out of the reach of the engine man;" height of chimney not to exceed 12 feet. The Company agreed to provide the tender with a supply of water and fuel.

During the summer three engines were put on the road; but only one of these—the "York"—built by Phineas Davis, was found to answer the purpose. This engine was mounted on four wheels of 30 inches diameter, the velocity being obtained by means of gearing with a spur-wheel and pinion on one of the axles of the road wheels. On the shortest curves (400 feet) a speed of fifteen miles per hour was frequently made; while on straight lines double the above rate could be obtained.

At the close of 1832, various kinds of superstructure had been brought into use. The rail used was in general the flat bar; but that was supported in some cases immediately by a stone foundation; in some by wood and broken stone; in some by longitudinal sills laid on the ground; and in some by log-rails, formed from trunks of trees, prepared on one side for the iron. The English rail had also been brought into use. At first, the superstructure of iron and granite was preferred; but this was subsequently abandoned for that now in use.

The earnings of the road for the five months ending 30th September, 1831, were \$31,405; and the working expenses, \$10,994. For the next year these were \$136,937 and \$69,534 respectively.

In the summer of 1833, the Company commenced manufacturing their own engines, at the Mount Clare Depot in Baltimore. In the following year, the large eight-wheeled car was brought out by Mr. Wilans and adopted by the Company.

The road was opened to Harper's Ferry, 82 miles, on the 1st of December, 1834. This continued to be their limit of progress for several years. In 1836, surveys of the line to Cumber-

The connections of this road are too important to be omitted. At Baltimore we have already the Philadelphia, Wilmington, and Baltimore road, together with the Philadelphia and Baltimore Central line, now in progress. From the same city the Northern Central is already completed up the valley of the Susquehanna to Sunbury, Pa. A fine connection is made with Western New York and the Lakes, through this route. From the Washington Branch a line proceeds to Annapolis, the capital of Maryland. At Harper's Ferry the Main Stem connects with the Winchester and Potomac road, running up the rich valley of the Shenandoah. From Cumberland to Pittsburgh the Connellsville road is already under way, having 25 miles in operation. The North-Western (Parkersburg) line will also afford a most important connection with the Ohio nearly 100 miles below Wheeling. From the last named place the Central Ohio road opens a direct route to Columbus, Cincinnati, and the western country in general. The completion of the Cleveland and Pittsburgh road to Wheeling will afford a most valuable connection with the Lakes. More important than both the last, however, is the Ohio river, during six months of the year at least. The Marietta and Cincinnati line, now approaching completion will also prove a valuable tributary.

The following statement shows the gross and net earnings, and dividends paid, from 1830 to the present time.

Year.	Gross Rec'ts.	Net Earn'gs.	Divid'ds.
1830.....	\$14,711	\$2,726	....
1831.....	31,405	20,410	....
1832.....	136,937	61,264	....
1833.....	195,680	57,195	....
1834.....	205,437	67,035	....
1835.....	263,368	102,152	....
1836.....	281,312	68,375	....
1837.....	301,301	12,176	....
1838.....	365,224	93,643	....
1839.....	407,847	94,647	....
1840.....	432,855	157,694	1½
1841.....	391,070	151,448	2
1842.....	426,492	209,777	....
1843.....	575,235	279,402	2
1844.....	658,619	346,986	2½
1845.....	738,603	374,762	....
1846.....	881,687	426,847	3
1847.....	1,101,937	511,108	3
1848.....	1,213,664	551,558	4
1849.....	1,241,202	596,571	*3
1850.....	1,341,805	734,216	*7
1851.....	1,349,222	653,803	*7
1852.....	1,325,563	615,384	*7
1853.....	2,033,019	797,792	3
1854.....	3,645,909	1,619,397	None.
1855.....	3,711,453	1,601,090	None.

* In Stock.

The gross earnings for the six months ending March 31st, 1856, were \$1,852,964; expenses, including extraordinary repairs, \$1,086,798, or 58.65 per cent. The floating debt is now liquidated. After paying interest, there was left in the Treasury the sum of \$382,879, out of which a cash dividend of three per cent. has since been paid.

That great work, though not yet fully completed, may be regarded as a paying concern for the future. We trust that in many years to come the city of Baltimore the State of Maryland, and the individual stockholders who have struggled so long and manfully in its behalf, may reap all the rewards they so worthily deserve.

Montour Rolling Mill Danville.

The Montour Rolling Mill is the largest of its kind in America. The building stands on a piece of ground, which is nearly 200 yards long by 100 yards wide, whilst the furnaces, yards, offices, houses, &c., belonging to the Company, occupy nearly one-half of Danville.

Messrs. Chambers & Biddles erected the first Anthracite Furnace here about 1842, but an old Charcoal Furnace, still standing, was erected many years before by Burd Patterson, if we mistake not. In 1844-5, another Furnace was added by the Montour Company, and since, though several changes have taken place, and many difficulties occurred, the premises have been gradually extended to their present extent and capacity.

A force of 1,000 hands were employed by this company at their mills, furnaces, mines and quarries during the winter, whose wages ranged from 96 cents to \$3 per day, averaging nearly \$2 per day to each, consequently one would think there would be no reason for a "strike" of the kind which has recently occurred. One hundred tons of T rails, from 60 to 70 lbs. to the yard, are turned out daily from the Rolling Mills. Their average composition is two-thirds puddled iron and one-third re-heated iron, though they are now making some for the Reading Railroad, which are composed of re-heated iron entirely.

Seventy-two puddling furnaces are made use of here, and eleven re-heating furnaces, which, with two rail mills, and all the accompanying machinery, with men and boys to keep them in full operation, present a scene of rare activity and bustle.

Five engines are made use of in the mill for the

purpose of driving the fans, puddle trams, rolls, &c., &c. 1 of 90, 1 of 60, 1 of 40, and 2 of 80 horse-power each, average 250 horse-power in the mill. At the furnaces, three 90 horse-power engines are employed and one 80, besides those employed at the mines.

They make use of the Pittston coal generally, for their puddling furnaces, or the lower benches of the Baltimore vein, in the vicinity of Wilkes-barre, the purer benches being too hard and brittle to answer their purposes. But the hard and denser varieties are prepared for the furnaces.—*Pottsville Journal.*

Clearing-House System of English Railways.

To render clearly intelligible the operations effected by the railway Clearing-House, which has been established upon principles analogous to those of the bankers, it will be necessary, first, to explain the reciprocal interchange of business which takes place, creating systems of mutual credits and debits between company and company.

The number of companies who have combined their operations in this manner is at present (Nov.) comprising all those whose railways lie north of a line passing from Bristol through London to Norwich, in fact, all the railways of the kingdom, except the Great Western, the Southwestern, the London, Brighton, and South Coast, the South-eastern, and their branches and collateral lines.

These railways possess 887 stations, at any one of which traffic may be booked for any other; the consequence of which is, that there are nearly four hundred thousand different pairs of places within the circle of operations of the united companies between which traffic may be transmitted. In passing from any one such station to any other, the traffic may pass over part of any or all of the lines of the combined companies with as much continuity of progress as if the whole system were under the government of a single company.

The service of the transport, whether of passengers or goods, consists, first, in the service of embarkation, which includes all the formalities observed at the station of departure, consisting of booking weighing, loading, packing, &c.; secondly, of the transport, properly so called, which is represented by a mileage; and thirdly, of the formalities and services of the stations of arrival, where the traffic is unloaded, discharged and delivered, and frequently sent to the domicile of the party to whom it is addressed.

A certain rate of charge, according to the nature of the traffic, being agreed upon for each of these parts of the service of transport, the sum receivable for each object of transport must be divided among the companies over whose lines it passes, including those at whose stations the traffic is received and delivered. But the sum payable for such transport is received either by the company at whose station the traffic is booked, or by the company at whose station it is delivered, or partly by one and partly by the other. Two companies must be, therefore, debited with the sums they thus receive, and they, as well as other companies intermediate between them, over whose lines the traffic may have passed, must be credited in the stipulated proportion according to the mileage.

The first object to be attended to by the railway Clearing-House is to adjust these complicated debits and credits, as well for passengers as for every species of goods, with simplicity, clearness and dispatch, and in such a manner as not to give rise to subsequent disputes.

But besides the interchange of credits for traffic, a most complicated account arises out of the circumstances already explained, for the use of the rolling stock. The wagons of each of the numerous companies which enter into the union of the Clearing-House are driven indifferently over the lines of all the others, carrying traffic for various companies, and sometimes transporting a load no part of which is to be credited to the company owning the vehicle in which it is borne.

By mutual agreement, a certain fixed rate is

charged for the use of each class of vehicle, and every company over whose lines the vehicles of other companies pass, being in the first instance credited for the traffic carried by these vehicles, is debited for the use of the vehicles themselves in which such traffic is carried. A mileage account must, therefore, be kept of all the rolling stock of all the combined companies, so that the course of each vehicle may be traced from day to day and from hour to hour, so that its mileage may be debited to such companies as may have shared its use; and in case of undue delay at the stations of any company, a demurrage may be charged according to a stipulated condition, proportionable to such delay.

To adjust in a satisfactory and equitable manner these accounts for the mutual use of the rolling stock, is the second function of the Clearing-House.

When the claims of one company upon another, arising out of these transactions, are not liquidated within a stipulated time, they are subject to interest at a rate agreed upon. An interest account must, therefore, be kept between company and company.

Luggage, parcels, and other objects of traffic being liable to be lost or unduly delayed, claims and complaints arise between company and company. The settlement of such claims enters into the class of operations to be transacted by the Clearing-House.

Such are the principal functions which the institution of the Clearing-House is called on to discharge.

Let us now consider the manner in which these operations are effected.

The Central Clearing-House is established in London, in a building situate near the eastern station of the North-western Railway. It is placed under the direction of a body of managers elected by the companies in which each company is represented.

The Central Office has agents at all the stations comprised within the circle of the united companies. In adjusting the mutual debits and credits of the companies, no company is regarded either as the debtor or creditor of any other, but the Clearing-House is the common creditor and common debtor of all.

Dr. Lardner proceeds to explain in detail successively the mode in which each class of claim is arranged, namely, "the goods, traffic and live stock, the passenger traffic and the carrying stock," which in reading we omit for want of time and in conclusion, he adds:

The principle which has been brought into successful operation in the Clearing-House admits of still more extensive application, which doubtless it will receive.

The practical effect of the arrangement, even so far as it is hitherto developed, is to facilitate such an interchange of the use of the rolling stock and the service of the stations between company and company, as to render their benefits in a great degree common to all. Each company, by this expedient, maintains a stock not only for its own traffic, but to some extent for the traffic of other companies, and in exchange receives the benefit of the stock and the stations of other companies.

The perfection to which this system tends would be, that a common rolling stock should be kept for all the companies, in the support of which they should, as it were, club, each contributing a share to its maintenance, in proportion to the quantity of traffic transported by it.

At present the interchange is limited to the vehicles of transport, the engines of each company being confined in their movements to the lines of the company to which they belong, but there is nothing which should prevent, under proper arrangements, the same interchange of locomotive power as now takes place with so much advantage in the carrying stock.

In fine, the Clearing-House may ultimately grow into an establishment for the maintenance of a general locomotive and carrying stock for the use

of all the railways, to be supported by the railways in common, and charged to them in the proportion in which they use it.

So far as regards the management of the traffic, there is nothing which should limit the operation of the Clearing-House to the railways of the United Kingdom.

By proper arrangements, the same reciprocal conveniences now obtained by the railway companies in reference to the traffic booked through, as it is technically called, might be extended to the entire continent of Europe, so that passengers or goods might be booked at any station on any English railway, for any station on any continental railway. The fare might be received on booking, either wholly or partially, and might be distributed between the various lines over which the traffic should pass, in the same manner as it at present is among the railways which are united under the clearing system.

Cincinnati, Hamilton, and Dayton R. R.

The Cincinnati, Hamilton, and Dayton Railroad advertise for proposals for the remainder of their Second Mortgage Bonds—439 in number. These Bonds are payable in May, 1880, with 7 per cent. interest, payable semi-annually in New York. Payment for Bonds to be made one-fourth on the 1st of July, and the remainder in three monthly instalments, with privilege of paying the whole on the 1st of July. The Bonds heretofore sold of this issue have netted the Company 90 cents and upward, with the exception of 46 sold in London, and netting 88 cents in New York. At these figures we know of no better investment in the Western country, for the security offered for their redemption is undoubted. The proceeds of these Bonds will be applied to the discharge of the floating debt of the Company, and the payment of the Scrip issued for dividend No. 5. This will enable the Company at once to resume the payment of cash dividends.

The condition of the road can be seen from the following:

EXPENDITURES.	
For Construction	\$2,140,125 53
For Equipments	517,632 35
For Real Estate	228,483 85
For Railroad and other Securities ..	384,570 48
Total	\$3,600,812 21

RECEIPTS.	
From Capital Stock	\$2,153,900
From First Mortgage Bonds	500,000
From Second Mortgage Bonds sold....	511,000
Total	\$3,164,900

—Showing a debt of \$485,912 21 to be provided for. If the four hundred and thirty-nine Bonds now offered are sold, the whole bonded debt of the Company—First and Second Mortgages—will be only \$1,450,000, on which the annual interest will be \$101,500—or not one-fifth of the gross receipts for the years 1855 and 1856. The affairs of the Company will then stand thus:

Gross receipts for year ending March 1st, 1856	\$508,271 71
Working expenses, same period	230,258 84
Net earnings	\$278,012 87
Deduct amount of interest as above stated	101,500 00

Showing an annual surplus of...\$176,512 87 after the payment of the interest. This is more than 8 1-3rd per cent. on the capital stock, supposing there is to be no increase of the business over the past year—which is not a supposable case. We think it safe to conclude, this road will be able, in a year or so, to make regular semi-annual cash dividends of 5 per cent., at least. In this we think we are fully borne out in the fact, that hitherto, seven-eighths of the earnings of this road have been from local traffic—a fact almost unparalleled in the history of railroads. When the Ohio and Mississippi, the Kentucky Central,

and other railroads, are completed and opened for through-travel, we may reasonably expect a vast increase of business, not only on this, but on other Eastern routes, and a corresponding increase in earnings, without a material increase of expenses.—*Cincinnati Enquirer.*

Railroads in Baden.

(An extract from a lengthy article in the *Augsburger Allgemeine Zeitung*, translated for the *Am. R. R. Journal*.)

In the year 1838, when the constructing of the Badish State Line Railroad was finally determined upon, the people and Government of our Grand-Duchy had, of course, derived a more than superficial knowledge from the experiences of other countries in railroading. But a feeling of uncertainty and even timidity prevailed like that of a navigator, who, for the first time, ventures with his vessel into the open sea. At that time, there was among the leading men of Baden, especially the Chancellor of State, Nebenius, who, far-seeing enough to look into the future importance of such works, effectually encouraged the first undertaking of the kind in Baden; and now, eighteen years after, we think, in fact, of replacing the old causeways of the country by railroads.

The State Legislature, now in session, is discussing the project to construct three new lines of railroad, which are to trisect our State longitudinally, and at the same time will form branch lines of our Rhine Valley Railroad. The first of these lines to run from Basel to Schaffhausen and Constance; the second, from Offenburg to Constance; and the third, from Wiesloch to Heidelberg through the Odenwald (Oden Forest) to Würzburg.

The third of these lines is now by the Government for the first time recommended. A petition praying for the construction of this road, was, in 1848, passed over with silence by the Chamber of Representatives, and the people themselves, the petitioners excepted, considered the project to be a mere fantastical idea, which, of course, ought to be scouted.

But what does now give us so strong an encouragement to aid a project, which eight years ago had been laughed at? It is, that it has been generally perceived, that of the European, the German railroads especially will show increased rates of earnings the longer the period during which they have been worked.

This is precisely the case with our State Line, if we except the periodical decrease in 1848 and 1849, which was caused by commerce being interrupted in consequence of political troubles. While in 1840, the net earnings of that road amounted to not quite two per cent. on the capital invested, they rose to six per cent. in 1854, and are still increasing. We may truly say: The Genius of railroads is like Fame, *crescit eundo* (growing in going).

To be added to this encouraging prospect is a due regard to those portions of Baden, which, being situated at a great distance from the State Line Railroad, did not derive any advantage from the work, to the payment of the construction of which they gave an equal share by being taxed as subjects to pay interest on the State loan required for the building of a road, which drew off the traffic from their once busy highways.

The road from Basel to Schaffhausen will be in running order in the first months of next year,

Government paying the cost of construction and equipment. The building of the other two lines above-mentioned will be left to private enterprise. Companies will be chartered, the Government guaranteeing to them, for twenty-five to thirty years, 4 per cent. on their investments. As soon as the net earnings of these projected lines will exceed 4 per cent. per annum, a proportioned tax on the profits shall be paid by the companies to the State, to be expended in purchasing their shares; the road thus, in the course of time, to come into possession of the State. This kind of financial operation has been made use of in previous cases (in Prussia, for instance) to the advantage of the people in general and to those capitalists in particular, who prefer good security on their investments to large profits.

Now the important question arises, whether the payments of interest guaranteed by the State for so long a period as twenty-five or thirty years may not prove too heavy a burthen for the taxability of the people? This will chiefly depend upon the amount of earnings of the proposed lines. As to that, there are good reasons to expect that the portion of the road from Offenburg to Constance, which is to cross the Kinzig Valley, will have an immense local traffic; and it is certain that all three roads will, in several directions, form links of the shortest routes for the large commerce from West to South-east and North-east.

The Basel Constance Railroad will connect at Schaffhausen with the Swiss Rhine Fall Railroad, which runs from Winterthur to Schaffhausen.

The location of the other lines is not yet decided upon, and petitions arrive from everywhere,—towns, villages, and hamlets,—to lead the road through their places.

What a difference this change of public opinion presents, when we read over again a petition from the corporation of Sellenheim (a town between Heidelberg and Mannheim) to the Chamber of Representatives, eighteen years ago, petitioners praying, not to lead the State Line Railroad through their town proper, as they would not like to part with even a small portion of their valuable farming lands for the use of a railroad.

In eighteen years more, many projects will, probably, have been undertaken, which now appear neither practical nor practicable, in just the same way as now things are brought into effect, which, at the commencement of our railroad era, we considered impossible. But the realization of these expectations will mostly depend upon the happy and constant union of Saturn and Peace, and their blessed progeny.

Southern Railroad Association.

The Richmond Dispatch notices a contemplated meeting of the officers of Southern railroads, to be held at the Slash Cottage on the 8th of July, to concert measures for a more complete connection of Southern interests in this respect. A connection of the Virginia roads is suggested with the Georgia roads and with the great Southwestern Railroad, at present terminating at Memphis, but destined to connect with Mobile, Savannah, and New Orleans, and it is urged that the Central road—beginning at Richmond and passing through Charlottesville and Staunton, should be pushed into Kentucky and Southern Ohio. All these connections are inevitable, but to the present generation it is a question of time of immeasurable importance.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	8	65	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---	---	
Androscog. & Kennebec	56	642,343	1,473,080	2,245,020	190,605	90,797	none	14	South Western	92	1,097,496	469,500	1,624,920	253,306	141,168	8	---	---
Kennebec & Portland	56	1,114,725	1,681,238	2,470,000	259,330	124,038	none	5	Tennessee and Alabama	30	248,486	679,906	1,775,240	176,434	102,016	---	---	---
Portl., Saco, & Portland	51	1,367,000	1,119,237	1,486,327	233,234	120,834	none	6	Tennessee and Mississ.	288	170,931	958,275	3,863,362	176,434	102,016	---	---	---
Boston, Concord, & Montreal	93	1,808,093	1,069,512	2,771,310	880,221	143,666	2	79	Mobile and Ohio	163	2,103,177	1,802,921	4,536,412	199,932	109,236	---	---	---
Cheshire	53	2,085,925	899,133	3,179,687	329,744	158,632	2	42	Miss. Central	188	642,534	none	628,303	In progr.	112,777	---	---	---
Concord	35	1,485,000	none	1,412,576	707,629	138,229	2 1/2	79	N.O., Opelousas & G.W.	55	2,930,425	671,645	2,657,565	In progr.	73,769	---	---	---
Northern, N. H.	82	2,763,400	3,016,633	5,779,933	162,657	55,173	none	42	Vicksburg, Shreveport & Tex.	111	1,117,700	1,500,000	2,500,000	In progr.	112,777	---	---	---
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	394,917	8,740	none	66	East Tennessee and Ga.	16	625,425	938,593	1,537,751	In progr.	112,777	---	---	---
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	489,754	140,377	6	61	Nash. and Chattanooga	161	2,319,330	1,497,081	3,843,694	816,080	138,694	---	---	---
Vermont Central	117	5,000,000	3,550,236	8,603,346	854,426	339,000	6	31 1/2	Covington & Lexington	98	1,302,504	2,235,939	3,738,753	264,978	43,635	---	---	---
Boston and Lowell	27	1,830,000	325,636	2,188,585	59,917	8,740	none	68	Lexington and Frankfort	29	430,055	158,069	637,071	In progr.	43,635	---	---	---
Boston and Maine	83	4,076,974	160,000	4,179,535	119,221	65,527	3	48 1/2	Lexington & Big Sandy	428,057	610,463	2,500,000	2,500,000	In progr.	112,777	---	---	---
Boston and N.Y. Central	74	2,240,300	1,518,071	3,463,118	1,008,004	404,461	6 1/2	88 1/2	Louisville and Danville	66	698,236	609,061	1,589,566	244,014	90,902	---	---	---
Boston and Providence	55	3,160,000	399,132	3,877,154	119,221	65,527	3	48 1/2	Atlantic & Gt. Western	254	866,939	77,294	618,231	In progr.	140,823	---	---	---
Boston and Worcester	48	4,600,000	655,428	4,865,419	647,281	303,798	5 1/2	43 1/2	Bellefontaine and Ind.	118	1,881,638	2,025,923	2,862,652	298,293	732,056	---	---	---
Cape Cod	47	681,690	280,598	997,252	681,168	122,507	70	70	Clev. Col. and Cincln.	141	4,547,020	122,857	4,613,722	1,290,293	386,960	---	---	---
Connecticut River	52	1,591,110	273,241	1,802,244	198,491	66,533	6 1/2	67 1/2	Cleveland and Toledo	200	2,676,425	2,689,901	8,124,929	736,272	109,236	---	---	---
Eastern, Mass.	60	2,683,400	2,947,737	4,621,616	198,491	66,533	6 1/2	67 1/2	Clev. and Mahoning	103	2,780,744	3,043,992	5,587,466	681,877	309,513	---	---	---
Fitchburg	37	854,000	163,700	3,765,998	1,569,673	633,013	7	93	Cin. Hamilton & Dayton	60	2,153,900	1,321,213	2,987,577	608,271	278,012	---	---	---
Northern Eastern	30	800,242	255,585	968,521	1,569,673	633,013	7	93	Cin. Wilm. & Zanesville	131	1,120,450	1,321,213	2,987,577	608,271	278,012	---	---	---
N. Bedford and Taunton	21	500,000	none	533,953	198,491	66,533	6 1/2	67 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,733	350,366	187,518	---	---	---
Old Coffey and Fall River	87	3,015,100	292,650	3,362,949	1,569,673	633,013	7	93	Dayton, Xen. & Belpre	63	437,838	422,658	806,496	In progr.	112,777	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	1,569,673	633,013	7	93	Dayton and Michigan	140	1,076,692	393,011	1,185,362	In progr.	112,777	---	---	---
Western, Mass.	155	5,160,000	6,966,420	10,495,905	1,569,673	633,013	7	93	Dayton and Western	35	310,000	600,000	733,769	In progr.	112,777	---	---	---
Worcester and Nashua	46	1,141,000	205,565	1,351,271	294,780	75,700	2	43	Baton and Hamilton	42	454,690	904,489	1,156,135	171,929	65,000	---	---	---
Providence and Worcester	43	1,510,020	338,461	1,806,696	811,430	138,057	10	21 1/2	Little Miami	65	2,963,921	1,171,785	3,048,172	681,862	336,708	---	---	---
Hartford and N. Haven	72	2,356,000	929,000	3,313,932	730,012	119,611	none	4	Mad River and L. Erie	205	2,451,650	2,572,932	4,446,681	Recently opened.	none	---	---	---
Hart'd, Prov. and Fishkill	123	1,845,610	920,124	4,060,869	258,686	119,611	none	4	Central Ohio	138	1,520,927	1,171,785	4,283,443	Recently opened.	none	---	---	---
Housatonic	110	2,000,000	474,177	2,429,066	330,792	18,851	none	4	Ohio and Penn.	187	2,451,700	3,219,006	6,670,700	1,111,626	662,117	---	---	---
Naugatuck	57	1,031,800	373,995	1,577,167	238,266	none	4	30	Pittsbg, Mansf. & Newk	60	371,350	31,000	380,933	In progr.	112,777	---	---	---
N. York and N. Haven	62	2,992,450	2,264,656	4,906,734	936,025	341,697	none	26	Scioto & Hocking Valley	135	403,975	509,600	888,858	In progr.	112,777	---	---	---
N. Haven and N. London	50	738,288	785,186	1,460,318	88,007	30,318	none	26	Springf. Mt. Vernon & P.	118	1,000,000	960,000	In progr.	112,777	---	---	---	
N. London, W. & Palmer	66	609,200	1,073,673	1,594,383	124,044	68,331	none	30	Tol. Wabash & St. Louis	242	2,500,000	4,530,000	In progr.	112,777	---	---	---	
Norwich and Worcester	66	2,122,300	873,489	2,997,163	304,236	88,458	2 1/2	30	Cin. Log. and Chicago	255	4,196,679	1,066,125	2,080,433	In progr.	112,777	---	---	---
Albany Northern	32	439,005	1,625,095	1,840,695	117,716	9,904	none	30	Evansville & Crawfordsv.	109	706,945	1,007,125	1,844,541	127,400	64,562	---	---	---
Black River and Utica	35	643,330	317,859	974,323	In progr.	---	---	33	Ind. and Cincinnati	88	1,213,723	1,422,859	2,178,461	856,012	193,142	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,133	2,819,096	172,476	68,333	none	36	Indiana Central	66	611,400	1,261,179	1,907,911	350,176	134,875	---	---	---
Buffalo and N. Y. City	92	798,439	2,537,849	3,401,868	288,392	31,896	none	36	Ind. Clev. & Pittsburg	83	834,157	1,011,971	1,671,544	206,544	94,318	---	---	---
Buffalo and St. Line	49	1,300,000	1,040,000	2,494,364	679,750	385,763	10	91	Jeffersonville	66	1,014,252	694,000	2,065,444	286,146	112,880	---	---	---
Canandaigua and Elmira	47	434,111	1,022,393	1,276,796	174,089	69,506	none	91	Madison and Indianapolis	87	1,647,700	1,336,816	2,205,000	286,146	112,880	---	---	---
Canandaigua & Niagara F's	91	1,315,000	2,279,354	3,498,832	1,812,067	603,466	none	56 1/2	New Albany and Salem	288	2,635,121	6,346,189	6,043,189	645,827	371,402	---	---	---
Oayuga & Susquehanna	35	687,000	606,889	1,187,562	135,433	48,649	none	17	Pert and Indianapolis	73	858,314	858,314	150,000	90,000	none	---	---	---
Hudson River	144	3,758,466	9,250,362	12,737,988	1,812,067	603,466	none	17	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	---	---	---
Long Island	95	1,875,148	6,680,949	2,655,988	301,793	116,462	none	33	Chicago and Rock Is'd	182	3,141,600	2,387,155	5,214,162	In progr.	112,777	---	---	---
New York Central	534	24,154,860	14,642,742	23,523,918	5,683,581	3,627,118	none	36	Chicago and St. Louis	220	1,077,312	1,777,596	2,761,429	722,580	379,821	---	---	---
New York and Erie	464	10,023,958	25,126,689	33,439,431	5,488,993	2,627,126	none	36	Chic. St. Paul & P'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	112,777	---	---	---
New York and Harlem	133	5,717,100	4,009,769	8,758,203	1,638,577	284,126	none	17	Galena and Chicago	298	4,334,800	1,189,304	5,866,263	1,506,710	842,231	---	---	---
Northern, N. Y.	118	1,633,022	4,006,874	5,470,714	520,153	135,754	none	126	Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	527,962	---	---	---
Oswego and Syracuse	35	399,000	216,681	723,633	126,540	59,982	3 1/2	126	Peoria and Oquawka	93	669,889	815,544	1,388,342	In progr.	112,777	---	---	---
Pottsdam and Watertown	26	467,200	294,159	749,683	In progr.	---	---	126	Ohio & Miss. (Wst. Div.)	147	1,780,295	3,292,403	4,870,536	Recently opened.	---	---	---	---
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7	126	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.	112,777	---	---	---
Saratoga and Whitehall	48	500,000	395,000	895,000	71,909	21,080	none	126	Detroit and Milwaukee	185	838,000	1,128,994	1,966,960	In progr.	112,777	---	---	---
Syracuse & Bingham'n	80	768,369	1,578,804	2,272,777	159,484	22,503	none	122	Mich. Central	282	6,032,444	9,906,013	10,668,155	2,215,283	879,556	---	---	---
Troy and Boston	27	437,830	737,079	1,109,822	156,393	55,184	none	122	Mich. South & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	879,556	---	---	---
Watertown and Rome	97	1,370,375	700,979	2,068,063	404,374	172,474	3 1/2	122	Green Bay, Mil. & Ch.	155	764,078	442,726	1,193,765	In progr.	112,777	---	---	---
Belvidere Delaware	64	1,000,000	1,618,000	2,618,000	161,355	75,534	none	122	Milwaukee and Miss.	100	1,826,428	2,467,889	3,678,757	691,843	417,443	---	---	---
Camden and Amboy	94	3,000,000	11,407,200	8,636,522	2,017,127	961,941	12	126	Milwaukee & Water'n	72	354,861	132,000	514,238	In progr.	112,777	---	---	---
Camden and Atlantic	60	869,320	1,522,131	1,720,642	122,417	50,080	none	126	Milwaukee and Horicon	15	654,200	854,109	In progr.	112,777	---	---	---	
New Jersey	30	3,482,850	600,000	4,310,011	861,514	500,747	10	122	Milwaukee & La Crosse	51	1,351,832	532,131	1,883,963	In progr.	112,777	---	---	---
New Jersey Central	63	2,000,000	2,296,176	8,683,149	398,728	171,603	6	122	Racine and Miss.	47	921,906	380,715	1,289,321	In progr.	112,777	---	---	---
Morris and Essex	53	1,167,805	375,000	1,636,560	225,893	102,474	6	122	Hannibal & St. Joseph	13	1,138,208	684,294	1,093,336	In progr.	112,			

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	800,000	Do. inconvertible	7	April, October	"	1866	97 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divid.	"	1861-64	77	79
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	83	85
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	Jan'y, Novemb.	"	1862	85	55
Cleveland, Fairview, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	80
Do. do.	1,200,000	Do. on branches	7	March, Sept.	"	1878	75	142
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	86	57 1/2
Chicago and Mississippi	500,000	Do. conv. till 1867	7	April, October	"	1869-72	80	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1869-72	80	11
Covington and Lexington	400,000	Do. do.	7	April, October	"	1862	72	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863		66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90 1/2	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94 1/2	96
Do. do.	2,000,000	2d mortgage, do.	7	Jan'y, Novemb.	"	1876	88 1/2	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		91
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	500,000	Do. 2d sec. inconv.	7	April, October	"	1873		75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	82 1/2	
Indianapolis & Cin'ti (for Lawd. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	850,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	75	
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1853	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	99 1/2	100 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1862	96 1/2	
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1867		97
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1868	88 1/2	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1863-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96	96 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		85
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Stouboville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	88	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	78 1/2
Do. do.	2,000,000	2d do. do.	6	Feb'y, August	"	1870	73	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83 1/2	83 1/2
Do. do.	1,123,500	Do.	6	Jan'y, July	Balt.	1875		88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	97	98
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106 1/2	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	97 1/2	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94 1/2	95 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	91
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	85	85 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	91	92
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67 1/2	67 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87	87 1/2
Do. (Free Land)	3,000,000	Mfge 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	92 1/2	93
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	93	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	86
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	75	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	93
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85 1/2	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	87 1/2	87 1/2
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec	"	1864	103	103 1/2
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	101	103
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	101	103
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	84 1/2	85

CITY SECURITIES.	Int't payable.	Off'd Asked	CITY SECURITIES.	Int't payable.	Off'd Asked
New York, 7 per ct. 1857	Feb'y,	100 101	Milwaukee, 7 per ct. coup. X	Divers	87 88
Do. 5 do. 1858-60	May,	94 96	New Orleans, 6 per ct. op. R.R. X	Do.	75 80
Do. 5 do. 1870-75	August, and	92 95	N. Orleans, 6 per ct. op. municip. X	Jan'y, July	84 87
Do. 5 do. 1880	November,	94 95 1/2	Philadelphia, 6 per ct. 1876-98	Jan'y, July	90 90 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	87 88	Pittsburgh, 6 per ct. coup. X	Divers	72 74
Albany, 6 per ct. coup. X	Jan'y, July	76 77	Quincy, 6 per ct. coup. 1868 X	Jan'y, July	
Baltimore, 6 per ct. 1879-99	Quarterly	97 98	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85
Boston, 6 per ct. coup. Long X	April, October	98 99	Rochester, 6 per cent. coup. X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100 101	St. Louis, 6 per ct. coup. Long X	Do.	78 79
Clev'd, 7 per ct. op. W.W. 1879 X	Do.	101 101	Do. do. Municipal. X	Do.	79 80 1/2
Cincinnati, 6 per ct. coup. X	Divers	89 90	Sacramento, 10 p. ct. op. 1862-74 X	Do.	76
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90 90 1/2	S. Francisco, 7 p. ct. 1865, pay. N.Y. X	May, Novemb.	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100 100 1/2	Do. 10 p. ct. op. 1871 X	Do.	90 93
Detroit, 7 per ct. op. W.W. 1873-78 X	Feb'y, August	100 102 1/2	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	104
Dubuque, 6 per ct. op. Long X	March, Sept.	101 105	Do. 6 per ct. pay. N.Y. 1876 X	Do.	57 59
Jersey City, 6 per ct. op. W.W. 1877 X	Jan'y, July	94 97	Wheeling, 6 per ct. coup. X	Divers	67 67 1/2
Louisville, 6 per ct. op. 1880-83 X	Divers	79 80	Do. 6 p. ct. op. Mun. 1874 X	March, Sept.	81
Memphis, 6 per ct. coup. 1863 X	Jan'y, July	70 70	Zanesville, 7 do. X	April, October	97 97 1/2

Cincinnati Stock Sales,

By HEWSON & HOLMES.

For the week ending June 4th, 1886.

BONDS.

\$1,000 Little Miami, 6 per ct., 1st Mortg.	82	(& int.)
3,000 Indiana Central, 10 per ct. Income	95	
4,600 Cin. and Chic. Coup. 10 per ct. Real Estate	18	
10,000 Covington & Lex., 7 per ct. 2nd Mortgage	65	
3,000 Ohio and Miss., 7 per ct., 1st Mortg.	45	
5,000 Ohio & Miss. 7 per ct. 2nd Mort.	45	
2,000 City of Wheeling 6 per ct. Municipal (sink- ing fund)	78	
1,000 Cincinnati 6 per cent	88	
600 Ind. & Cin. 7 per cent Dividend	70	

STOCKS.

182 Shares Mad River and Lake Erie	15	
35 " Cin. Wilm and Zanesv.	10	
239 " Covington and Lexington	14	
55 " Little Miami, with div.	93	
50 " Columbus and Xenia	86	
60 " Marietta and Cincinnati	16	
142 " Cin. & Chicago	5 1/2	
40 " " "	6	
20 " " "	6	
11 " Cin., Ham. and Dayton	60	
75 " " " exchanged for Ind'p. and Cin.	8	
150 " Cin., Harrison and Indianap.	20	
24 " Dayton & Western	20	
35 " Eaton & Hamilton	23	

By KIRK & CHEEVER.

For the week ending June 3rd, 1886.

BONDS.

Little Miami, 6 per ct. Mort.	81	Per ct.
Covington & Lexington, 2nd Mort. 7 per ct.	64	
Ohio & Mississippi, 2nd Mort. 7 per ct.	45	
Indianap. & Cin., 2nd Mort. 7 per ct.	77 1/2	
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	85	
Covington & Lexington, 10 per ct. Income	68	
Indianapolis and Cincinnati Dividend	70	

STOCKS.

Bellefontaine and Indiana, 40.—Cin., Ham. and Dayton, 60.	
—Col. & Xenia, 86 1/2.—Cincinnati & Chic., 8.—Covington and Lexington, 16.—Dayton and Western, 17.—Eaton and Ham- ilton, 22.—Indiana Central, 60.—Indianapolis and Cincinnati, 58.—Little Miami, 93.—Mad River & Lake Erie, 15.—Mari- etta and Cincinnati, 16 1/2.—Ohio and Mississippi, 7.—Hillsboro and Cincinnati, 16 1/2.—Peru and Indianapolis, 18.	

Extract from Cammann & Co.'s Money
Circular for the European Steamers of the
11th Inst.

[EXTRACT.]

NEW YORK, Tuesday, June, 10th, 1886.

There has been a fair degree of activity in the Stock Market during the past fortnight, accompanied by some improvement in prices, attributable, principally, to the increasing abundance of money, and the generally wholesome and encouraging aspect of financial matters. The dismissal of the British Minister did not check the upward tendency, its effect having been felt in anticipation during the previous fortnight; but the unsatisfactory position of our relations with Great Britain induces, notwithstanding the general belief that the differences will be amicably settled, a feeling of caution on the part of Stock operators, rendering business comparatively limited, and depriving the market, to a considerable extent, of that buoyancy which it generally exhibits under an easy condition of money matters. In State Stocks, with the exception of California 7s, there is a general advance.—There have been sales of Kentucky 6s at 105 1/2; Virginias at 96, and of Missouri at 85 1/2. California 7s of the new issue, redeemable in 1876, have been sold at 83. For City Bonds the market continues quiet, and there is generally no important change in prices. The market for the current descriptions of Railroad Bonds has been moderately active. As compared with our quotations of 27th ult., the last transactions show an improvement of 2 per cent. on Erie 2d mortgage, 2 1/2 on 3d mortgage, 1/2 on Sinking Funds, and 2 on the Convertibles of 1871. New York Central 6s have also advanced 1 1/2. Of Illinois Central Construction Bonds there have been sales to a fair amount, closing at a small advance. Freeland Bonds, with privilege, command 92 1/2, and those without privilege, 88. A sale of 2d mortgage bonds of the Delaware, Lackawanna and Western Railroad, to the amount of \$1,850,000, was made at auction on the 4th inst. at 80 1/2. Of Railroad Stocks the sales have been quite large, at rather irregular prices, and the annexed quotations, although showing a general advance on those contained in our list, are in most cases from 1 1/2 per cent. lower than the prices current a few days since. Reading shares close firm at 91 1/2. The coal tonnage on this road

is rapidly increasing, and now exceeds that of this time last year. Illinois Central shares are firm at 99½@100. An installment of \$5 per share has been called for 1st prox., and an interest dividend of \$1.28 33-100 per share will be paid on same day. The land sales in May were 293,360 acres, at \$15.63 per acre. The supply of Money is in excess of the demand, and rates of interest have a downward tendency. Loans on call are readily obtained at 6½ per cent., and discount on first-class paper has fallen to 7½ per cent. The Bank returns for the fortnight show favorable results.

CAMMANN & CO.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 11th Inst.

[TRANSLATED.]

NEW YORK, Tuesday, June 10, 1856.

The growing animation which we noticed at the close of our advices of 2d Inst., was not of duration. The uncertainty which is felt as to the manner in which the suspension of diplomatic intercourse between this Government and the British ambassador will be received in England, has produced some apathy in the stock market. There is an evident indisposition to enter the market for a rise, whilst, on the other hand, the increasing facility of procuring money prevents holders from pressing sales. Independently of the circumstance above mentioned, the condition of the market and commerce in general is favorable to an improvement. The payment during the week of about \$2,500,000 in specie by the Sub-Treasury for the Texas Indemnity has considerably added to the Bank reserves, and increased the growing abundance of money. Another feature worthy of notice results from the figures lately published of the general foreign commerce of the United States for the nine months (of the Treasury year) to 31st of March, 1856. They show that if, on the one hand, importations have largely overrun those of the corresponding period the preceding year, the exports have exceeded them by about \$10,000,000, and that if fears had been entertained of large specie shipments to liquidate the commercial debt of the country, the above facts are calculated to dispel such fears, unless some abnormal cause interveres to counteract them.

State Stocks—There was some activity in Virginia 6s at a gradual rise of 1½ per cent. The following have been done in small amounts: Tennessee 6s at an advance of 1, and Missouri of ½ per cent., and also North Carolina 6s and California 7s at rather weaker rates.

City Bonds—We have still no return of animation to notice. A few sales have taken place of Chicago 6s and St. Louis city and county 6s.—Prices remain without any material alteration.—Railroad bonds at private sale continue neglected. We notice, however, the sale at auction of about \$1,500,000 Delaware, Lackawanna and Western 2d mortgage.

At the Stock Exchange a very moderate business was done in Illinois Central Construction and Freeland, Erie 7s, 1871 and 1875 and Harlem first mortgage, all at advanced rates.

In Railroad shares, our table of daily quotations shows a general falling off in prices, with one or two exceptions. The only ones that have been somewhat active are Erie, N. Y. Central, Michigan Central, Cleveland and Toledo, and Reading; the five former at more or less decline, the latter at a rise of 1½.

Money is more decidedly abundant, from 7c. a 6c. on call loans, more generally at the latter rate. Paper 7c. a 10c., according to length and class.—Exchanges on Europe without any noticeable variations. Principal business on London from 109½ a 109¾; on Paris, 5.16½ a 5.17½.

DE COPPET & CO.

Vermont Central Railroad Company.

We understand that Chancellor Poland has vacated his decree, of May last, which gave possession of the Vermont Central and Vermont and Canada Railroads to the Vermont and Canada Company, and restored the property to the Trus-

tees of the First Mortgage Bonds of the Vermont Central Railroad; and that the Hon. L. Brainard, of Vermont, has been appointed a Trustee, in place of Mr. Lee, resigned. The Board of Trustees now consist of Messrs. Smith and Brainard of Vermont, and Eldridge of Boston. The restoration of the Central road to its Trustees will no doubt be gratifying to the various interests in the Vermont Central Railroad Corporation, which property it is understood is at present doing a large business.

American Railroad Journal.

Saturday, June 14, 1856.

Philadelphia, Fort Wayne and Platte River Railroad.

A correspondent, writing from Wapello, Louisa county, Iowa, communicates some interesting information with regard to the above work. The road is intended to run from a point on the Mississippi river to Council Bluffs, passing through the counties of Louisa, Washington, Keokuk, Mahaska, Marion, Warren, Madison, Adair, Cass and Pottowatomie. These counties are situated on a direct east and west line through the State of Iowa, and it is designed to build this road as near an air-line as possible. When completed, it will make the shortest route to New York and Philadelphia, for a large section of the State, connecting, as it will, with the Western Air-Line through Illinois to Fort Wayne, and thence with roads under rapid construction or already completed.—By this line, it is estimated, passengers can be carried between Council Bluffs and New York in six hours' less time than by any route at present in operation.

The company was organized in June, 1853. Since then 42 miles have been located and put under construction, under very favorable terms. The work is stated to be progressing rapidly, and it is expected that the road-bed will be ready for the track, from the Mississippi to Wapello, the county seat of Louisa county, in the ensuing Fall. Subscriptions in that county have been very liberal, and the other counties are following with commendable zeal. Proposals have been made for the construction of the second division of this road, to be completed in two years. Should this be accepted, it will make 85 miles under contract. The road passes through a very healthy and fertile section of country. The prairies are high and rolling, and well adapted to farming purposes.

Iowa promises in a few years to be, in the construction of railroads, second to no State in the Union of the same extent. Her climate is healthy, her soil unusually productive, and her population increasing at a rate almost surpassing belief. By 1860, she will have close on a million of inhabitants! The influence of the Great Atlantic cities with Chicago and the Lakes will call for railroads, for several years, in an east and west direction, or nearly so. The influence of St. Louis, and the natural course of the rivers in Iowa will somewhat modify her railroad system; but this will not be felt for some time. In five years several lines will be built across the State, which will ultimately connect the East with Nebraska, Kansas and Northern Texas. Northern and Central Illinois, Southern Wisconsin and Iowa will then become the Garden of the West, filled with a dense population, and having unsurpassed natural and artifi-

cial facilities for the purposes of travel and commerce.

New York and Erie Railroad.

Below we give a synopsis of the operations of the New York and Erie Railroad for six months ending 31st of March, 1856.

Total earnings for half year ending March 31, 1856.....	\$2,959,251 93
Transportation expenses (53.32 per cent.)	\$1,577,837 91
Rent of Union R. R.	41,700 00
Taxes paid, applicable to whole year.....	46,564 28
Loss on Lake Erie steamers, 1855.	13,885 77
Amount paid D. L. & W. R. R. Co. for drawback on freight transported during year ending Dec. 31, 1855	8,898 60
Transportation expenses incurred prior to Oct. 1, 1855, paid since	12,536 66

Total expenditures (57.48 per cent.) 1,700,922 62

Net earnings.....	\$1,258,329 31
Interest on floating debt. \$22,332 33	
Do. funded debt.. 869,785 00	
	892,117 33

Balance of net earnings, applicable to dividends, equal to 3.66 per ct. on \$10,000,000 of stock.....\$366,211 98

The particulars of the traffic are as announced showing the detail of the variation from last year:

For the half year ending March 31.

EARNINGS.		1855.	1856.
From Freight.....	\$1,904,299 79	\$2,165,153 25	
From Passengers..	786,078 65	723,459 24	
From Storage....	1,732 06	968 02	
From Telegraph..	747 88	3,181 83	
From Rents	5,281 25	6,025 43	
From Hire of Cars		2,151 74	
From Mails.....	58,314 42	58,314 42	
Total Earnings..	\$2,756,454 05	\$2,959,251 93	
Increase.			Decrease.
From Freight.....	\$260,853 46		
From Passengers.....		\$62,619 41	
From Storage.....		766 04	
From Telegraph.....	3,433 95		
From Rents	744 18		
From Hire of Cars.....	2,151 74		

\$202,797 88

EXPENSES, &C.

		1855.	1856.
Transportation Expenses.....	\$1,386,781 71	\$1,577,837 91	
Rent of Union R.R.	42,366 66	41,700 00	
Interest on floating debt.....	64,404 18	22,332 33	
Do. on funded debt.	814,857 13	869,785 00	
Taxes	27,291 51	27,291 51	
Hire of Engines & Cars.....	4,998 36		

Total Expenses. \$2,340,649 55 \$2,538,946 15

		Increase.	Decrease.
Transportation Exp'ses.	\$191,105 60		
Rent of Union R. R.		666 66	
Interest on float'g debt.		42,071 85	
Do. funded debt.	54,927 87		
Hire of Engines & Cars.		4,998 36	

\$198,296 60

The following table gives the earnings and expenses and net result of each month in detail, as compared with the same month of the previous year:

Earnings.		Net Earnings.	
1854.	1855.	1854.	1855.
Oct....\$539,018	\$598,340	\$166,666	\$173,692
Nov....486,792	547,587	107,478	138,782
Dec....454,971	582,062	60,504	150,373
1855.		1855.	
Earnings.		Net Earn'gs.	
1855.	1856.	1855.	1856.
Jan....\$427,829	\$402,988	\$26,122	\$33,852
Feb....340,751	367,915	32,679	49,323
March. 407,090	400,358	87,711	40,684
Expenses.		Expenses.	
1854.	1855.	1855.	1856.
October.....	\$372,352	\$424,647	
November.....	379,314	408,855	
December.....	394,466	431,688	
Expenses.		Expenses.	
1855.	1856.	1855.	1856.
January.....	\$401,706	\$126,841	
February.....	373,431	417,239	
March.....	419,878	410,673	
For six months ending 31st March :			
1855.		1856.	
Earnings.....		Increase.	
\$2,756,454		\$202,797	
Expenses.....		198,296	
2,340,649		2,538,946	
Net earnings..	\$415,804	\$420,305	\$4,501

The net earnings for the six months have been nearly equal to four per cent. on the capital stock. The winter months were unexpectedly unfavorable, in consequence of the severity of the weather. The earnings for April and May have, on the other hand, exceeded expectation, having averaged about \$612,000 each. The expenses for the same time may be put down at \$800,000; leaving \$425,000 net income, equal to about 4 per cent.—The earnings for the 8 months have thus equalled 8 per cent. The road will probably earn at least 4 per cent. for the last three months of the year, making a total of 12 per cent. upon the entire stock of the company. In the meantime, we believe the road to be continually improving, and that the organization of the company is constantly becoming more economical and efficient. The result obtained is certainly a most gratifying one.

Hudson River Railroad.

At the annual meeting of the above company the following gentlemen were unanimously elected Directors for the ensuing year :

S. Sloan, Brooklyn; E. D. Morgan, J. D. Wolfe, E. Jones, M. H. Grinnell, W. H. Hays, M. L. Sykes, Jr., New York; W. Kelly, Rhinebeck; D. T. Vail Troy; D. Richmond, Buffalo; J. L. Schoolcraft Albany; E. M. Gilbert, Utica; and R. P. Getty Yonkers.

At a subsequent meeting of the Board, S. Sloan was re-elected President, and M. L. Sykes, Jr., Vice President.

Montgomery and Pensacola Railroad.

The *Pensacola Gazette* states, that under the late grant by Congress, the road leading from Pensacola to the line of Alabama, will be entitled to receive about 160,000 acres of land, and that the road constructing in Alabama will receive about 575,000.

Oswego and Syracuse Railroad.

The annual meeting of this company was held at Oswego on the 2d inst., when the following persons were elected Directors :

F. T. Carrington, Joel Turrell, Sylvester Doolittle, J. B. Penfield and Luther Wright, of Oswego; Aden Monroe, E. B. Wicks, T. J. Davis and Austin Myers, of Syracuse; R. H. King and Henry H.

Martin, of Albany, and Harvey Loomis, of New York.

At a meeting of the Directors, held the same day, F. T. Carrington, Esq., was elected President, and it was resolved to declare a dividend of four per cent. payable on the 1st of August.

Florida Railroad.

This company have recently made a purchase of five thousand tons of rails. A portion of this purchase is made for immediate delivery, and the company will commence laying rails forthwith.—They hope to have fifty miles of the track laid by the close of the year. They are pushing the work with vigor, with the design of opening it at the earliest moment possible.

Firth's Metal for Journals.

We have hitherto abstained from noticing this metal, choosing to wait the progress of events, and that it might undergo the severe ordeal of a tried experience, testing the question upon its own merits.

Its chief recommendations are—

1st. Its cheapness—being only 25c per pound, when brass is 35c: add to this a difference of 20 per cent. in weight in its favor:—that is for the same number of boxes only 80 lbs. would be required where 100 lbs. of brass and Rabbit metal would be used.

2. It's not cutting the Journal, even in the event of heating. We have often thought of the piles of old axles thrown behind machine-shops, worth only the price of old iron, on account of the Journal being so much worn and cut as not to allow of being used further. This circumstance is often neglected by railroad men, and yet every axle is worth \$20.

Again—look at those broken off with the wheel still attached. What number of lives may not have been sacrificed by that accident alone? Let us suppose a train has started out:—

1st. In a short time, the journal, if not perfectly lubricated, becomes hot.

2d. Percussion and magnetism follow.

3d. Disintegration of the particles, and crystallization or granulation ensues.

4th. The wheel drops off by its own weight, and the car is precipitated down an embankment. Who will deny these facts? None but those who remain in ignorance of cause and effect. The experiments of J. E. McConnell and Mr. Nasmith, of England, confirm this, besides the daily proofs in our own country. But we will abstain from this subject at present, and only give two of the numerous certificates in our possession :

CINCINNATI, April 18th, 1855.

This certifies that the Cincinnati, Hamilton and Dayton railroad company are using Thos. Firth's Composition Metal Boxes. They have given excellent satisfaction, better than the Brass Box with Rabbit Metal; they are a great object on account of not heating and the cheapness of the metal.

DANIEL McLARIN,

Master Machinist, C., H. & D. R. R. Co.

OFFICE OF THE TROY IRON AND NAIL FACTORY. }
Troy, 1st June, 1856. }

Messrs. Elliot & Bowles :

Gentlemen—In reply to yours of the 29th inst., we have to say, that we have used Firth's Composition Metal for the past eleven months, and it gives us entire satisfaction. We find it an excellent and economical substitute for Brass or Rabbit Boxes. Yours truly,

WM. F. BURDEN, Agent.

Kentucky Central Railroad—2d Division.

LATE LEXINGTON & DANVILLE RAILROAD.

From the report of this company, rendered on the 6th of May last, we learn that their charter was granted in March, 1850, with an authorized capital of \$700,000. The length of the road to be 35 miles. Of the four counties interested, three made prompt and liberal subscriptions to the work. The country traversed by it is very rich and beautiful; but difficult of construction, on account of the limestone ridges and deep chasms in one of which flows the Kentucky river, crossing its course. The company were accordingly, at a subsequent date, empowered to increase their capital stock to \$1,000,000. Various amendments have since been obtained, all of a liberal character. The company seem to have experienced a continuous succession of difficulties with contractors. At last, when their means had been all expended, the present incumbent (Gen. Leslie Combs) was chosen President. Since then public confidence has begun to revive, and operations have again been commenced. Two massive towers for the suspension bridge over the Kentucky river have been erected at a cost of \$97,667. Further work on the bridge has had to be temporarily suspended from the want of means to pay Mr. Roebling his monthly estimates. An arrangement has lately been made with the Covington company, by which the latter are to operate that part of the road completed for one-half the gross receipts—the remainder being applied to construction purposes.

At the annual meeting held in May, 1855, a resolution was adopted offering, if \$100,000 should be subscribed by solvent parties in Cincinnati, to fix the gauge of the road at five ft., in order to save transshipment. An effort was made to raise the above sum, but without success, \$70,000 being all that could be secured. It has not since been decided how to proceed with reference to the gauge question.

The Treasurer's report shows the total stock subscription to be \$719,500, of which \$487,000 have been taken by counties. The latter has all been paid in. Total receipts, \$694,444, over half being in county bonds. The entire cash receipts to date have been \$668,779, and the disbursements an equal amount. The indebtedness consists of \$29,000 seven per cent. mortgage bonds, and \$23,734 of floating debt. The sum of \$18,143 is still required for graduation, masonry and bridging from Lexington to the Kentucky river, 21 miles. This will be completed in a short time. The sum of \$31,026 has been expended south of the river. The company have on hand one locomotive, six platform, and two hand cars.

Pacific Railroad.

At a meeting of citizens of Vicksburg, held a few days since, Thomas Butler King made an extended address on the subject of a railroad to the Pacific. This gentleman is well known for his connection with the projects for building the road through Texas, with the aid of the grants made by the Legislature of that State, on the line nearest approaching to the 32° of north latitude. His particular object in Vicksburg at this time is, to call attention to the identity of interest which exists between the Texas company, which he represents, and the Vicksburg, Shreveport, and Texas railroad company, of which the eastern terminus is at Vicksburg. He is laboring to secure a close alliance between the two companies, with a view to making the roads the main trunk of the great road across the continent. A committee of citi-

zens was appointed to promote the objects of the meeting, in effecting a junction between the Louisiana road, and the Texas road as the principal trunk in the road to the Pacific.—*Vicksburg Wlig.*

The Public Lands—Land Warrants.

We have ascertained that lands are to be granted to all the following States for railroad purposes:

Iowa	4,000,000
Wisconsin	2,000,000
Michigan	2,000,000
Minnesota	2,500,000
Arkansas	4,000,000
Florida	1,500,000
Alabama	4,000,000
Louisiana	1,500,000
Missouri	1,500,000

The acts of the first five named States have been signed by the President—Louisiana has passed both Houses of Congress, and Minnesota, Arkansas and Missouri are sure to pass. The total amount of lands given to railroads will not vary much from 25,000,000 acres.

The roads take every other section for six miles each side of the line of the road, and where land has been pre-empted or entered within six miles, then the road can select alternate sections anywhere within fifteen miles of the line of the road, until it gets a quantity in the aggregate equal to what it would have had, had no entry or pre-emptions been made on the six miles.

The land reserved to the Government within the six miles is doubled in price. These grants necessarily shut up all the principal land offices in the above States for a year or two; this has caused the great decline in warrants. When the offices open, the Government's alternate sections are to be offered at auction, under a limit of \$2.50 per acre cash; after which what is not sold, can be entered with one-half warrants and one-half cash.

There has been a demand for land warrants, recently, from parties who think they can, being smart, get entries made before the offices are closed, and we are buying, at present, from 90 to 95 cents per acre, and selling at 97 to 100; we cannot, however, promise these prices any time ahead, the market is so fluctuating.—*Thompson's Reporter.*

Rome and Watertown Railroad.

The annual meeting of the stockholders of the Watertown and Rome railroad company was held at Watertown on the 2d inst., and the following gentlemen were elected Directors for the ensuing year:

W. C. Pierrepont, Pierrepont Manor; Philip Dater, J. P. Yelverton, S. F. Phelps, Christian Zabriskie, Jr., New York City; Willis Phelps, H. Alexander, Jr., Springfield, Mass.; O. V. Brainard, Clark Rice, Watertown; Calvert Comstock, Albany; David Utley, Rome; S. D. Hungerford, Adams; W. Lord, Brownville.

At a meeting of the Directors held the same day, W. C. Pierrepont, Esq., was unanimously elected President, and Richard E. Hungerford, Treasurer. As will be seen by the annexed figures the affairs of the road are in a very healthy condition:

The capital stock is	\$1,500,000
And the funded debt	701,500
which is payable in 24 years, to meet which a sinking fund is provided.	
Gross earnings for the year ending May 1, 1856	\$429,160 33
Operating expenses and cost of maintaining road-bed and equipments for same period	210,751 35

Net earnings	\$218,428 98
Interest on funded debt, as above	49,105 00
Applicable to dividends	168,323 98

—making the net earnings for the year a fraction over 11 per cent. A cash dividend of 3½ per ct. was paid on the 1st of October last, and on the 20th of February last a stock dividend of 10 per cent. was declared, the latter being made in order

that the net cash earnings, equal to that amount might be used for the payment of the floating debt of the company, to which purpose the same has been applied. The company are now free of a floating debt, except to a limited amount, which is amply provided for by good bills receivable now due to the company. The Directors have just declared a cash dividend of 3½ per cent., payable on and after the fifteenth day of July next.

Steubenville and Indiana Railroad.

We copy the following article furnished the *Courier and Enquirer* of this city, by a correspondent. The Steubenville and Indiana Railroad is one in which our people are much interested as holders of its securities, which will render acceptable any information in reference to the road.

COLUMBUS, Ohio, May 31.

After spending two very agreeable days in Steubenville, admiring its beautiful surroundings, and making the acquaintance of a number of its citizens, I started yesterday morning for the capital of the State, where I arrived, after a very pleasant ride, last evening, passing through the very heart of this great and flourishing agricultural region, the earth teeming with promise of abundant crops.

The Steubenville and Indiana Railroad being now looked upon by New York and Philadelphia as the most important of the iron links to secure to them a portion of the trade and travel of the West, the capitalists and far-seeing business men of those cities are, with a cordial unanimity, preparing to make it immediately available. This road has been completed from Steubenville to Newark for nearly two years, where it intersects the Central Ohio, Sandusky, and all the principal roads passing through the State. At Steubenville, however, there is no connection East, and, consequently, its business has been confined exclusively to local trade and travel. The two roads contemplated, and in course of construction, from Steubenville to Pittsburg, amid the pecuniary embarrassments of all railroad enterprises, have been much retarded, but the means have now been furnished by Philadelphia and New York for their immediate completion.

Messrs. THOMPSON & KING, of New York, have leased the Pittsburg and Steubenville Railroad for twenty years, and have entered into bonds with the Company to have it completed, and in running order, some time before the close of the present year; and the river road from Pittsburg to Steubenville, it is announced, will be completed during the month of August. In view of this early connection with Pittsburg, both the Miami and Wilmington and Cincinnati roads are making overtures for a connection with the Steubenville and Indiana road, the latter proposing a connection at Dresden, and even leaning towards a consolidation of the Companies, making an air line almost from Pittsburg to Cincinnati. Messrs. T. & K., the contractors, were expected to arrive at Steubenville last evening, coming in carriages over the bed of the road from Pittsburg, and will to day come to Newark over the Steubenville and Indiana road, to examine its condition and its ability for a heavy freight business. I passed over this road yesterday, and having taken a seat at the end of the hind car, had an opportunity of critically examining the track, bridges, &c., and have no doubt that they will report it as the most substantial road in the entire West. The cross-ties are very heavy, closely laid, and of the most durable timber, and the iron is heavier than that on the Central Ohio road. The masonry, bridges, and tunnels of the road have been built in the most massive and durable manner—most of the bridges being triple arches of hewn stone, with solid stone beads, across which the ties are laid. There are five or six tunnels on the line of the road, but they have all been substantially arched as fast as they were excavated, and may be regarded as permanent and free from all liability to obstruction from accident.

The present superintendent of the road, Mr.

George W. Fulton, during the eight months he has charge, has undoubtedly produced a marked improvement in every department. The bed of the road is being put in order, and if the Company are enabled to furnish the means for the prosecution of the work during the Summer and Fall, the trunk for its entire length will be in the finest possible condition. The part already completed, under the direction of the maker of the road, Mr. William L. Whiter, is an evidence of superior ability in his business, and is a guarantee to the Company that their funds will be expended to the best possible advantage. The condition of the rolling power of the road also shows a marked improvement. The engines have all been repaired in the workshops recently erected by the Company at Steubenville, which are in charge of Mr. Thos. Denmead, the master of the machinery, who in the few months he has been in the employ of the Company has given evidence of the greatest efficiency in his business.

Every department of the road has been put in the hands of men of acknowledged character and proficiency as experienced railroad men, the Superintendent regarding qualification as the essential requisite to appointment, and although the necessity of making changes in re-organising the affairs of the Company, gave some dissatisfaction at first, time has removed these objections, and given him the entire confidence of the Board and Stockholders.

As there are Bonds of the Steubenville and Indiana Railroad, to a very large amount, held in Baltimore and the Northern cities, I took some pains to inquire the opinion of gentlemen connected with other roads, as to its prospects of trade and travel, on the completion of its connection to Pittsburg. In reply to my queries, I was everywhere assured that it will undoubtedly rank among the most popular routes between the West and the East, the grades being light, and the distance over it from Cincinnati to Philadelphia, New York, and Baltimore, (by way of the Northern Central,) as short, if not a little shorter, than by the most favored of existing lines. This is the opinion here, which I give for what I may be worth; those directly interested can take a map and examine, or what would perhaps be better, come out and make a personal inspection for themselves. T.

New York and New Haven Railroad.

At a meeting of this Corporation on Thursday, in addition to the election of Directors whose names we have published, the Company accepted the reports of the Directors and other officers, and transacted some other business. The act of the Legislature, authorizing the company to exchange its outstanding bonds for mortgage bonds, to an amount not exceeding \$3,000,000, having been accepted, such mortgage has been executed, and the requirements of the act strictly complied with.—These mortgage bonds draw 6 per cent. interest and run 20 years from Oct. 1st, 1855, and \$552,000 have been issued in substitution of the old bonds. In December, \$271,000 of the 7 per cent. bonds fell due, and were paid by the sale of a sufficient amount of the new 6 per cent. bonds. A decision as to the validity of the Schuyler stock is expected to be made by the New York Court of Appeals in June. Five suits are still pending against the road on account of the Norwalk disaster—two in Connecticut, two in New York, and one in Massachusetts.

The road is represented to be in excellent order, and there has been a gratifying freedom from accident during the past year.

A completion of the double track is recommended, by the construction of the six miles between New Rochelle and the Harlem road, as soon as the condition of the treasury will warrant the expense.

The Coscob Bridge has been finished and paid for, at an expense of \$101,000, and not much more bridge repairing will be required for many years. It is stated, as probable, that the New York depot will be removed up town, to some place above

26th street, during the present year, when we presume the fares will be correspondingly lessened.

The receipts for transportation have been—

From passengers.....	\$687,976.86
From freight.....	152,047.49
From mail, expresses, &c.....	44,582.29

Total \$884,806.58

The running expenses have been \$545,428.73, leaving the net earnings \$338,877.85. The expenses are \$25,000 less than last year, and the net earnings exceed the previous year by \$3,000.

The above earnings, with the balance of \$42,223.98 on hand at the beginning of the year, have paid—interest on bonds, \$135,838; Norwalk damages, \$25,466; loss by canal road, \$32,221; Concob-bridge, \$62,445.83; floating debt, \$66,137; mortgage, \$7,000, and other items, leaving a cash balance of \$21,441.71 on hand on the 1st of April last. There was a discount of \$2,250 paid on the mortgage bonds out of the above amount, and a further discount of \$89,000 paid by issue of extra bonds, making the discount on all bonds issued \$91,250.

The capital stock of the road is \$3,000,000, and the amount of bonds, accounts, &c., run up the liabilities of the road to \$5,376,803.63.

The Canal Railroad being run under the agreement with the New Haven and Hartford road, nets a loss to the company, of course, of which the Hartford road pays a certain share. The statement of its earnings and its expenditures is not very clear without extraneous explanation.

The stockholders voted to accept the amendments, made by the last Legislature, authorizing the enlargement of the capital stock, to be available in case of the necessity of assuming the Schuyler stock.—*New Haven Journal*.

Central Railroad and Banking Co.

The Board of Directors have declared a semi-annual dividend of \$5 per share, being at the rate of ten per cent. per annum, payable on and after the 15th June inst.

The amount of earnings of road and bank, paid into bank from 1st Dec., 1855, to 1st June, 1856, is.....	\$815,263.75
Amount paid for interest, banking, and road expenses.....	381,120.96

\$434,142.79

Paid on account of railroad (beyond current expenses) during the six months.....	77,695.11
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\$356,447.68

Dividend declared June 3rd, 1856....	193,874.00
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Surplus carried to Reserve Fund....	\$162,573.68
Making the reserved profits at this day the sum of.....	\$402,745.00

Iron for the Georgia and Florida Railroad.

We are gratified to announce to our readers that the Georgia and Florida railroad company, through its President, has concluded an agreement with Messrs. Padelford, Fay & Co., for the purchase of eight hundred tons of iron rails of the most approved T pattern, and the necessary quantity of chains and spikes. The order went forward by the steamer of the 21st, and will probably be delivered in Savannah on or before the first day of October. In the meantime the first division of the road will be prepared for the reception of the iron, so that it may be completed and ready for business on or before the first day of November.

This will be grateful intelligence to all who are interested in this section of the State, and especially to the stockholders and citizens of Albany and its vicinity. It will save twelve miles of haul for the next crop over the worst part of the road between this and Americus—bringing us within about 24 miles of the depot—and it gives us a certainty that the road will be completed to this place in time for the crop of the next year. This year's business on the first division of the road will bring a handsome income to the company, and

the entire arrangement will give confidence and satisfaction to all.—*Albany Patriot*.

New Railroads Building in Pennsylvania.

The following is a list of some of the most important of the railroads in progress of construction in this State:

No. 1. The Sunbury and Erie railroad, from Sunbury to Erie City, in the counties of Northumberland, Lycoming, Clinton, Elk, McKean, Warren and Erie..... 268 miles.

Forty miles of this road, from Sunbury to Williamsport, are completed and in use; from Williamsport to Lockhaven, 26 miles, the work is in progress.

No. 2. The Lebanon Valley railroad, from Harrisburg to Reading, in the counties of Dauphin, Lebanon and Berks..... 63½ miles.

This road will connect with the Pennsylvania railroad at Harrisburg, and with the Reading railroad at Reading, and thereby open, via the city of Reading, a continuous railroad from Philadelphia to Harrisburg, almost as short as the existing route via the city of Lancaster.

No. 3. The North Pennsylvania railroad, from Philadelphia to Bethlehem, in the city of Philadelphia, and in the counties of Montgomery, Bucks, Lehigh and Northampton..... 55 miles.

This road is completed and in use to Gwynedd, 19 miles, and in progress to Bethlehem on the main road, and to Doylestown on the branch road. The main road and branches comprise sixty-seven miles.

No. 4. The North Western railroad, from Blairsville to New Castle, in the counties of Indiana, Westmoreland, Armstrong, Butler and Lawrence..... 89½ miles.

This road connects with the Pennsylvania railroad at Blairsville, and the Cleveland and Mahoning railroad at New Castle, whereby a direct communication of uniform gauge will be opened from Philadelphia to Cleveland, 476 miles. It may be, that the two companies between Blairsville and Cleveland, following the wise example of the three companies between Pittsburg and Chicago, will consolidate into one company with one road 176 miles long.

No. 5. The Hempfield railroad, from Greensburg to Wheeling, in the counties of Westmoreland and Washington in this State, and in Ohio county, Virginia..... 76½ miles.

This road is in progress between Wheeling and Washington; at the latter place it will connect with the Chartier's Valley railroad, in progress to Pittsburg; but little if any work has been done east of Washington. The Hempfield railroad is a link in a route to Cincinnati, via Marietta and Chillicothe, whereby the distance to Cincinnati, from Greensburg, is 338 miles, and from Philadelphia 660 miles.

The city of Philadelphia is a subscriber in the Hempfield link, and the Pennsylvania railroad company in the Marietta road; but very much remains to be done before the original programme will be consummated.

As consolidation might be a wise precaution and a strengthening remedy, perhaps the time is not very remote when a "Philadelphia and Cincinnati railroad," 838 miles long, shall extend from the Pennsylvania railroad at Greensburg, to Cincinnati, making a friendly line which cannot be divided nor estranged, from Philadelphia to Cincinnati, 660 miles in length.

No. 6. Pittsburg and Steubenville railroad, from Pittsburg to the Ohio river opposite to Steubenville, in the counties of Alleghany and Washington in Pennsylvania, and in Brooke county, Virginia..... 42 miles.

This road has been leased to parties who have contracted to complete it. As originally planned it connected with the Steubenville and Indiana railroad, whereby it was shown that the Pennsylvania gauge would be carried to Columbus, there to connect with the same gauge continued east from Indiana. And as the importance of such a route passing into central Ohio and thence farther west, by connections beginning at Columbus, was

obvious to the city of Pittsburg and the Pennsylvania railroad company, the city of Pittsburg subscribed to the stock of her own railroad company, and the Pennsylvania railroad company endorsed some of the bonds of the Ohio and Indiana railroad company.

Since these events, however, changes have taken place, not the least important of which is the termination of the Ohio and Indiana railroad at Newark, about 32 miles east of Columbus, its change of gauge, and its connection eastward with the Wellsville route to Pittsburg. Instead, therefore, of a bridge over the Ohio at Steubenville there will be a ferry; and at either end of the ferry, upon the banks of the Ohio, if not at Pittsburg, will terminate for a time the Pennsylvania and the Ohio gauges.

Pittsburg and Philadelphia are alike interested in having a continuous uniform route from Pittsburg to the Mississippi river through central Ohio, Indiana and Illinois; and when a propitious time shall come, as come it will, a vigorous movement, uniting earnest action with hearty co-operation, will overcome all hindrances, and accomplish by treaty, alteration and construction, a union of links built under different organizations into one central trunk line to be worked and managed under one organization.

Such a line would be the great trade artery between the lakes and the Ohio river, and would drain from the lines running across it, as naturally as the river and the lakes drain from the streams which flow into them.

No. 7. The Alleghany Valley railroad, from Pittsburg to the north line of the State, in the counties of Alleghany, Armstrong, Clarion, Jefferson, Forest, Elk and McKean..... 179 miles.

This road is in use to Kittanning, 44 miles from Pittsburg. It was projected to connect with the wide gauge roads of New York, but the track was laid down of the narrow gauge, conforming to the Sunbury and Erie road, with which a most advantageous connection may be made at Winslow via Brookville, 88 miles from Kittanning, and 132 miles from Pittsburg.

From Winslow, via the Sunbury and Erie route to Williamsport, the distance is 95 miles, making the whole distance from Pittsburgh to Williamsport 227 miles.

By a connection with the Sunbury and Erie road at Winslow, the Alleghany Valley road can have communication northward with western New York, via Williamsport and Elmira, and with points east and south via Sunbury, Catawissa and Harrisburg.

The adaptation of the Alleghany Valley railroad to the narrow gauge roads, was, we think, an act of judicious policy independently of the financial reasons which doubtless had an existence actual or prospective when the original design was modified.

No. 8. The Pittsburg and Connellsville railroad, from Pittsburg to Cumberland, Maryland, in the counties of Alleghany, Westmoreland, Fayette, Somerset and Bedford, in Pennsylvania, and in Alleghany county, Maryland..... 147 miles.

From West Newton to Connellsville, 25 miles, the road is in use; other parts of the route are in progress of construction.

This road, when finished, will connect with the Baltimore and Ohio railroad at Cumberland, 179 miles from Baltimore, making the distance from Baltimore to Pittsburg, by this computation, 326 miles, being six miles shorter than the route now open from Baltimore to Pittsburg over the Northern Central and Pennsylvania railroads.

The Pittsburg and Connellsville Railroad, with the Metropolitan railroad, and an intermediate link of the Baltimore and Ohio railroad, when completed throughout, will establish between Pittsburg and Washington a direct communication.

No. 9. The Lackawanna and Bloomsburg railroad, from Rupert to Scranton, in the counties of Columbia and Luzerne..... 55 miles.

This road which connects with the Catawissa road at Rupert, 147 miles from Philadelphia, fol-

lows the Susquehanna river to Pittston, whence it follows the Lackawanna valley to Scranton, and connects with the Delaware, Lackawanna and Western railroad, which gives it an eastern outlet towards New York city via the Delaware Water Gap, and a northern outlet into western New York via Great Bend.

The money cost of this road per mile, will be less than the money cost per mile, upon the same number of consecutive miles of any other railroad in Pennsylvania.

No. 10. The North Division of the Northern Central railroad, from Bridgeport opposite Harrisburgh, to Sunbury, in the counties of Cumberland, Perry, Dauphin and Northumberland.....54 miles.

This link originated in the charter of the Susquehanna railroad company, which was authorized to build a road projected from Bridgeport to Williamsport, 94 miles: but as the Sunbury and Erie line occupied the ground between Sunbury and Williamsport, the Susquehanna road was located to terminate at Sunbury, and its construction commenced. After a time, the work was suspended; and was resumed subsequent to the consolidation of the four companies between Sunbury and Baltimore, 138 miles, under the name of the "Northern Central Railroad Company." The road will now be pushed forward to completion.

The surveyed length of the foregoing ten roads, including only the north division of the Northern Central Railroad, is 1,031½ miles.—*Phil. Railroad and Mining Journal.*

Portland, Saco, and Portsmouth Railroad.

The annual meeting of this Company was held at North Berwick on Monday. From the annual Report which was presented, we learn that the total receipts of the road for the year ending May 31st, was \$270,214.45; the expenditures \$157,723.42—leaving the net income \$112,491.03. The sum of \$27,898.11 has been paid the Eastern and Boston and Maine railroads, after all expenses have been paid and six per cent. dividend declared, as per agreement with those two roads. The road is said to be in an excellent condition, large repairs and improvements having been made the past year. No accident to passengers or employees has occurred during the year.

The following directors were chosen:—Ichabod Goodwin, Portsmouth; Josiah Galef, Saco; Chas. E. Barrett, Portland; John Howe, Brookline; James Hayward, Boston; Thomas West, Haverhill; Albert Thorndike, Beverly.

Painesville and Hudson Railroad.

The work on this road has been prosecuted to good advantage during the past winter, considering the number of hands employed, and the winter's length and severity. The cut through the village has been extended near half a mile, and is nearly finished. The one from Kellogg's creek this way has also had a large amount of earth taken from it. All the earth removed is used for embankment.

The bridge across this creek is going on rapidly, and is the most substantial and durable we have ever seen. Its exact height we do not know, but it varies little from 80 feet. It consists of 8 arches of 50 feet span, and solid stone work raised seven feet above the crown. The masonry already done, for strength and durability is not excelled by that of any road in the country. We have before said that all the bridges are to be of the same kind. The action of the Directors in adopting the permanent and lasting mode on the start is shown to be the best policy by the losses which the neighboring roads have suffered by not adopting it, and they are entitled to much credit from every friend of the road, and especially from every stockholder, for it. The Engineer, Mr. C. C. Smith, in the plan of the work, and the contractors for the masonry, Messrs. Byrant, Fifield & Co., are also entitled to much credit and the confidence of the stockholders.

We learn that the grading between the Lake and Chardon is being done as fast as the nature of the work will admit—the largest cuts having as many

hands in them as can work to advantage. The work is in progress on every section between these two points, and will be rapidly pushed to completion.—*Painesville Tel.*

Grand Trunk Railway.

We learn that Mr. A. M. Ross, Chief Engineer of the Grand Trunk railway company, has returned from Toronto to Montreal, and, that the work on the entire line is now in rapid progress, including the Victoria bridge. A large force is at work at each end of it, or on both sides the St. Lawrence, and it is expected that £200,000 or \$800,000 will be expended on the bridge this year. The price of labor favors the progress of the works. The line is in rapid progress the entire distance from Brockville to Stratford. The Toronto and Stratford line—96 miles—will be opened for traffic in June next. From Toronto to Whitby—40 miles east—it is nearly finished, as is also the line from Brockville to Kingston. The entire line from Montreal to Toronto and Stratford will be ready for traffic in November.

The company are preparing bridge boats to run from the Montreal station, at Pt. Charles, to Longueuil, so that loaded freight cars will be taken across the St. Lawrence, in this way, till the completion of the bridge. This will be a new feature in working the line, calculated to rapidly develop the traffic the coming autumn. Cars will, by this method, be taken from Stratford, Collingwood, Toronto, and other places on the north shore direct to Portland, Quebec and other places on this side the St. Lawrence without any transshipment of goods, and vice versa.

We do not learn in what form the Provincial aid is to be extended to the work, but no question remains but that the material aid required, will be granted.

Virginia State Interest.

From an Official Letter from the State Auditor.

Being frequently addressed upon the subject of the probable ability of Virginia to pay the interest, &c., which will be due the 1st of July next, I deem it proper to make the following statement:

By an act of the General Assembly, passed the 18th of March, 1856, the undersigned was authorized "under the advice and with the approbation of the Governor," to borrow from time to time such sums as might be deemed expedient to meet the public engagements, on the sale of twelve months Treasury Notes at a rate not under par.

Agreeably to the foregoing provisions, I have sold nearly \$1,000,000 of Treasury Notes. This sum, added to about \$800,000 arising from taxes, in May, 1856, licenses, semi-annual dividends on Bank Stocks belonging to the State, and other ordinary subjects of revenue, will furnish ample means to enable the Commonwealth to meet the July (1856) interest promptly, besides paying the "floating debt," or temporary loan heretofore obtained from a portion of the Virginia Banks.

It is proper to observe that all the Treasury notes sold have been purchased by bankers and capitalists in Virginia.

G. W. CLUTTER,

Auditor of Public Accounts.

AUDITOR'S OFFICE, Richmond, May 31, 1856.

Quincy and Palmyra Railroad.

On the 14th inst., a meeting of the Directors of this company was held in this city, when the Board was organized by electing Saml. Holmes, Esq., of Quincy, President; W. P. D. Claybrook, Treas'r; and E. McCabe, Sec'y; the Treas'r and Sec'y are citizens of Palmyra.

We learn that the President is well qualified for the important post which he has been selected to fill—that he possesses the requisite promptness, energy and experience for an efficient officer.

We are led to believe that this work, so important to Quincy, to Palmyra, the north-east portion of Missouri, and to northern Illinois, will be at once commenced and pressed vigorously forward to its completion. Satisfied, as all must be of its importance, we hope to see the people of this sec-

tion rallying as one man to its support, and promptly contributing their part toward raising the requisite means. The people of Quincy are wide awake, and it only remains for us to meet them in a similar spirit, and the work will be done. Shall we falter; shall the golden opportunity be lost by slothfulness, or criminal indifference to our best interests? We shall see.—*Palmyra Sentinel.*

Railroad Earnings.

LA CROSSE & MILWAUKEE R. R.

The earnings of the La Crosse and Milwaukee Railroad for the month of May were:

Freight Income.....	\$24,014.77
Passengers	17,243.86
Transportation United States Mail....	217.87
	\$41,475.00

The earnings for 1856 thus far have been:

January	\$10,550.29
February	20,128.71
March	27,226.28
April	32,138.72
May	41,476.00

BALTIMORE & OHIO R. R.

The revenue for the month of May has been—

	Main Stem.	Wash'n Branch.	Total for both roads.
Passengers.....	\$62,178	\$31,377	\$93,556
Freight.....	375,287	10,474	385,762
	\$437,466	\$41,852	\$479,318
May, 1855	351,604	34,211	385,816

Increase..... \$85,861 \$7,640 \$93,502

HUDSON RIVER R. R.

The receipts of this road for May were:

May, 1856	\$150,715.91
May, 1855	130,443.16

Increase..... \$20,267.75

NEW HAVEN R. R.

The receipts of the New York and New Haven railroad for May were:

Passengers.....	\$71,550.97
Freight.....	10,000.00

Total..... \$81,550.97
Paid Harlem Co..... 4,157.92

Balance \$77,393.05 || For May, 1855 | 72,199.67 |

Increase..... \$5,093.32

GALENA & CHICAGO R. R.

The earnings of this railroad for

May 1856, were.....	\$228,797.59
May, 1855	214,106.20

Increase..... \$14,691.39

ROCK ISLAND R. R.

The earnings of this road for May were:

Passengers.....	\$80,856
Freight.....	70,000
Mails, &c.....	1,800

Total \$152,656 || May, 1855 | 128,990 |

Increase \$23,666 |

KENTUCKY CENTRAL R. R.

The receipts of the road for May, 1856, were:

Passengers and mail.....	\$13,791.75
Freight.....	14,657.71

Total \$28,449.46 || Increase over April..... | 1,842.04 |
| " " May, 1855..... | 11,931.46 |

Receipts for last 8 months..... 237,527.71

Receipts for corresponding 8 months last year..... 149,565.06

Increase..... \$87,962.15
About \$10,000 per month

Railroad Iron.

900 TONS best quality Welsh Rails "Erie" pattern, weighing 60 lbs. per yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.
Im24

NEW YORK, June 14th, 1856.

English Blister Steel.

20 TONS on hand, for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
4124 NEW YORK.

OFFICE CINCINNATI, HAMILTON AND DAYTON R.R. CO. }
Cincinnati, June 1, 1856. }

TO THE STOCKHOLDERS.—GENTLEMEN: At the Annual Meeting, held on the 5th ult., it was recommended by the Stockholders that a circular be issued, inviting proposals for the remainder of the Second Mortgage Bonds of this Company, of which 611 have heretofore been sold. Proposals, will, therefore, be received until the 20th day of June for 439 of the Second Mortgage Bonds, of \$1,000 each, payable on the 1st day of May, 1860, and bearing interest at the rate of 7 per cent per annum, payable semi-annually, in New York, at the office of the Ohio Life Insurance and Trust Company. Payment for the Bonds to be made—one-fourth of the 1st day of July, and the remainder in three monthly instalments thereafter, with privilege of paying all on the 1st of July. The accumulated interest to be adjusted on the delivery of the Bonds. The mortgage provides for the issue of 1,250 of these Bonds. The Board of Directors have, however, withdrawn 300 from the market, indefinitely, and it is not supposed they will be offered for sale for many years to come. The Bonds heretofore sold, of this issue, have netted the Company 90 cents and upward, on the dollar, with the exception of 46, which were sold in London, netting 88 cents in New York.

The object in disposing of these Bonds is to discharge the floating debt of the Company, and to provide for the scrip issued for dividend number five; thus enabling the Company to resume the payment of regular cash dividends. The following figures will show the condition of the Company:

EXPENDITURES.	
For Construction Account.....	\$2,470,125 53
For Equipments Account.....	517,632 85
For Real Estate Account.....	228,483 85
For Railroad and other Securities.....	384,570 48
Total.....	\$3,600,812 21

RECEIPTS.	
From Capital Stock.....	\$2,163,900
From 1st Mortgage Bonds.....	500,000
From 2d Mortgage Bonds of present issue, heretofore sold.....	511,000-3,164,900 00

Leaving a debt to be provided for, of.....\$436,912 21

When the 439 Bonds now offered shall be sold, the whole bonded debt of the Company, (1st and 2nd mortgages,) will be \$1,460,000—on which the annual interest will be \$101,600. For the security of the principal of these Bonds it will be seen that there has been invested in Construction and Equipment more than double the amount of the whole mortgage debt, without counting the real estate or other assets; beside which, a sinking fund has been provided for the redemption of a portion of the Bonds by the action of the Stockholders. The property mortgaged was all acquired previous to the issue of the Bonds.

For the prompt payment of the interest, the means are as follows:

Gross receipts of the Company for the year ending March 31st, 1856.....	\$508,271 71
Less working expenses, for same period.....	230,258 84
	\$278,012 87

Amount of annual interest as above stated.....	101,500 00
Showing an annual surplus, after payment of the interest of.....	\$176,512 87

The Cincinnati, Hamilton, and Dayton Railroad is sixty miles in length—has fifteen miles of double track in use—and including side tracks, has upward of ninety miles of iron laid. No road in the country is more substantially built or completely furnished. It occupies the position of a trunk road—is located in the Great Miami Valley, the most densely populated and richest portion of Ohio—the important cities of Cincinnati and Dayton being the termini of the road. It connects at Hamilton with the Junction road, now in progress to Indianapolis, and with the Eaton, Richmond and Chicago road, nearly completed to Logansport and in progress to Chicago. At Dayton it connects with the Mad River and Lake Erie road to Sandusky—with the Dayton and Michigan road, finished to Piqua and in progress to Toledo and Detroit—and with the Greenville and Miami road, finished to Union and in progress to Fort Wayne.

The road was opened for business in the Fall of 1851, since which time seven eighths of its earnings have been from local traffic. The past year its earnings averaged \$8,471 71 per mile. These earnings will doubtless be increased fifty per cent. when the various connecting roads, referred to above, are fully extended and completed.

The Company is under no pecuniary obligations to other Roads, either for subscriptions, indorsement of Bonds, or otherwise. For a full and detailed statement of the condition of the Company, reference is made to the Annual Report of the Directors, accompanying this Circular.

Proposals for the Bonds will be received in New York by EDWIN LUDLOW Esq., Cashier of the Ohio Life Insurance and Trust Company, and in Cincinnati at the Office of the S. S. L'KOMMEDIEU, Esq.

KASSON'S

RAILROAD IRON EXPRESS,

NEW YORK AGENTS,
DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

W. M. KASSON & SON.

N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay. Insurance at low rates of premium, will be effected when desired.

ELLIOTT & BOWLES,

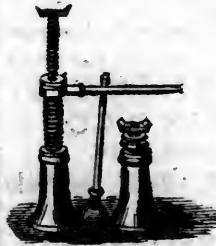
(LATE ELLIOTT & CO.)

Railroad Commission Merchants, and Agents for the Sale of

FIRTH'S METAL,

The Cheapest and Best Metal for Rail Road Journal Boxes.
118 WILLIAM STREET, N. YORK.

BALL'S PATENT JACK SCREW.



For sale by

No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8 1/2 inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 60 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Notice to Contractors.

OFFICE OF STATE ENGINEER BURNHASTA,
Orange Mill Post Office.
St. Johns River, Fla., August 20th, 1856.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1856, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANCY,
State Engineer, State of Florida.

By SAMUEL HATCH, Boston.

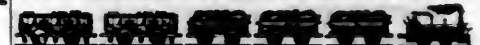
4122

Six Railroad Locomotives at Auction.

ON WEDNESDAY, June 25th, at 12 o'clock, on the premises at the shops of the Boston and Lowell Railroad Corporation, in East Cambridge,

Six second hand Locomotives and Tenders which are deemed too light for the use of that Company. Three of said engines weigh 16 tons each with fuel and water in, and are of the following distinctive dimensions—cylinders, 12 inches diameter, 18 inches stroke of piston, arranged with inside connections, 2 driving wheels of 6 feet diameter, 4 truck wheels, 30 inches diameter, with boilers, furnaces, &c., in due proportion. They were built by the Locks and Canal Company of Lowell. The other three engines are still lighter, having cylinders of 11 in. diameter and 10 inches stroke of piston, 2 driving wheels, 5 ft. in diameter, also of inside connection; they were built by the same Company.

The above engines are suitable for light service either of passenger, freight or gravel trains, and having been built by the Locks and Canal Company whose character for excellence of manufacture stood so deservedly high, are strongly recommended for their qualities to purchasers. Terms at sale.

To Railroad Contractors.

ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C.; May 18th, 1856.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock M., on WEDNESDAY, July 16th, 1856, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad, commencing at Knoxville. There are several heavy jobs of masonry, among them the masonry for the Bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 5th of July.

WALTER GWYNNE,
May 29th, 1856. 6123 Chief Eng'r Blue Ridge R. R.

TO CONTRACTORS.**PETTES' ROCK DRILL**

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.

4122

N. DAVIDSON, 9 Spruce st., N. Y.

Railroad Iron.

1,500 TONS New York and Erie pattern 67 lbs. per linear yard, on the way from English shipping port to New York. For sale by

THEODORE DEHON,
10 Wall st., near Broadway.
NEW YORK.

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They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
 No. 62 Michigan Av., CHICAGO, Ill.

Hufty's Engineers, Architects and Draftsmen's STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER,
 Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationary and Blank Books.

All goods packed with care, and forwarded to any part of the United States.

JOSEPH HUFTY,

Successor to H. L. Lipman,
 159 Cheesnut St., Philadelphia.

May 15, 1864

Railroad Iron Wanted.

CONTRACTOR'S OFFICE MINERAL POINT RAILROAD.
 Hanover Building, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

317

A. WILKINS.

Brass Cocks.

MCNAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,
 ROOM 16.

TO TEN

MUNICIPAL AUTHORITIES OF THE SEVERAL
 CITIES OF THE UNITED STATES,

AND TO

RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, **GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.**

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
 and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, Washington, D. C.

CHARLES MONROE, Esq., Baltimore, Md.

DAVID BURBANK, Esq., Detroit, Mich.

JOHN J. SPEED, Esq., Mayor of Boston, Mass.

HON. J. V. O. SMITH, Mayor of Boston, Mass.

L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.

HON. H. Y. FRENCH, Associate Judge, Superior Court, Essex, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

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SATURDAY, JUNE 21, 1856.

[WHOLE No. 1,053, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, June 21, 1856.

Consolidation of the Chicago, Burlington and Quincy, and the Central Military Tract Railroads.

A movement for the accomplishment of this object has been for some time on foot; and circulars have been addressed to the stockholders in both companies, calling for a general meeting to be held in Chicago, on the 9th of July next, for the purpose of deciding upon the terms of consolidation. At a meeting of the Directors of the Chicago, Burlington and Quincy railroad company, on the 5th inst., the following basis for a union of the two roads, to be submitted to their respective stockholders, was adopted by a majority—

The name of the consolidated company shall be the "Chicago, Burlington and Quincy railroad company."

Each stockholder in the Central Military Tract railroad company, in exchange for every share of stock he may hold in that company, shall be entitled to one share of stock in the consolidated company.

Each stockholder in this company shall be entitled to one share of stock in the consolidated company for every share held in this, and in addition thereto shall be entitled to one share in the consolidated company for every two shares held in this company; upon payment therefor within one year, of sixty dollars, with interest thereon at the rate of ten per cent. per annum, and in case any stockholder shall be entitled to a fractional or

half share, he may receive a whole share, on payment of eighty dollars therefor and interest as above, or if he elect not to receive said share he shall be paid twenty dollars for said fraction.

A majority of the stockholders in interest in each of the consolidating companies shall signify their assent to these terms of consolidation in accordance with the Statute in such case, made and provided, at or before the meeting mentioned in the resolutions hereafter.

A resolution was also adopted that the Treasurer prepare a statement of the financial condition of both companies, together with the length of road, amount of rolling stock, &c., owned by each—this circular to be directed to each stockholder, with a request that he signify his assent to or dissent from the terms specified, at the July meeting.

The following is the statement, at 30th April last, of the

CHICAGO, BURLINGTON & QUINCY R. R.

Debit.

Capital stock, 16,391 shares	\$1,639,100
Fifth and final dividend by old Co.	12
Dividend of July 1, 1854	69
" Dec. 31, " frac. stock	162
" June 30, 1855	215
" Dec. 31, "	180
Inconvertible 1st mort., 7 per ct. bonds payable July 1, 1867	640,000
Inconvertible 2d mort., 7 per ct. bonds, payable Oct. 1, 1869	600,000
Bills and acc'ts payable	444,738
Balance income acc't	71,003
	\$3,395,469

Credit.

Construction acc't	\$2,278,595
Equipment	606,027
Bills and acc'ts receivable	180,313
Des Moines Co. bonds	3,000
Peoria and Oquawka R. R. Co. bonds	25,000
P. & O. Co. acc't and interest	177,719
Sinking fund	27,000
Balance in Treasury	97,813
	\$3,395,469

The length of the road (main track) is fifty-eight miles.

The rolling stock consists of 27 locomotives, 20 first class passenger cars, 3 second class, 2 baggage, 65 platform freight, and 322 house cars.—The cars are all eight wheeled.

CENTRAL MILITARY TRACT R. R.

The annexed is a statement of the condition of this company, at date of April 30th, 1856:

Debit.

Capital stock, 12,625 shares	\$1,262,500
Installments on part paid stock	569
Forfeited stock	65
Inconvertible 1st mort., 7 per ct. bonds, payable July 1, 1864	800,000
Convertible 2d mort., 8 per cent. bonds, payable March 1, 1868	700,000
Convertible 8 per cent. bonds, dated April 1, 1854, payable April 1, 1868	24,000
Convertible 8 per cent. bonds, dated March, 1856, payable March 1, 1876	330,000
Bills and acc'ts payable	279,050
Unpaid dividends	160
Balance income acc't	55,254
	\$3,451,538

Credit.

Construction acc't	\$2,603,967
Equipment acc't	816,274
Des Moines Co. bonds	3,000
Peoria and Oquawka R. R. Co. bonds	25,000
P. & O. Co. acc't and interest	164,307
Bills and acc'ts receivable	101,111
Deposits in New York and Boston	237,877
	\$3,451,538

The length of the road (main track) is eighty miles.

The rolling stock consists of 19 locomotives, 6 first class passenger cars, 2 baggage, 50 coal, 51 platform freight, and 116 house cars.

STATEMENT of the earnings from freight, passengers, miscellaneous and interest, and the operating expenses, taxes, and (one year's) interest on bonds of the Chicago, Burlington and Quincy, and the Central Military Tract railroad companies, for one year, commencing May 1, 1855, and ending April 30, 1856.

	C. B. & Q.	C. M. T. R. R. Co.
Earnings from May 1, to Dec. 1, '55	\$612,270	\$327,462
Earnings from Jan. 1, to April 30, 1856	208,314	143,936
Ag. earnings for one year	\$820,584	\$471,399
Operating exp's for 8 mos. as above	246,826	184,293
Interest accrued for 8 months as above	57,866	75,946
Interest accrued for 4 months as above	28,933	42,373
Operating expenses for 4 mos. as above	116,581	117,518
	\$450,208	\$370,131
Net earnings for one year	370,376	101,267

The number of shares of stock existing June 30, 1855....	13,975	9,724
Do. Dec 31, 1855....	14,753	9,724
Do. Apr. 30, 1856....	16,391	12,625
The av'ge number of shares for one year is.....	15,175	10,691

The interest on bonds in existence at date becomes due and payable as follows each year:

C. B. & Q., Jan'y 1.....	\$22,400
April 1.....	21,000
July 1.....	22,400
Oct. 1.....	21,000—\$86,800
Gen. Mil. Tr. Jan. 1.....	28,000
March 1.....	41,200
April 1.....	960
July 1.....	28,000
Sept. 1.....	41,200
Oct. 1.....	960—\$140,320

STATEMENT of the earnings from freight, passengers, and miscellaneous, and the operating expenses and interest on bonds by the Chicago, Burlington and Quincy railroad company, for the year ending December 31, 1851, being the first year of its operation on dividend acct.

Earnings.....	\$302,583
Operating expenses.....	\$152,105
Int. accrued on bonds.....	50,697
	202,803

Net earnings for the year.....	\$99,779
The number of shares of stock existing June 30, 1851, was.....	6,789
Do. Dec. 31, 1854, was.....	12,087

The managers of the Chicago, Burlington and Quincy road, in their circular to the stockholders, say there is no reason to suppose that the increase of business on the C. M. T. road will not be equal to that on the C., B. and Q. line, while the former being longer, its *through* business will tend to nearly equalize the receipts of both. On the other hand, by a recent agreement made with the Galena company, the C., B. and Q. company will have the use of that part of the road between Chicago and the Junction at a lower rate than formerly.—A large expenditure, however, for the purchase of depot grounds and accommodations, will be necessary at Chicago; as the Galena company can no longer afford the facilities needed at that point.—It is believed that a consolidation, on the proposed basis, will be productive of advantage to both interests. The Central Military Tract company is financially in an easy condition, having no floating debt; while the other company has a considerable one, and a large outlay is necessary for the Chicago depot, and re-laying several miles of road with new rails. The depot grounds already purchased have cost \$140,000. The machine and repair shops will cost nearly a like amount. The purchase and re-laying of rails will cost at least \$50,000. The floating debt will add \$133,000 to these figures; in all, nearly \$500,000. To raise the means necessary for these purposes will involve a sacrifice and increase the cost of the road, unless some such plan is adopted. The proposed issue of stock upon consolidation will secure the funds necessary. The time allowed for payment is liberal; while many will doubtless prefer paying up at once. Before the year is out, no doubt is entertained that the stock will bear a considerable premium.

The address concludes thus:

"The general advantages to result from consolidation need not be alluded to. They must be apparent to all. The difficulty in this case arises from the fact that the Military Tract road is one year newer than the Chicago, Burlington and Quincy. It is not fully proved, but it is clearly

evident already, that it is to be a successful road. Its first year's business surpassed that of the C., B. and Q. road, and with the extensions west to Burlington and south to Quincy, there can be no reasonable question that its business is to be a very large one. Still, as its business contributes to swell that of the Chicago, Burlington and Quincy, that stock may reasonably be supposed to be the most valuable, though that road has cost, nominally, the most money. It is for this reason that a premium or a bonus of 20 per cent. is to be paid in the consolidation to the holders of stock in that company, and which is deemed by a majority of both Boards, under the circumstances, just and fair.

The difficulty has been, in this case, not so much to ascertain a basis of consolidation which should be advantageous to both, but to determine upon one which should benefit both exactly alike. That both will be benefitted, a majority of the Directors have no doubt, and as they are strongly of the opinion that the interests of both companies require consolidation, they are also of opinion that the company whose business is not fully developed, is, in the consolidation, at least entitled to as favorable a consideration as that whose business is fully known and proved."

Cincinnati, Peru and Chicago Railroad.

We are informed that the affairs of this company are in a very flourishing condition. All the iron is secured for that portion of the road lying between Laporte and Plymouth, the grading is finished, and the road will be completed to the latter point in a short time. Some 15 or 16 miles of the road are already in operation.

Finances of Ohio.

Funded debt to foreign creditors:

Five per cents of 1856.....	\$85,350
Do. do. 1865.....	1,025,000
Six do. 1856.....	2,423,360
Six do. 1860.....	6,413,325
Six do. 1870.....	2,183,632
Six do. 1875.....	1,600,000

Total.....	\$13,730,567
Domestic creditors.....	277,728
School and Trust Funds.....	2,265,181

Total debt of State Jan'y 1, 1856.....	\$16,273,426
State Revenue for 1855.....	\$3,631,173
Balance from 1854.....	584,681

Total.....	\$4,215,854
Interest on Public Debt.....	\$980,249
Reduction of Principal.....	466,681
Common Schools.....	1,217,119
State Government.....	466,972
Public Works.....	290,168
Miscellaneous.....	91,295
	3,512,484

Balance to budget of 1856.....\$703,370

The sources of State Revenue as above, are:

Taxation direct.....	\$2,871,255
Canal tolls and water rents.....	444,827
School lands.....	127,061
Penitentiary.....	64,249
Miscellaneous.....	123,781

Total.....\$3,631,173

Ohio Sinking Fund, 1855.

Taxation (part of above).....	\$1,014,749
Balance from 1854.....	566,783
School lands (as above).....	127,061
Canal tolls (part of above).....	200,000
Miscellaneous.....	92,629

Total Income.....	\$2,001,222
Interest debt.....	\$980,249
Principal redeemed.....	466,681
Miscellaneous.....	16,793
	1,463,723

Balance in hand Jan'y 1, 1856.....\$537,499

The Triton and the Minnow.

(From the London Quarterly Review.)

The voyager up and down the Thames has noticed with astonishment, during the last eighteen months, the slow growth of a huge structure on the southern extremity of the Isle of Dogs. At first a few enormous poles alone cut the sky-line, and arrested his attention; then vast plates of iron, that seemed big enough to form shields for the gods, reared themselves edgewise, at great distances apart; and as months elapsed, a wall of metal slowly arose between him and the horizon. The sooty engineer, as he leans over the bulwark of Bridegroom No. 2, when questioned respecting it, tells you it is "the Big Ship"—he knows no more. If, moved by curiosity, the voyager hails a boat and rows ashore, the sturdy oarsman can only tell you it is "the Big Ship." If you question Jack, whom you see coming along the road laden with a green parrot and a bundle of yams, as to what they are doing here, he will eye the huge mass for a moment, and reply with a vacant negative. Even those who are informed of its purpose doubt and argue respecting it. "Look 'ee here," said an old salt to us, pointing with his pipe to the stem and stern of the ship, which lie parallel with the river, "here's her stern and here's her stem, and here's the water; and how they are going to launch her I can't figure noways."

The great ship, or "Great Eastern," as she is sometimes called, projected by the eminent engineer Mr. Brunel, the father of Transatlantic Steam Navigation, although building in the midst of the largest collection of sea-faring people in the world, stands a wonder and a puzzle to them all. And indeed, the moment you are inside the works of Scott, Russell & Co., at Millwall, you feel the reason of the strange eye with which the maritime population view the monster which is slowly growing up, and overshadowing not only the shipyard itself, but the portion of the new town immediately in its neighborhood. Where are the merry ship-carpenters, caulking away with monotonous, dead-sounding blows? Where are the artificers chipping with their adzes, rearing up one after another huge ribs, and laying the massive keel? Where are the bright augers gleaming in the sun, as sturdy arms work out the bolt-holes? None of these old accustomed sights and sounds of ship-building are to be found; but in their place we see the arm of steam, mightier than that of Thor, welding some iron shaft big as "the mast of some huge admiral," or punching inch-plates of iron as quickly and as noiselessly as a lady punches card-board for a fancy ornament.—Steel, urged by the same potent master, is seen showing its mastery over iron as the huge lathes revolve, or the planing-machine pursues steadily its resistless course, whilst, in place of the shavings of the carpenter, long ringlets of dull grey metal cumber the ground. The ship-carpenter is transmuted into a brawny smith, and the civil engineer takes the place of the maritime architect. A closer inspection of this Leviathan vessel shows us how completely the employment of a new material has necessitated new ideas with respect to construction. She runs along, or rather will—for she is not yet quite up in frame—some seven hundred feet; those portions of her yet unfinished at stem and stern show her partitions or bulkheads running nearly sixty feet in height, and standing just sixty feet apart. If we examine the outer walls of these huge partitions, we see at once that the ship has no ribs springing from a keel or back bone—none of the ordinary framework by which her bulging sides are maintained in their places; but, on closer inspection, it is found that she has a system of ribs or webs, longitudinal instead of transverse, running from stem to stern of the ship up to eight feet above her deep water-line; and rivetted on each side of these thirty-two webs or ribs, which are again subdivided at convenient lengths, are plates of iron $\frac{3}{4}$ of an inch in thickness, forming a double skin to the ship, or a dermis and epidermis. Thus her framework forms a system of cells, which, like the Menai tube, combines the minimum of weight with the maximum

of strength. A glance at the transverse midship section will show at once this portion of her structure. Hitherto it has been the practice to build iron ships in exactly the same manner as regards framework as wooden ones; that is, the strength of the sides has been made gradually to lighten towards the deck, which being of wood, can offer but slight resisting power. Thus iron ships of the old method of construction are peculiarly liable to break their backs upon the application of force, either to their two ends or to the centre of their keels, just, in short, as a tube would be easily broken, one side of which was made much stronger than the other. The "Birkenhead" iron troopship was a melancholy instance of this unscientific method of construction; for it will be remembered that when she struck, her wooden deck doubled up and snapped in two, as a stick would snap across the knee, whilst stem and stern reared for a moment high in the air, and then went down like stones into the deep.

As you stand watching the process of building up this double skin, or framework of the ship, the question immediately strikes the mind, how are these unyielding plates of inch iron made to accommodate themselves to her lines, which are seen to run as finely fore and aft as those of a Thames water-boat? How are the innumerable curves which die away into each other, to be produced by any aggregation of rectilinear pieces of flat boiler plate? In ordinary wooden ships, the planking, by its elasticity, allows itself to be modelled to the ribs; but here there are no ribs, in the true sense of the word, and the form of the vessel must depend upon the inclination given to each separate piece of iron before the fastening process is commenced. And such in fact is the case. Every individual plate, before being fixed in its proper position, was the subject of a separate study to the engineer. Of the ten thousand, or thereabout, that compose the framework of the ship, only a few situated in the midship section are alike either in size or in curve. For each a model in wood, or "template," as it is technically called, had originally to be made, and by these patterns the plates were cut into their required shapes by the huge steam shears, in exactly the same manner as a tailor cuts out the various portions of a garment. The "list," or inclination to be given to each plate, is the next process to be gone through; and this is produced by passing it through a system of rollers, which can be so reversed in their action, and so adjusted as to give it any required curve. The "template," studded with holes around its margin, is then fitted to it, and a boy with a stick dipped in white lead marks through them the places upon the iron where the rivet-holes are to be punched; when this last process is completed, the plate is lettered with two or three separate letters, indicating the precise place it has to take in the ship. Thus the hull is first carefully thought out in detail, and is then regularly and mechanically put together, in much the same way as a tessellated pavement.

The process of fastening the plates affords another curious contrast to the old method of bolting employed by the ship-carpenters. The holes in the plates to be held together being brought in exact opposition, bolts at a white heat are one by one introduced, and firmly revetted whilst in that condition by a group of three men, one the upholder, who holds the bolt in its position by placing a hammer against its head on the inside of the ship, whilst two sturdy Vulcans, with alternate blows, produce the rivet-head on the other. The bolts contract in cooling, and draw the plates together with the force of a vice, and hold them so for ever afterwards. The rapidity with which this process is performed strikes the spectator with astonishment. A set of three men and a boy to shovel the hot bolts out of the furnace, will in the course of a day close up four hundred rivets; and speed in the process is requisite when we remember that before the ship can swim three millions of them must be made secure.

If we clamber up the ladders which lead to her deck, some sixty feet above the ground, we per-

ceive that her interior presents fully as strange a contrast to other vessels as the construction of her hull does. Ten perfectly water-tight bulkheads, placed 60 feet apart, having no openings whatever lower than the second deck, divide the ship transversely; whilst two longitudinal walls of iron, 36 feet apart, traverse 350 feet of the length of the ship. Thus the interior is divided, like the sides, into a system of cells or boxes. Besides these main divisions there are a great number of sub-compartments beneath the lowest deck, devoted to the boiler-rooms, engine-rooms, coal, and cargo, &c.; whilst some 40 or 50 feet of her stem and stern are rendered almost as rigid as so much solid iron by being divided by iron decks from bulwark to keel. Her upper deck is double, and is also composed of a system of cells formed by plates and angle irons. By this multiplication of rectilinear compartments, the ship is made almost as strong as if she were of solid iron, she is rendered as light and as indestructible, comparatively speaking, as a piece of bamboo. There is a separate principle of life in every distinct portion, and she could not well be destroyed even if broken into two or three pieces, since the fragments, like those of a divided worm, would be able to sustain an independent existence.

A better idea, perhaps, of the interior of the ship can be gained at the present moment than when she has progressed further towards completion. As you traverse her mighty deck, flush from stem to stern, the great compartments made by the transverse and longitudinal bulkheads, or parti-walls of iron, appear in the shape of a series of parallelograms, 60 feet in length by 36 in width; numerous doors in the walls of these yawning openings at once reveal that it is here that the hotels of the steamship will be located. If we were to take the row of houses belonging to Mivart's and drop them down one gulf, take "Far-rance's" and drop it down the second, take Morley's at Charing Cross and fit it into a third, and adjust the Great Western Hotel at Paddington and the Great Northern at King's Cross into apertures four and five, we should get some faint idea of the nature of the accommodation the Great Eastern will afford. We speak of dropping hotels down these holes, because these separate compartments will be as distinct from each other as so many different houses; each will have its splendid saloons, upper and lower, of 60 feet in length; its bed-rooms or cabins, its kitchen and its bar, and the passengers will no more be able to walk from one to the other than the inhabitants of one house in Westbourne Terrace could communicate through the parti-walls with their next door neighbors. The only process by which visiting can be carried on will be by means of the upper deck or main thoroughfare of the ship. Nor are we using figures of speech when we compare the space which is contained in the new ship to the united accommodation afforded by several of the largest hotels in London. She is destined to carry 800 first-class, 2,000 second class, and 1,200 third class passengers, independently of the ship's complement, making a total of 4,000 guests. A reference to the longitudinal and transverse sections will explain her internal economy more readily than words. The series of saloons, together with the sleeping apartments, extending over 350 feet, are located in the middle instead of "aft," according to the usual arrangement. The advantage of this disposition of the hotel department must be evident to all those who have been to sea and know the advantage of a snug berth as near as possible to the centre of the ship, where its transverse and longitudinal axes meet, and where, of course, there is no motion at all. It will be observed that the passengers are placed immediately above the boilers and engines; but the latter are completely shut off from the living freight by a strongly arched roof of iron, above which, and below the lowest iron deck, the coals will be stowed, and will prevent all sound and vibration from penetrating to the inhabitants in the upper stories. As the engines and boiler rooms are separated from each other by bulkheads, in exactly the same

manner, as the saloons, a peculiar arrangement has been made to connect their machinery without interfering with their water-tight character. Two tunnels, of a sufficient size to give free passage to the engineers, are constructed fore and aft in the centre of the coal bunkers, through all the great iron parti-walls. By this arrangement the steam and water pipes which give life and motion to the ship will be enabled to traverse her great divisions, just as the aorta traverses in its sheath the human diaphragm.

Let us return, however, for a few moments to the deck, in order to give the reader a clear idea of the magnitude of the structure under our feet. The exact dimensions "over all" are 692 feet. There are few persons who will thoroughly comprehend the capacity of these figures. Neither Grosvenor nor Belgrave square could take the Great Eastern in; Berkeley square could barely admit her in its long dimension, and when rigged, not at all, for her mizzen boom would project some little way up Davies street, whilst her bowsprit, if she had one, would hang a long way over the Marquis of Lansdowne's garden. In short, she is the eighth of a mile in length, and her passengers will never be able to complain of being "cooped up," as four turns up and down her deck will afford them a mile's walk. Her width is equally astonishing. From side to side of her hull, she measures 83 feet, the width of Pall Mall; but across the paddle-boxes her breadth is 114 ft., that is, she could just steam up Portland place, scraping with her paddles the houses on either side. With the exception of the sky-lights and openings for ventilating the lower saloons, her deck is flush for and aft. Mr. Brunel has, we think, wisely decided not to trust so precious a human freight and so vast an amount of valuable cargo to a single propelling power, but has supplied her with three—the screw, the paddle, and the sail. Her paddle-wheels, 56 ft. in diameter, or considerably larger than the circus at Ashley's, will be propelled by four engines, the cylinders of which are 6 feet 2 inches in diameter, and the stroke 14 feet. The motive power of these will be generated by four boilers. Enormous as are these engines, having a nominal power of 1,000 horses, and standing nearly 50 feet high, they will be far inferior to those devoted to the screw. These, the largest ever constructed for marine purposes, will be supplied with steam by six boilers, working a force of 1,600 horses—the relative strength of the combined engines being equal to 3,600 horses. The speed of the ship under steam is expected to average 20 miles an hour.

We all know, even on a calm day, what a wind meets the face looking out of a railway train going at that pace, and consequently it can be understood that sails, except on ordinary occasions, would act rather as an impediment than as an assistance to the ship's progress. It is not probable, therefore, that they will be much resorted to except for the purpose of steadying or of helping to steer her. In case, however, of a strong wind arising, going more than twenty-five miles an hour in the direction of her course, she is provided with seven masts, two of which are square-rigged, and the whole spreading 6,500 yards of canvas.—It will be observed that she carries no bowsprit, and has no sprit sail. We do not know the reason of this departure from the ordinary rig, unless it be to avoid her plunging too deeply in the sea.—Her bow is also without a figure-head; and this peculiarity, together with her simple rig, gives her the appearance of a child's toy-boat. If beauty is nothing more than fitness, this form of bow is undoubtedly the most beautiful, and the Americans, who have long adopted it in their trans-Atlantic steamers, are right; but to ordinary eyes it looks sadly inferior to the old figure-head projecting out before the ship, as if eager to lead her onward over the wave. Fewer hands will be required to navigate the "Great Eastern" than her size would seem to demand. Her whole crew will not exceed 400 men—a third of the number composing the crew of a three-decker. The difference is made up by what we may term *steam sailors*.—

There will be four auxiliary engines appointed to do the heavy work of the ship, such as heaving the anchors, pumping, and hoisting the sails; for the gigantic arm of steam will be imperatively called for to deal with the vast masses of iron and canvas required to move and to hold the ship.—These engines will, in all probability, communicate their power to a shaft running through an aperture in the upper iron deck, by which arrangement motive power in any required quantity will be laid on from stem to stern of the ship.

It is obvious that some special means must be adopted to direct this vast mass of moving iron as she flies on her course, threatening by her speed destruction to herself and whatever may cross her path in the great highway of nations. The usual contrivances will not apply. No speaking-trumpets, for instance, could make the captain on the bridge heard either by the helmsman, or the look-out at the bow, more than three hundred feet away. Even the engineer, sixty feet beneath him, would be beyond the reach of his voice. As in the railway, we have to deal with distances which necessitate the use of a telegraph, and the "Great Eastern," in this respect, will be treated just like a railway. On ordinary occasions a semaphore will, in the daytime, give the word to the helmsman, whilst at night and in foggy weather, he will be signalled how to steer by a system of colored lights. The electric telegraph will also be employed to communicate the captain's orders to him and to the engineer below.

Thus the nervous system, if we may so term it, of the vessel will be provided for. Starting from the bridge, or post of the commander, which leads directly from his apartments, located between the paddle-boxes, the fine filaments will be extended to the helmsman at the stern, and to the look-out at the bow, whilst a third thread will communicate with the engineer. By this means the captain, or brain of the ship, will be able in a moment to put in motion, to drive at full speed, to reverse the action, or to stop the iron limbs, which toil day and night far out of sight in the deep hold, or as instantly to direct the helm so as to alter the vessel's course.

In most iron vessels great precautions are taken to avoid the incorrectness to which the needle placed on deck is liable, on account of the proximity of attractive masses of metal. The commonest expedient is to have placed high up in the mizen-mast, beyond the influence of the iron sides of the ship, what is called a standard compass, and which may be said to realize Dibdin's 'sweet little cherub who sits up aloft, and takes care of the life of poor Jack.' In the "Great Eastern," a special stage or frame-work will be erected for this dainty Ariel, at least forty feet in height, and the helmsman will probably either read off the points from above as they appear through a transparent card illuminated like a clock-front, or the shadow of the trembling needle will be projected down a long pipe upon a card below, so as to avoid the necessity of the helmsman looking up, and to obviate the difficulty which would occur in foggy weather. The experiments with respect to this important adjunct to the ship are not yet concluded, however, and we must be considered to speak speculatively as to the plan which is likely to be adopted.

The anchors of this mighty steamer would, with their accessories, alone form the cargo of a good sized ship. The ten anchors with which she will be fitted, together with their stocks, will weigh fifty-five tons. If we add to this ninety-eight tons for her eight hundred fathoms of chain cable, and one hundred tons for her capstans and warps, we shall have a total weight of two hundred and fifty-three tons of material dedicated to the sole purpose of making fast the ship.

It was prophesied that Mr. Brunel's first ship, the "Great Western," would be doubled up as she rested upon the crests of the Atlantic waves, and we all know how the prophecy was fulfilled.—When it was made, indeed, we were very much in the dark as to the size of ocean waves, and it was not until the introduction of long steamers that they could be measured with any accuracy. Dr.

Scoresby, while crossing the Atlantic in one of the Guard boats, some years since, closely observed the waves, and by means of the known length of the ship, was enabled to form a pretty accurate idea of their dimensions. The old vague account of their being "mountains high" was well known before that time to be an exaggeration; but we do not think even philosophers were prepared for the statement made by this observer at a meeting, some years since, of the British Association, that they averaged no more than twenty feet in altitude, and rarely exceeded twenty-eight feet. The popular impression principally produced by marine painters that waves formed valleys thousands of yards across, down the sides of which ships slid as though they were about to be engulfed, seems to have been equally erroneous; as the maximum length of ocean waves, according to Dr. Scoresby, is six hundred feet; whilst in a moderate gale they are only three hundred, and in a fresh sea about a hundred and twenty feet in length. A moment's consideration of these facts leads to the conclusion that long ships must have a great advantage over short ones with respect to the rapidity with which they make their journey, as it is quite evident that whilst the latter have to perform their voyages by making a series of short curves—much to the impediment of their progress and to the discomfort of their inmates—the former, by ruling the waves with their commanding proportions, make shorter and smoother passages. As steamers grow larger and larger, the curse of sea-sickness must therefore gradually diminish. The "Great Eastern," from her length and the bearing which she will have upon the water, being a paddle and a screw ship, will, in all probability, neither pitch nor roll, and will therefore be most comfortable to the voyager.—Her immense stride, if we may use the term, will enable her to take three of the three hundred ft. waves of an Atlantic gale as easily as a racer would take a moderate sized brook. She will still have to encounter the six hundred feet waves of storms, and there may be those mistrusting her length and the great weight she will carry amidships, in the shape of engines and coal, who may be inclined to repeat with respect to her the prophecy which was made with respect to the "Great Western." Mr. Brunel, by the method of launching which he intends to adopt, will, however, set these misgivings at rest before she even touches the water. Although the total weight of the ship, together with her engines, which will be erected in her whilst she is still on land, cannot be less than twelve thousand tons, she will rest entirely on two points as she enters the water broadside on. No statement could give a more powerful idea of the strength of her fabric. The reasons which have induced Mr. Brunel to adopt this method of launching are given as follows in his Report:

"Launching is generally effected by building the ship on an inclined plane, which experience has determined should be at an inclination of about 1 in 12 to 1 in 15, the keel of the ship being laid at that angle, and the head consequently raised above the stern say 1-15th of the whole length of the ship. In the present case this would have involved raising the fore-part of the keel, or the forefoot, about forty feet in the air, and the fore-castle would have been nearly 100 feet from the ground, the whole vessel would have been on an average twenty-two feet higher than if built on an even keel.

"The inconvenience and cost of building at such a great height above ground may be easily imagined, but another difficulty presented itself which almost amounted to an impossibility, and which has been sensibly felt by the larger vessels hitherto launched, and will probably ere long, prevent launching longitudinally vessels of great length. The angle required for the inclined plane to ensure the vessel moving by gravity being, say 1 in 14, or even if diminished by improved construction in ways to 1 in 25, is such, that the end first immersed would become water borne, or would require a very great depth of water before the fore part of the ship would even reach the water's edge. Vessels of 450 or 500 feet in length would be difficult

to launch in the Thames, unless kept as light as possible; but our ship could not be so launched, the keel of the sternpost being required to be, as I before said, about forty feet below the level of the forefoot; some mitigation of the difficulty might be obtained by an improved construction of the ways; but the great length of ways to be carried out into the river would, under any circumstances, be a serious difficulty.

"These considerations led me to examine into the practicability of launching and lowering the vessel sideways; and I found that such a mode would be attended with every advantage, and so far as I can see, it involves no countervailing disadvantages. This plan has been accordingly determined upon, and the vessel is building parallel to the river, and in such a position as to admit of the easy construction of an inclined plane at the proper angle down to low-water mark."

"In constructing the foundation of the floor on which the ship is being built, provision is made at two points to ensure sufficient strength to bear the whole weight of the ship when completed.—At these two points, when the launching has to be effected, two cradles will be introduced, and the whole will probably be lowered down gradually to low water-mark, whence, on the ensuing tide, the vessel will be floated off. The operation may thus be performed as slow as may be found convenient; or if, upon further consideration, more rapid launching should be thought preferable, it may be adopted."

Astonishing as are all the proportions of this monster ship, of course it will not be supposed that mere size is claimed, either by the engineer or the Company to which she belongs, as any merit independently of the substantial benefits which accompany it. Her length is not her only advantage. Indeed, length in a steamer is merely a comparative term, and applies entirely to the extent of the river or ocean-path she has to traverse. The "Himalaya," for instance, would be an enormous vessel to run to Margate and back, but is only a full size one to cross the Atlantic or to navigate the Mediterranean. The "Great Eastern," again would be large for the passage to New York, but is only duly proportioned to make a voyage round the world.

It is interesting to note the progressive advance of size in steam-vessels that has taken place within the last thirty years, which the following table will render clear to the reader:—

Date.	Name and Description.	Length.	Breadth.
		ft.	ft.in.
1825	Enterprise, built expressly to go to India, coaling at intermediate stations	122	27 0
1835	Tagus for the Mediterranean.....	182	28 0
1838	Great Western, first ship built expressly for Atlantic passage.....	236	35 6
1844	Great Britain, first large screw ship, and the largest iron ship then projected	322	51 0
1853	Himalaya, iron ship for the Mediterranean.....	370	43 6
1856	Persia, iron ship.....	390	45 0
1856	Eastern steamship, iron.....	680	83 0

Thus the ocean-going steamer of 1856 is nearly six times the length of that of 1825, whilst the difference between their tonnage is still more in favor of the last built vessel. The augmentation has gone on in an increasing ratio, and if it is still to continue, we wonder over what space of water our Leviathan of 1870 will extend! As our commercial steam marine is in the hands of shrewd men of business, it can well be imagined that the reasons for this progressive advance in size are sound. Steamship builders are, in fact, only accommodating the tonnage of their vessels to the length of the voyages they have to perform, so that they may be enabled to carry their own coals over and above their due proportion of cargo. This the 'Great Western' did, and succeeded; this the various screw steamers which have run the

Australian voyage have not done, and consequently they have failed.

No one can fail to have observed that within these last two years steam, in long voyages, has apparently suffered a defeat. Clippers of all kinds, the 'Marco Polos,' 'Red Jackets,' and 'Morning Stars,' seem to have recovered their own again, and in the race round the world, sails have distanced the paddle and the screw. When the question comes to be examined, however, it is clear that it is the want of steam that has caused the failure: vessels, in short, as little fitted to make a passage of thirteen thousand miles, as the 'Sirius,' though by a lucky accident it managed to cross the Atlantic at the same time as the 'Great Western,' was to go a continuous stage of three thousand miles. They have all the expense of the new motive power without its full advantages, and, in consequence of their having to go out of their direct course to coal, they lose from twelve to twenty days on the passage. The tortoise in this instant has not fairly beaten the hare, because the latter has wilfully broken her leg.

Mr. Brunel, in constructing a ship of such large dimensions, is only doing for the long Eastern voyage what he did for the shorter Western one, namely, making her own coal bunkers the bank on which she can draw to any extent during her progress out and home, instead of employing from six to eight ships of 800 tons burthen each to carry fuel for her over half the globe, as the vessels at present running are obliged to do; a system which may be likened to the extravagance of a man who employs half-a-dozen porters to carry parcels which, by proper management, he could manage to stow in his own knapsack.

The Report of the Directors for the year 1853 puts the calculation with respect to her immense advantage, in carrying power so well, that we quote it entire:—

"In avoiding the delay of coaling on the voyage, your ships will also escape the great cost of taking coals at a foreign station. Coals obtained on the Indian and Australian route cost, on the average, including waste and deterioration, four or five times as much per ton as in this country. But your ships will take their amount of coals for the voyage from near the pit's mouth, at a rate not exceeding for the best quality, 12s. to 14s. per ton. On the voyage of existing steam vessels to Australia or India and home, the consumption amounts to from 4,000 to 6,000 tons; the cost of which would supply 20,000 tons if taken on board at some port in immediate communication with the coal field.

Each of the Company's ships will carry, besides their own coals, upwards of 5,000 tons measurement of merchandise, and will have 800 cabins for passengers of the highest class, with ample space for troops and lower class passengers. These you will not only be able to carry at rates much smaller than those by any existing steamships, but with an unprecedented amount of room, comfort, and convenience.

In thus determining the size of the ships your Directors believe that they are also obtaining the elements of a speed heretofore unknown; and if hereafter coals applicable to the purposes of steam can be supplied from the mines of Australia, the carrying capacity both for cargo and passengers will be proportionately increased. The great length of these ships will undoubtedly, according to all present experience, enable them to pass through the water at a velocity of at least fifteen knots an hour, with a smaller power in proportion to their tonnage than ordinary vessels now require to make ten knots. Speed is, in fact, another result of great size. It is believed that by this speed, combined with the absence of stoppages, the voyage between England and India, by the Cape, will be reduced to from thirty to thirty-three days, and between England and Australia to thirty-three or thirty-six days."

It may be objected that the route by way of Egypt, now that the railway is in progress and a canal is projected, will prove a too powerful competitor for the traffic round the Cape; but inde-

pendently of the inconvenience and tediousness of embarking and then re-embarking, which will be fatal to vessels containing such bulky cargoes as lumber the Australian steamers, it is asserted that the ocean path is the direct route to the focus of Australian connexion with Europe. Thus the navigable distances from Land's End to Port Philip are as follows:—

	Miles.
Via the Cape of Good Hope	11,818
" Cape Horn	12,700
" Gibraltar, Malta, Alexandria, Aden, Point de Galle, and Singapore, including transit through Egypt.....	12,034
" Panama including transit across the Isthmus	12,678

The General Association for the Australian Colonies have indeed recommended for the mail line the overland route as far as Aden, and from thence by way of Diego Garcia and King George's Sound to Melbourne, an estimated distance of 10,348 miles, which they fancy can be done in forty-four days. If the Eastern Steamship Company have not anticipated too great a speed for their vessel—and we scarcely think they have done so, considering that the 'Persia' has made fourteen and a-half knots with very far inferior powers of propulsion—this passage will be beaten by between eight and ten days without the expense and trouble of making a long land journey across the isthmus. Surely this, if it comes to pass, will go far to accomplish the Alnashar dream of the 'Times,' that the period will arrive when we shall be able to communicate with our friends at the antipodes in a month.

As far as the commercial part of the speculation goes, we are of course incapable of giving an opinion. The value of the exports to the young empire, which is springing up with such rapidity in Polynesia, is, however, so great—in 1853 the declared value being £14,506,532—that we cannot conceive there would be any lack of cargo even for our Leviathan. That she will be *par excellence* the emigrant ship, who can doubt when we find that, with all her splendid accommodation, she will be able to take passengers of the first class for £65, of the second class for £35, and of the third class for £25.

Her great proportions will indeed almost deceive her passengers into the idea that they are sojourning in some noble mansion. Let us imagine her saloons blazing at night with gas, which will be manufactured on board and supplied to every part of the ship: let us picture to ourselves her magnificent sweep of deck filled with gay promenaders, listening to the band as she sails over a summer's sea; annoyed by no smoke, for in consequence of the use of anthracite coal, none will be emitted from her five funnels; and distressed by no motion, as in consequence of her length she will stride with ease over the waves of the Pacific. We might also dwell for a moment upon the mighty larder of our Leviathan prepared for her flight of five and thirty days, without a stoppage, across the ocean desert with a whole town on board; or we might draw a comparison between her and the Ark (which by-the-by had not half her capacity) as she receives on board her flocks and herds to furnish fresh meat for the passage. But we believe we have said enough to enable those who have not visited the rising edifice, to realize the vast extent of this latest experiment in ship-building.—And as a contrast to this fair side of the medal, let us fancy her rushing through the night in full career—an arrow 27,000 tons in weight, propelled by a bow of 3,000 horse-power. Can we without a shudder contemplate the possibility of a collision with such a resistless force? a line-of-battle-ship with a thousand hands on board cleft in two as swiftly as the apple by the shaft of Tell?

Every precaution will indeed be taken to avert such a catastrophe. The electric light will be fixed at the mast-head; so that in dark nights the ship will carry a moonlight atmosphere wherever she goes. In case of any fatal injury to herself, which could not well happen, boats have been provided capable of taking off her passengers.

Thus she will have two screw-steamers of 90 feet in length as paddle-box boats, and in addition to those she will carry a large number of the new collapsing, or bellows boats, as the sailors call them. These curious structures, the invention of the Rev. E. L. Berthon, expand and shut like a Gibus hat or the head of a carriage, occupying so little room that half a dozen of them of a large size can be stowed away in the same space as would be occupied by an ordinary jolly-boat, and seem to be as easily opened as a parasol or umbrella.

Canals in Pennsylvania.

<i>Schuylkill Navigation,</i> From Philadelphia to Port Carbon..	108 miles.
<i>Delaware Division of State Canal,</i> From Bristol to Easton.....	60 "
<i>Lehigh Navigation,</i> From Easton to Stoddartsville.....	84 "
<i>Union Canal,</i> From Reading to Middletown— main line.....	77
Branch to Pine Grove.....	22
Total.....	99 "
<i>Susquehanna and Tidewater,</i> From Columbia to Havre de Grace.....	45
Deduct for portion in Maryland...	18
Pennsylvania portion.....	32 "
<i>Main Line of State Canal,</i> From Columbia to Hollidaysburg, east division.....	173
From Johnstown to Pittsburg, west division.....	108
Total.....	276 "
<i>Susquehanna Division of State Canal,</i> From Juniata Junction to Northum- berland	41 "
<i>West Branch State Canal,</i> From Northumberland to Farrands- ville.....	76 "
<i>Lower North Branch Division of State Canal,</i> From Northumberland to Pittston..	73
<i>Upper North Branch Division,</i> From Pittston to New York line.	94
Total.....	167 "
<i>Wisconsin Canal,</i> From Clark's Ferry to Millersburg...	13 "
<i>Delaware and Hudson Canal,</i> From Honesdale to Hudson river.	108
Deduct portion in New York.....	83
Pennsylvania portion.....	25 "
<i>Erie Canal,</i> From Beaver, on the Ohio, to Erie city.....	136
<i>French Creek Feeder,</i> From near Meadville to Evansb'g.	21
Total.....	157 "
<i>Pennsylvania and Ohio Cross Cut Canal,</i> From near New Castle to Akron...	78
Portion in Ohio about.....	68
Portion in Pennsylvania.....	10 "
<i>Monongahela Navigation,</i> From Pittsburg to within ten miles of Virginia line.....	84 "
<i>Bald Eagle and Spring Creek Naviga- tion,</i> From Bellefonte to West Branch of Susquehanna.....	25 "
<i>Conestoga Navigation,</i> From Lancaster to Safe Harbor.....	18 "
<i>Youghiogheny Navigation,</i> From McKeesport to West Newton..	18 "
Total.....	1293 miles.
East of the Alleghany Mountains..	921
West	372
Total.....	1293 miles.

—Phila. Railroad and Mining Register.

Railway Share List,

[Compiled from the latest returns—corrected every Wednesday on a par valuation of \$100.]

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	65	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscoog & Kennebec	55	642,343	1,478,080	2,245,020	190,605	90,797	none	14	South Western	92	1,097,498	465,500	1,824,920	253,306	141,168	8	
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600			none	14	Tennessee and Alabama	30	248,488		679,906	311,681	159,572		
Portl., Saco, & Ports'm'th	51	1,367,000	119,237	1,486,237	270,214	112,491	6	90	Tennessee and Mississ.		170,931		175,940	In progr.			
Boston, Concord, & Montreal	93	1,808,093	1,059,512	2,771,310	233,234	120,534	2		Memphis and Charleston	217	2,179,440	2,127,002	4,028,796	264,973	109,236		
Cheshire	53	2,085,925	899,313	3,179,857	385,221	143,665	2		Mobile and Ohio	153	2,688,555	1,802,921	4,536,412	199,932			
Concord	35	1,500,000	8,242	1,412,576	385,221	136,484	79		Miss. Central	188	642,534	none	628,303	In progr.			
Northern, N. H.	82	2,768,400	none	3,016,838	370,529	138,299	2 1/2	42	N.O., Opelousas & G.W.	55	2,930,425	671,645	2,657,565	In progr.			
Con't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	162,687	65,173	none		Vicksburg, Shreveport & Tex.		111,750	none	107,896	In progr.			
Rutland & Burlington	120	2,233,376	2,662,396	5,878,428	394,971		none		East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Vermont Central	117	6,000,000	3,550,236	8,463,366	820,119	214,798	none		East Tennessee and Va.	16	625,425	938,593	1,033,781	In progr.			
Boston and Lowell	27	1,830,000	825,635	2,188,596	489,764	140,377	6	60	Nash. and Chattanooga	161	2,319,330	1,497,081	8,843,694	316,090	112,177	none	
Boston and Maine	83	4,076,974	160,000	4,179,535	854,426	339,000	3 1/2		Covington & Lexington	98	1,302,804	2,235,939	3,738,758	264,973	138,694	16	
Boston and N.Y. Central	74	2,240,300	1,518,071	3,463,118	69,917	8,740	none		Lexington and Frankfort	29	430,055	158,099	637,071	93,263	48,636	6	
Boston and Providence	55	3,160,000	359,132	3,677,154	558,671	219,689	6 1/2		Lexington & Big Sandy				428,057	In progr.			
Boston and Worcester	68	4,500,000	655,425	4,865,439	1,008,004	404,481	8 1/2		Lexington and Danville		694,444	62,734	747,178	In progr.			
Cape Cod	47	681,690	280,508	997,252	119,221	65,627	3	49 1/2	Louisville and Frankfort	65	698,236	669,061	1,580,500	244,014	96,902	6	
Connecticut River	52	1,591,110	273,241	1,802,244	298,653	103,787	5 1/2		Atlantic & Gt. Western	254	896,989	77,294	613,231	In progr.			
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	647,281	305,995	43 1/2		Bellefontaine and Ind.	118	1,881,635	2,025,925	2,852,652	298,293	140,823	none	40
Fitchburg	67	3,540,000	153,700	3,765,968	681,163	225,071	70		Clev., Col., and Cincin.	141	4,447,020	122,867	4,618,722	1,290,205	732,056	9	105
North-Eastern	30	800,242	235,555	968,521	In progr.		6 1/2		Cleveland and Toledo	200	2,675,425	2,689,301	6,124,629	736,272	396,986	10	75
N. Bedford and Taunton	21	500,000	none	533,953	198,491	56,533	6 1/2		Clev. and Mahoning	103			628,533	In progr.			
Old Colony and Fall River	87	3,015,100	292,650	3,362,949	633,499	295,738	8	87 1/2	Clev. and Pittsburgh	133	2,780,744	3,043,992	6,537,466	681,877	309,518	62	
Old Colony and Mass.	77	2,232,541	1,033,670	3,209,727	1,828,726	87,313	6 1/2		Cin., Hamilton & Dayton	60	2,153,900	1,321,213	2,987,757	608,271	278,012	62	
Western, Mass.	155	5,000,000	5,966,420	10,495,905	1,869,673	633,013	7	93	Cin., Wilm. & Zanesville	131	1,120,450	1,181,265	2,326,459	In progr.			
Worcester and Nashua	46	1,141,000	205,565	1,351,271	391,790	75,760	2	43	Columbus and Xenia	55	1,484,560	149,000	1,451,732	356,366	187,518	10	86 1/2
Worcester and Worcester	43	1,510,020	335,461	1,806,696	314,430	138,057	73		Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.			
Providence and N. Haven	72	2,356,000	939,000	3,313,932	730,012	362,799	10	21 1/2	Dayton and Michigan	140	1,076,002	398,011	1,185,826	In progr.			
Hartford and N. Haven	123	1,845,610	2,090,124	4,060,869	268,685	119,611	none		Dayton and Western	35	310,000	500,000	733,769	In progr.			20
Hartford, Prov. and Fishkill	110	2,000,000	474,177	2,429,066	330,792	18,351	none		Eaton and Hamilton	42	454,690	904,989	1,155,135	171,929	65,000	23	
Housatonic	117	1,031,800	573,995	1,577,167	338,266	none	4		Little Miami	65	2,063,921	1,171,785	3,648,172	681,562	336,708	90 1/2	
Narragansett	62	3,000,000	2,376,808	5,376,808	884,306	338,577	26		Mad River and L. Erie	205	2,461,650	2,572,992	4,446,661	In progr.			15
N. York and N. Haven	50	738,258	735,165	1,450,318	88,007	30,315	none		Central Ohio	138	1,620,927	3,485,076	4,283,443	Recently opened.	none	12 1/2	
N. Haven and N. London	66	509,200	1,073,673	1,584,383	124,044	66,381	30		Ohio and Penn.	187	2,451,700	3,219,000	6,670,700	1,111,628	602,117	9	12 1/2
N. London, W. & Palmer	66	2,122,300	873,489	2,997,163	304,236	88,458	2 1/2		Pittsburg, Mayview & Cin.	50	371,350	31,000	390,933	In progr.			
Norwich and Worcester	32	439,005	1,625,098	1,840,695	117,710	9,904	none		Sandys, Manass. & Newk.	127	1,850,000	2,206,387	3,562,357	323,958	164,479	none	
Albany Northern	35	643,330	317,859	974,323	In progr.		none		Scioto & Hocking Valley	135	403,976	509,080	888,868	In progr.			
Black River and Utica	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none		Spring, Mt. Vernon & P.	113	1,000,000	960,000	In progr.				
Buffalo, Conn. and N. Y.	92	798,439	2,557,849	3,401,868	288,392	31,596	none		Tol. Wabash & St. Louis	242	2,500,000	4,530,000	In progr.				
Buffalo and N. Y. City	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10		Cin., Log. and Chicago	255	4,196,697	1,006,126	2,090,433	In progr.			6
Buffalo and St. Line	47	434,111	922,393	1,275,796	174,089	69,506	none		Evansville & Crawfordsv.	109	706,945	1,177,598	1,844,541	127,400	64,552	7	58
Canadaigua and Elmira	98	1,315,000	2,279,854	3,495,832	135,433	48,649	none	32 1/2	Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	58
Canadaigua & Niagara Falls	35	687,000	500,689	1,187,652	135,433	48,649	none	26	Indiana Central	60	611,400	1,261,179	1,907,911	550,176	134,375	50	
Cayuga & Susquehanna	144	3,785,466	9,250,362	12,737,898	1,812,087	603,946	none	32 1/2	Ind., Clev. & Pittsburgh	83	834,157	1,011,971	1,671,544	In progr.			
Hudson River	95	1,755,148	688,940	2,555,986	301,793	116,462	none	26	Jeffersonville	66	1,014,262	694,000	206,544	94,318	none		
New England	534	24,154,860	14,462,742	25,528,913	6,663,581	3,162,126	8	91 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	296,148	112,880	none	
New York Central	464	10,023,955	25,126,669	33,439,431	6,488,993	2,627,118	6 1/2	54 1/2	New Albany and Salem	268	2,835,121	6,281,848	6,643,189	645,827	371,402	none	
New York and Erie	133	5,717,100	4,060,769	6,758,203	1,035,677	234,120	none	10 1/2	Peru and Indianapolis	73		888,314	150,000	90,000	none	18	
New York and Harlem	118	1,633,022	4,406,874	5,470,714	520,153	135,754	none		Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	
Northern, N. Y.	35	399,000	216,681	723,683	126,540	59,992	3 1/2		Chicago and Rock Island	182	3,141,500	2,387,155	6,214,162	In progr.			91 1/2
Oswego and Syracuse	29	467,200	204,189	749,683	In progr.		none		Chicago and St. Louis	220			1,077,312	In progr.			
Pottsdam and Watertown	25	610,000	140,000	896,423	241,149	82,600	7		Chicago, Burl. and Quincy	139	1,475,300	1,811,557	2,761,429	722,580	379,821	20	
Rensselaer & Saratoga	48	500,000	395,600		71,909	21,089	none		Chic., St. Paul & F'd du Lac	178	2,800,000	1,325,000	3,625,000	In progr.			
Saratoga and Whitehall	80	768,360	1,578,904	2,272,777	159,484	22,503	none		Galena and Chicago	298	4,334,800	1,189,304	5,866,263	1,506,710	942,231	17	110 1/2
Saratoga & Binghamton	27	487,830	737,079	1,109,822	166,363	55,184	3 1/2		Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	627,952	99	
Troy and Boston	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2		Peoria and Quawwaka	93	569,898	818,454	1,388,342	In progr.			
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,834	12	125	Ohio & Miss. (Wat.Div.)	147	1,780,296	3,292,403	4,870,586	Recently opened.			
Belvidere Delaware	94	3,000,000	11,407,200	8,636,523	107,127	961,941	12		Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.			
Camden and Amboy	60	369,320	1,522,131	1,729,642	122,417	50,080	none		Detroit and Milwaukee	185	838,000	1,128,994	1,966,969	In progr.			
Camden and Atlantic	30	3,482,850	690,000	4,310,011	801,514	500,747	10	122	Mich. Central	282	6,032,444	5,996,013	10,668,155	2,215,283	879,656	10	96 1/2
New Jersey Central	63	2,000,000	2,266,176	3,683,149	393,728	171,603	none		Mich. South'n & N. Ind.	475	6,925,900	6,319,224	11,645,208	2,410,000	875,000	10	96 1/2
Camden and Essex	53	1,157,805	375,000	1,636,550	225,993	102,474	6		Green Bay, Mil. & Ch.	153	764,076	442,726	1,193,768	In progr.			
Allegheny Valley	44	1,637,867	342,564	1,988,317	Recently opened.		none		Milwaukee and Miss.	100	1,826,428	2,467,889	3,578,757	691,843	417,443	17	83 1/2
Cataw. W. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	152,450	6 1/2		Milwaukee & Watertown	72	354,861	132,000	514,238	In progr.			
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,381	66,994	15		Milwaukee and Horicon	15	564,200		854,109	In progr.			
Del. Lack. & Western	100	3,051,622	3,884,702	6,022,667	628,911	269,265	6		Milwaukee & La Crosse	51	1,351,832	532,131	1,883,963	In progr.			
Erie and North East	20	600,000	150,000	750,000													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	97 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	79
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1866		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1868	83	85
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1867	7	Jan'y, July	"	1868	62 1/2	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1868	85	
Cleveland, Fairview, and Ashtabula	1,670,000	Do. convertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	86	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	72	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	66	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90 1/2	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	94 1/2	96
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88 1/2	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	91	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. conv.	7	April, October	"	1873	80	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	62 1/2	
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1866	75	
Little Miami	1,500,000	Do. conv.	6 1/2	May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	99 1/2	100 1/2
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96 1/2	
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	97	
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88 1/2	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96	96 1/2
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	85	
Seloto and Hooking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	
Terre Haute and Indianapolis	800,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1867-77	77	78 1/2
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	73	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83 1/2	83 1/2
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	88	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	97	98
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106 1/2	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	97 1/2	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94 1/2	95 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	90 1/2	91
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	85	85 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	91	92
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67 1/2	67 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87	87 1/2
Do. (Free Land)	3,000,000	Mfge 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1860	92 1/2	93
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	93	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	75	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91 1/2	93
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	93
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85 1/2	86
New York Central	8,287,000	No mortgage, do.	7	May, Novemb.	"	1863	87 1/2	87 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	103	103 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	101	103
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	101	103
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	92	
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92	
Do. do. 1849	8,469,000	Do. inconvertible	6	April, October	"	1870	84 1/2	85

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	Divers	87
Do. 5 do. 1858-60	May,	94 1/2	96	New Orleans, 6 per ct. ep. R.R. X	Do.	Do.	75
Do. 5 do. 1870-75	August,	92	95	N. Orleans, 6 per ct. ep. municip.	X	Jan'y, July	81
Do. 5 do. 1880	November,	94	95 1/2	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	90
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	97 1/2	97 1/2	Pittsburgh, 6 per ct. coup.	X	Divers	72 1/2
Allegheny, 6 per ct. coup.	Jan'y, July	97	98	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 6 per ct. coup.	April, October	98	99	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	Do.	78
Clev'rd, 7 per ct. ep. W.W. 1879 X	Do. do.	101 1/2	101 1/2	Do. do. Municipal X	Do.	Do.	79 1/2
Cincinnati, 6 per ct. coup.	X	Divers	89	Sacramento, 10 p. ct. ep. 1862-74 X	Do.	Do.	76
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	90	90 1/2	S.F.isco, 7 p. ep. 1865, pay. N.Y. X	May, Novemb.	Do.	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. ep. 1871 X	Do.	Do.	96
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August,	100	102 1/2	Do. 10 do. pay. N.Y. X	Jan'y, July	Do.	104
Dubuque, 8 per ct. ep. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	57 1/2	59
Jersey City, 6 p. ct. ep. W.W. 1877 X	Jan'y, July	94	97	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. ep. 1880-83 X	Divers	79 1/2	79 1/2	Do. 6 p. ct. ep. Mun. 1874 X	March, Sept.	Do.	81
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70	70	Zanesville, 7 do.	X	April, October	67 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.
For the week ending June 10th, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	81
Covington & Lexington, 2d Mort. 7 per ct.	64
Ohio & Mississippi, 2d Mort. 7 per ct.	46 1/2
Indianapolis & Cin., 2d Mort. 7 per ct.	77
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	85
Covington & Lexington, 10 per ct. Income	58
Indianapolis and Cincinnati D. videad	76

STOCKS.	Per ct.
Bellefontaine and Indiana, 35.-Cin., Ham. and Dayton, 60.	
-Col. and Xenia, 87.-Cincinnati & Chic., 8.-Covington and Lexington, 14.-Dayton and Western, 17 1/2.-Eaton and Hamilton, 22.-Indiana Central, 50.-Indianapolis and Cincinnati, 60.-Little Miami, 93 1/2.-Mad. River & Lake Erie, 15.-Marietta and Cincinnati, 16 1/2.-Ohio and Mississippi, 7.-Hillsboro' and Cincinnati, 17.-Peru and Indianapolis, 17.	

Marie & Kanz' Money Circular for the
European Steamer of the 18th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, June 16th, 1886.

Since our advices of the 10th instant, up to Friday, our stock market has continued firm, but very inactive. The political news, received on Saturday, from England, were not looked upon as placing beyond doubt the amicable settlement of the difficulties between the two countries, and counteracted the influence of the favorable money and commercial news, which, under ordinary circumstances, would undoubtedly have caused our stocks to rise, while at present we have to report an almost general decline. European orders for our stocks have again been very trifling. State stocks—sold to a larger extent than for some weeks past, Missouri closing at a decline of $\frac{1}{2}$, Virginia at $\frac{1}{4}$ per cent.; the new California Loan, due 1875, has been offered as low as 78; we hear even some sales at 75. City and County bonds—business continues on the same limited scale as noticed for some time in our circulars. Railroad bonds—fair transactions. Erie 1875 bonds advanced $\frac{1}{2}$; Erie 1883, $\frac{1}{4}$; New York Central 6s, $\frac{1}{4}$; and Illinois Central declined $\frac{1}{4}$, and Erie 1871 Bonds, $\frac{1}{4}$. Railroad Shares—Erie was the only active stock during the week; all the other stocks have been more or less quiet. Erie declined $\frac{1}{4}$; New York Central, $\frac{1}{4}$; Reading, $\frac{1}{4}$; Michigan Central, $\frac{1}{4}$; Michigan Southern, $\frac{1}{4}$; Cleveland and Toledo, $\frac{1}{4}$; Cleveland and Piusburg, $\frac{1}{4}$; Galena and Chicago, $\frac{1}{4}$; Chicago and Rock Island, $\frac{1}{4}$; Cleveland, Columbus and Cincinnati sold at an advance of $\frac{1}{4}$. Money—very abundant. Loans on call, 5a7. Discounts for first class paper, 5a7; for names less known, 8a6; stock contracts, 8a10. Exchanges—are active and have slightly advanced. London 109 $\frac{1}{2}$ @ 110; Paris, 5.17 $\frac{1}{2}$ a 5.15.

Extract from De Coppet & Co's Money
Circular for the European Steamer of the
18th inst.

[TRANSLATED.]

NEW YORK, Tuesday, June 16, 1886.

The aspect of our stock market has scarcely changed since our last advices of the 10th instant. As a natural consequence of a disposition to abstain from operating, money is tending towards greater abundance, especially for loans on call. The same cause noticed a week ago maintains a vague uneasiness in the public mind as regards our diplomatic relations with England, and continues to exercise its influence in reducing considerably the amount of business, which for speculation and railroad shares has been limited, and at declining rates. The effect has been but little felt upon State stocks and investment securities, in which some transactions have taken place, as well for European as for American account. State stocks—Missouri 6s have been active, closing at a decline of $\frac{1}{4}$; Virginia 6s have been done to a limited amount at $\frac{1}{2}$ per cent. decline, and Tennessee 6s at $\frac{1}{4}$ advance. California 7s, redeemable in 1875, (new loan,) having been pressed for sale, in large amounts, they have fallen several per cent., selling at 75a76. The first interest coupon on these (for eight months' interest) is due 1st January, 1887; after that the coupons are semi-annual. Indiana 5s are quoted ex interest 1st July. City and County Bonds—We notice a

few retail transactions in St. Louis 6s, Chicago 6s, and 7s, Detroit 7s, Milwaukee 7s, Wheeling 6s, (municipal,) and in Peoria 7s; the latter at a reduction of price. Railroad Bonds—At the Stock Exchanges the only transactions of some amount, have been in Erie 7s of 1875, at a rise of $\frac{3}{8}$ —and in Illinois Central Construction at a decline of $1\frac{1}{4}$ per cent. At private sale some Memphis and Charleston 1st Mortgage, and Michigan Southern and Indiana (Sinking Fund) have been done without material alteration in prices. Railroad shares—During the early part of the week, transactions were limited, with weakness in prices; to-day with more activity, the tendency downward. Money—Abundant from 5s7 per cent. on call, principally at 6 per cent. Paper, 7s9. Exchanges—With moderate business, are looking up. London, 109 $\frac{1}{2}$ ¢109 $\frac{3}{4}$ ¢. Paris 5.16 $\frac{1}{2}$ ¢5.17 $\frac{1}{2}$ ¢.

DE COPPET & CO.

American Railroad Journal.

Saturday, June 21, 1856.

Cotton Trade of the United States.

The *National Intelligencer* has recently compiled a number of very interesting facts from the report of the Secretary of the Treasury, in relation to the exports and consumption of the above commodity. As to the tariff duties on raw cotton, we learn that in Great Britain, Sardinia, Belgium, Austria, Sweden, Holland, British North American Possessions, Denmark and Tuscany, it is admitted free; in France the duty, when carried in French or American vessels, is \$3.72, or in foreign vessels, \$6.48 per bale of 220 lbs.; in Spain, 79 $\frac{1}{2}$ cents in national, and \$1.85 in foreign vessels, per bale of 101 lbs.; in Mexico, \$1.50 for the same quantity; in Russia and Norway about $\frac{1}{2}$ cent. per lb. In Bremen and Hamb'g the duty is imposed *ad valorem*, the rate being $\frac{3}{4}$ of one per cent. in the former, and $\frac{1}{2}$ per cent. in the latter. In Naples and Sicily it is \$8.00 per bale of 192 lbs.; in Portugal, 2 1-5 cents per lb.; in the Papal States, 10 cents per lb.; and in Cuba, 19 $\frac{1}{2}$ per cent. in national, and 27 $\frac{1}{2}$ per cent. in foreign vessels.

The following statement shows the export of cotton for the United States, and the annual average of the same, for the three years ending June 30th, 1855:

Countries to which Exported.	Pounds of Cotton Exported From the U. S. in the Years—	An average amount
Great Britain.....	1853. 1854. 1855. 1856.	of Cotton.
France.....	768,696,498 606,247,047 673,498,259 712,321,141	173,829,658
Spain.....	189,226,913 144,428,360 210,113,809 173,829,658	173,829,658
Hanse Towns.....	36,851,042 35,024,074 33,071,756 33,704,298	33,704,298
Belgium.....	22,671,752 37,719,922 30,809,991 26,011,208	26,011,208
Austria.....	15,494,442 13,960,460 12,219,553 17,038,427	17,038,427
Sardinia and Italy.....	17,908,642 14,901,144 9,761,465 16,789,767	16,789,767
Russia.....	17,487,948 12,725,830 16,087,054 14,911,024	14,911,024
Mexico.....	21,266,563 2,914,954 448,897 9,044,800	9,044,800
Holland.....	7,463,851 12,146,080 7,527,079 6,396,612	6,396,612
Sweden and Norw.....	7,638,994 6,048,165 4,941,414 6,759,267	6,759,267
Dr. N. A. Pos.....	6,089,517 9,212,710 8,428,457 6,968,132	6,968,132
Denmark.....	12,205 72,790 883,204 201,619	201,619
Cuba.....	435,169 320,983 209,186 142,874	142,874
Portugal.....	136,892 260,633 9,620 173,014	173,014
Elsewhere.....	87,691 121,059 144,006 130,189	130,189
To all coun-tries.....	652,595 1,916,895 270,822 746,918	746,918
1,111,570,370 987,833,106 1,008,424,601 1,025,659,166		

damages, and rolling stock, which are estimated at \$984,338 additional. The present estimate is \$6,612,508 for all purposes, towards which the following resources are available:

St. Louis City.....	\$500,000
St. Louis County.....	500,000
Individual subscription in St. Louis Co..	117,800
St. Charles Co., and individual subscrip-	
tions.....	100,000
Warren " " " "	59,600
Montgomery " " " "	65,300
Boone " " " "	127,300
Audrain " " " "	62,400
Randolph " " " "	164,400
Individual subscriptions in Macon Co....	8,300
do do in Monroe " "	300
do do in Calloway " "	4,100
Stock subscribed by contractors.....	300,000
Estimated amount of the bonds of the	
Company which the contractors will	
have to take.....	350,000
To the foregoing may be added the credit	
originally granted to the State.....	2,000,000
Also, the unconditional credit of the State	
granted at the last session of the Legis-	
lature to purchase iron and rolling stock	
for second division.....	1,000,000

Total means.....\$5,359,500

The subscriptions made by Schuyler and Adair counties of \$50,000 each, are not to be called in until the work is put under contract north of the Hannibal and St. Joseph road.

The above shows a deficit of means to the amt of \$653,008, besides interest and discount on State and City bonds, which will materially increase the deficiency. The last payments of county subscriptions will not fall due before the beginning of 1858. It is hoped, however, that arrangements can be made for anticipating these; and that the State and the counties along the line will not see the undertaking fall for the want of resources thus deferred.

At the last session of the Legislature an act was passed, granting a loan of \$1,000,000 in State bonds to the company, for the purchase of iron and rolling stock, between St. Charles and the H. & St. J. line. A further grant of \$1,000,000 was made, to be applied in like manner north of that line. The latter was made conditional on an actual expenditure being made by the company, and not creating a lien on the road, of one dollar for every two to be obtained from the State. This still leaves them minus by the sum of \$3,695,897, for completing the road to the Iowa State line. No effort should be spared to secure this at the earliest day possible.

In the ensuing six months it is hoped that the company's title to lands over which the line will pass, will be perfected as far as the junction. Much complaint is made at the illiberality of land owners on the line, particularly in the vicinity of St. Louis and St. Charles, for the purpose of wrenching the last cent out of the treasury.

Applications have been made to several counties for increased subscriptions, and to some counties which have not yet subscribed. It is hoped the results will be satisfactory.

On the 17th day of August, 1855, the Directory agreed to receive from the contractors, that portion of the road from St. Louis to St. Charles, although the roadway was not thoroughly completed. From that time until the beginning of winter, two trains each way were run daily. During the winter, one train each way, per diem, was deemed sufficient. We refer you to the report of the Treasurer, which exhibits the receipts and expen-

ditures, in operating this portion of the road, from the day of opening to the 1st of April, 1856.

We deem it hardly necessary to repeat to you the opinion expressed by our predecessors, that beyond all reasonable doubt, this will be a dividend paying road, when completed to the Iowa State line. Nor need we refer you to the estimate in their last annual report, by which that opinion was amply sustained. The people of St. Louis especially, must be aware that to the business interests of their city, it is the most important road now being constructed in the State. It is to develop and secure a trade from Iowa and the northern portion of this State, which, without this road, would unquestionably find a market elsewhere. Nor is it of less importance that this road should be ready to operate as far as the Hannibal and St. Joseph railroad by the time that work is finished, and that then our work should be pushed on as rapidly as possible to the Northern State line. We trust that those whom you may select to be our successors in directing the affairs of the Company, will be earnestly and heartily seconded in their efforts by all whose interest it is that this great work shall be speedily accomplished. Stockholders expect of Directors a faithful and efficient discharge of duty as such. The latter receive no salary or other emolument for their services, and are often compelled to use their individual credit, and to sacrifice much valuable time for the interests of their enterprise. It is but just that they ask of stockholders, in turn, a ready and zealous co-operation in supplying them with the means necessary to render their labor effectual.

Iron Mountain Railroad.

Two miles of the track on this road are already laid. From its general appearance the road bids fair to be one of the most substantial structures in the West. The road is thoroughly ballasted, and the rails laid in alternate joints. A St. Louis contemporary mentions an improved chair which has recently been patented by the Chief Engineer, and is to be used on this line.

Morris and Essex Railroad.

The annual meeting of stockholders of this company was held in Newark, on the 11th inst., Judge Ephraim Marsh acting as Chairman. From the annual report read we learn that the company's business, for the year ending 31st May, was—

Gross receipts	\$229,341 33
Working expenses.....	133,073 51
Net gains.....	\$96,267 82
Less interest on debt.....	24,584 06
	\$71,683 76

Two semi-annual dividends, amounting to \$77,454 94, were paid during the year.

The equipment of the road consists of ten locomotive engines; 16 passenger cars; 62 freight and cattle cars, and 20 baggage, gravel, and hand cars.

In accordance with a resolution of the last meeting, the Directors have procured a survey from Hackettstown to the Delaware river, with an estimate of the cost of constructing the extension. The route follows the eastern slope of the Pohatcong Valley 7 miles, thence passing north of Stewartsville, into Lopetcong Valley, and thence to the Delaware, near Cooper & Hewitt's Furnaces at Philipsburg—26½ miles from Hackettstown. The route is represented as very favorable; the grades easy and curvatures light.

The cost is estimated to be \$540,839 00—including rolling stock for five years.

The propriety of completing this extension is urged as beyond question, and is considered a matter of time.

The Board of Inspectors then reported the result of the election for Directors for the ensuing year, as follows: Wm. Wright, Joel W. Condit, Beach Vanderpool, Wm. N. Wood, Jeremiah C. Garthwaite, Daniel Babbit, Alexander Robertson, Jonathan Parkhurst, John C. Bayley.

Imports of Iron.

A table, showing the various kinds and quantities of iron imported into this country for the five years ending 30th of June, 1855, has recently been published. It appears that the total import for the several years in that period were—

Year.	Tons.	Value.
1851.....	374,027	\$10,204,100
1852.....	457,190	11,919,625
1853.....	558,466	17,276,326
1854.....	548,480	17,262,593
1855.....	386,652	13,950,941

Of the above quantities we find that the single item of railroad iron amounted to over 50 per cent. annually. In 1855, common bar iron (manufactured by rolling) formed 30 per cent., and pig iron fully 25 per cent. of the entire receipt from abroad.

The import of steel was—

Year.	Tons.	Value.
1851.....	8,063	\$1,570,063
1852.....	9,276	1,708,599
1853.....	16,267	2,970,313
1854.....	13,632	2,477,709
1855.....	13,389	2,593,137

The imports and values of manufactures of steel and of iron and steel were—

Year.	Tons.	Value.
1851.....	11,392	\$7,169,486
1852.....	11,564	6,938,370
1853.....	13,298	7,979,119
1854.....	15,132	9,979,182
1855.....	13,383	8,029,787

The sum of the above shows the following grand result for five years—

	Tons.	Value.
Iron.....	2,324,814	\$70,613,585
Manufactures of Iron,		
and Iron and Steel...	65,309	32,185,944
Steel.....	60,621	11,314,821
	2,450,744	\$121,114,350

The average price of iron, during that period, was \$30.38 per ton; of steel, \$186.64; and of manufactured goods, about \$600.00 per ton.

Delaware, Lackawanna, and Western Railroad.

A contract has been made between the managers of this road and the Lackawanna Coal Company, for 20 years, to convey their coal from Greenville, to Elizabethport, N. J., at a fixed rate of freight—150,000 tons per annum for the next two or three years, and then 300,000 tons per annum thereafter. It is calculated to send to market before January, 1857, 100,000 tons of coal. More than 20,000 tons are now stacked at the mines and ready to come forward to New York.

Schenectady Locomotive Works.

The Albany Evening Journal states that two engines built at these works for the Great Western Railroad (Ca.), have performed the following amounts of work, since the 1st of August, 1854—

The "Welland" has run, from the above date to 19th May, 1856, 57,055 miles.

The "St. Catharines", during the same period, has made 53,150 miles.

The first is an average of above 100 miles a day for over a year and three quarters. We believe it will be pretty hard to beat that.

Iron Bridge.

The Chicago *Press* states that an iron bridge is to be built in Chicago, at Rush street. It will cost \$48,000, \$30,000 of which will be paid by the Galena and Chicago, and the Illinois Central Railroad Companies. The posts will be of cast iron, but the balance of the bridge will be of the very best quality of wrought iron. The whole of the work will be done in that city.

Reading and Lehigh Railroad.

This is the name of a new line, 34 miles long, which has been recently chartered. The surveys were made by M. E. Lyons Esq., and a report of these, has just been published. The road, when completed, is to form the last link in the great chain composing the middle route from New York to the West and North-West. The line as surveyed commences in Reading, Pa., from which point turning to the North by a curve of 730 ft. radius, and crossing the Philadelphia and Reading railroad, it proceeds for some distance along the base of South Mountain. At $3\frac{1}{2}$ miles from Reading, it attains to the summit level. Its highest point is 480 feet above tide-water, or 230 feet above the starting point. About one mile east of Allentown, it connects with the Lehigh Valley railroad. The following characteristics of the work are given in the report:

Length of road, 34 miles, $9\frac{1}{2}$ of which are curved.

Total ascent eastward, 356 feet.

Do. westward, 363 feet.

Maximum grade eastward, 34 feet per mile; but susceptible of being reduced to $26\frac{1}{2}$ feet, by an additional expenditure of \$40,000.

Maximum grade westward, 37 feet per mile.

There are $3\frac{3}{4}$ miles of the 34 feet grade, and $3\frac{1}{2}$ miles of the 37 feet grade.

Seven miles are level; 10 miles under 20 feet per mile; and the remaining grades vary from 20 to 28 feet per mile.

Total curvature, 280 degrees to the south, and 260 to the north.

With the exception of two short curves at the termini, the curves have radii of not less than one mile.

The country traversed is well known to be one of the most fertile and productive sections on the continent, being similar in formation and character to the Tennessee, Virginia, and Cumberland valleys, and extending the entire length of the Alleghany mountains. Along the route there are also inexhaustible beds of lime-stone and iron ore. Numerous furnaces are already at work in Reading and other places. The ore when mixed with what is called the "red short ore," produces the best quality of pig iron. Numerous lateral coal roads are already in operation, all of which would become more or less tributary to the line.

Its connections for through business are most important. With the Lehigh Valley and New Jersey Central roads, a line will at once be opened to the city of New York. At Reading a connection is made, through the Lebanon Valley road, with the city of Harrisburgh. The total distance between New York and Harrisburgh, by these lines, would be 178 miles; or between New York and Pittsburgh, 425 miles, without any change of gauge. It is claimed that in the matters of distance and cost, as well as graduation, curvature, and connections, this route will be more advan-

tageous than the Port Clinton and Allentown, chartered in 1853. The city of Reading is already the third in the State, containing over 20,000 inhabitants.

We annex estimates of cost as follows:

Grading, masonry, &c.....	\$534,040
Superstructure.....	390,000
Stations, switches, &c.....	30,000
Engineering and contingencies.....	75,000
Land damages, say.....	50,000

Total.....\$1,079,040

Books were opened to receive subscriptions, on the 19th ult. The company were to be organized by the election of officers, on the 16th inst, in the city of Reading.

Little Miami Railroad.

The gross earnings of this road, with the Columbus & Xenia railroad, for the six months ending 31st of May were.....\$504,462
Working expenses.....234,727

Net earnings.....\$269,735
Less interest and taxes.....59,000

\$210,735

Dividend received from the Columbus & Xenia R. R.....25,802

Net profits.....\$236,037

Divided as follows—

To the Columbus & Xenia R. R. Co.....\$73,679
" Little Miami ".....157,358

From the net profits a dividend of five per ct., payable in Co.'s bonds at par, has been declared.

Maryland and Delaware Railroad.

We have received a copy of the first report of this company, containing their charter, with Engineer's report, estimates, &c. The company are authorized to build a railroad from Easton, or any other point in Talbot county, Md., to the Delaware State line, there to connect with the Delaware railroad, authorized by the Legislature of that State. Other provisions are liberal, no limits being imposed as to rates of toll or dividends. The surveys were commenced in September last under the superintendence of Mr. Chas. P. Manning. Three different lines have been located, the respective lengths of which are 37.7, 36.7, and 36 miles. Mr. Manning having been obliged to resign his post, owing to his connection with the Board of Public Works in Virginia, the services of Col. Walter Gwynn have since been obtained. In October a proposition was received for grading the road, and after some delay accepted by the company—the contract to take effect only when sufficient stock has been subscribed to pay for the grading.

Meetings have recently been held at several points along the line, to secure the necessary stock subscriptions. A good feeling towards the undertaking is said to be generally manifested. Its prospects are believed to be much better than they were a year ago.

The cost of the work is estimated at \$12,000 per mile. As this is an unusually low figure, it should be borne in mind that there will be little or no bridging necessary and no very heavy cuttings. The steepest grades need not exceed 20 ft. per mile, and the curvature will be equally favorable.

The total receipts to date have been \$1,995; expenses, \$2,095.

Gen. T. Tilghman is President, and J. P. Manlove, Treasurer. The Company's office is at Easton, Md.

Missouri State Bonds.

The State Treasurer has given notice that he is prepared, and will pay all coupons on Missouri State Bonds, issued for railroad and other purposes, on the 1st of July, at the Bank of Commerce, in New York. This, we presume, will satisfy bondholders of the security of their investment, and ought to appreciate these bonds in the money market.

Pittsburg and Connellsville Railroad.

In June, 1853, an ordinance was passed by the Common Council of the City of Baltimore, guaranteeing the above named company's bonds to the extent of \$1,000,000. This method of granting assistance was changed, on Saturday last, to one substituting for the guarantee, city bonds to an equal amount. The bonds authorized to be issued under the ordinance are to be done in such manner as shall seem most conducive to the early completion of the road, in sums of five hundred and one thousand dollars, to amount of one million of dollars in the aggregate, to be payable on the first day of January, 1886, bearing six per cent interest per annum, payable semi-annually, on the first day of January and July, in each year, and upon the surrender to the Register, from time to time, for cancellation, of any amount of the bonds of the said Pittsburg and Connellsville Railroad Company, heretofore guaranteed by the city of Baltimore. The bonds to be sold by the Commissioners of Finance, and the proceeds to be disbursed by them in the discharge of the debts and contracts of the road, upon the order of the President and Directors of the road, when the Commissioners of Finance are satisfied that the orders are given for the legitimate expenditure of the road, and for redeeming from hypothecation the bonds of the Company guaranteed by the city of Baltimore.

Before the exchange of bonds shall take place to any extent whatever, the Pittsburg and Connellsville Railroad Company is to execute to the city of Baltimore, a deed, the form of which shall be approved by the Counsellor to the city, recognizing and confirming all the provisions and conditions of the ordinance approved June 24th, 1853, except as modified by this ordinance, and covenanting for, and securing the payment by the Railroad Company of the interest and principal of the bonds, as they shall respectively become payable, and making the mortgage now held by the city of Baltimore, applicable to secure the interest and principal of the bonds of the city directed to be issued.

The ordinance also enacts that whenever the Commissioners of Finance shall be satisfied that the railroad company can borrow from other sources the whole sum necessary to complete and equip the whole line of said road from Cumberland to Pittsburg, after the expenditure of the means now possessed, or which may hereafter be acquired, by the company, upon the security of a first mortgage upon the property of said company, the Commissioners of Finance are to certify the same to the Mayor of the city of Baltimore, and the Mayor is authorized to execute to the lenders of the money, a deed giving priority to the mort-

gage to the lenders of said money, over the mortgage to the city of Baltimore.

The ordinance is not to go into effect until the provisions and conditions thereof shall be accepted by the Pittsburg and Connellsville Railroad Company.

Southern Railroad Association.

This Association, composed of the officers of all the Southern railroads, has been convened by its President, R. R. Cuyler, Esq., of Savannah, to meet at Ashland, (Slash Cottage) on Tuesday, 8th July next.

The objects of the meeting are to regulate the business relations of the Southern roads, and combine them in one complete system.

As the Association is composed of intelligent gentlemen engaged in the consistent support of Southern interests, we may expect from their meetings something more than a mere arrangement of freights, fares, gauges and schedules.

We may expect a development of railroad commerce, and the recommendation of a concerted plan of Southern improvements worthy of consideration and adopted by the Legislatures of Southern States. Reciprocally interested, as all railroads in the same section must be, we may expect that the stronger shall aid the weaker, at least by recommendation to capitalists and commercial cities.

The Richmond and Danville railroad should be extended to a connection with the Georgia roads. The Virginia and Tennessee road should extend its aid and countenance to the incomplete section of the Great Southwestern railroad, terminating for the present at Memphis, but destined to be connected with Mobile, Savannah, and New Orleans. The Central road should be pushed into Kentucky and into Southern Ohio.

But, above all, the Association should recommend to the Southern States the connection of a common trunk, by way of El Paso, to the Pacific Ocean. This important work will develop a home market, a field of internal commerce, and a current of travel intercourse, in which every part of the South will participate.

It is not, however, for us, to trace the physical or political consequences which will follow its completion. We would, however, remind our fellow citizens, that as the immediate vicinity of our city has been selected as the place for holding this Convention, it will afford an excellent opportunity for impressing upon it the common interest of the Southern cities, as well as for displaying their proverbial hospitality towards the intelligent gentlemen who are expected to assemble.—*Richmond Dispatch*.

The Peoria and Oquawka Railroad.

The following is a condensed statement of the condition of this new enterprise. Messrs. Kellogg, Moss & Co., Contractors and Lessees. Western division completed and in operation. Operated temporarily by the Central Military Tract Railroad Company—43 miles long, from Galesburg to Burlington.

Middle Division—In process of construction, work two-thirds done and iron purchased and on the way. Will commence laying rails in two weeks. This division will be completed in August next. Extends from Elmwood to Galesburg, 25 miles.

Eastern Division—Completed and operated by the lessees; extends from Peoria to Elmwood, 28 miles. During the months of March and April, 1856, the business on this division has been as follows, one train each way, daily, carrying freight and passengers:

Number of passengers carried.....	4,256
Do. bushels grain	66,580
Do. do. coal	42,600
Do. tons up freight.....	606
Do. shingles and pickets	58,000
Do. feet lumber.....	162,000

The Eastern Extension is now open to Crugen station, 18 miles. One thousand tons of iron are

on hand, and the balance to lay the track to Peoria Junction is on the way from New Orleans. This road intersects the Illinois Central Railroad half-way between Kappa and Panola station, which point it will reach by August, and Peoria Junction by November.

Reading Railroad.

We give below a statement of the business of the Reading railroad for the month of May, and the five preceding months of the fiscal year, compared with the business and receipts for the corresponding time last year, as follows:

	1856.	1855.
Received from coal.....	\$289,194 48	\$387,897 38
Received from merchandize.....	31,600 61	28,488 15
Received from travel, &c.....	27,717 18	33,208 55
Total.....	\$349,512 27	\$449,694 08
Transportation, roadway, dumpage, Renewal Fund, & all charges.....	172,479 64	184,424 90
Net profit for the month	\$176,032 63	\$265,269 13
Net profit for previous 5 months	489,867 05	711,817 37
Total net profit for 6 months.....	\$665,899 68	\$977,086 50

The receipts from travel and coal have fallen off largely, while the receipts from merchandize have increased.

Genesee Valley Railroad Company.

The election for Directors of the Genesee Valley Railroad Company was held in Rochester, on the 12th inst. The following gentlemen were elected by the Common Council to represent the city, viz:—Samuel G. Andrews, John Fowler, Andrew J. Brackett, and Johnson I. Robins.

The stockholders elected the following gentlemen:—Jas. S. Wadsworth, Daniel H. Fitzhugh, John R. Murray, Freeman Clark, Levi A. Ward, Isaac Hills, James Chappell, Lewis Selye, Lyman Munger.

Inspectors—Charles M. Lee, Isaac R. Elwood, James L. Angle.

The Board subsequently chose the following officers and committees:—

President—James S. Wadsworth, Genesee.

Vice President—James Chappell, Rochester.

Secretary and Treasurer—Isaac Hills.

Executive Committee—James Chappell, Lewis Selye, John Fowler.

Finance Committee—Levi A. Ward, D. H. Fitzhugh, J. I. Robins.

Lexington and Big Sandy Railroad.

We learn that the 4 ft. 8½ in. gauge has been adopted for this road, similar to that between Louisville and Lexington. This will give a uniform gauge across that part of the State between Louisville and the Virginia line, at the mouth of Big Sandy river. If the people of Cincinnati do not bestir themselves, and secure a five foot gauge from Lexington to Danville, they will feel the effects of the above step in the withdrawal of trade from their city, to an extent that they hardly dream of.

Central Ohio Railroad Bonds.

The *Wheeling Gazette* states that the secretary of the Central Ohio Railroad is now busily engaged in issuing bonds to the creditors in lieu of their claims. These bonds are made payable in

twenty years, and bear interest of seven per cent. payable semi-annually. The creditors, it is stated, go into the matter with cheerfulness. The road is said to be doing well, and is well managed.

Pacific (Mo.) Railroad.

We observe that EDWARD MILLER Esq. of Philadelphia has been chosen Chief Engineer of the above road by the new Board of Directors. Mr. Miller has accordingly resigned his connection with the North Pennsylvania road. He will be succeeded by SOLOMON W. ROBERTS Esq. of Pittsburgh. The latter gentleman has acted for seven years as the Chief Engineer of the Ohio & Pennsylvania railroad; but as this work is now nearly completed, he has entered the service of the North Pennsylvania Railroad Company, as their Chief Engineer and General Superintendent.

A railroad has been projected to extend from Reading northwards to connect the Lebanon Valley Railroad with the Lehigh Valley road and the New Jersey Central. This will prove a rival road to the proposed Allentown railroad, which is to connect the Dauphin and Susquehanna railroad with the Lehigh Valley railroad. The projected road we allude to is the Reading and Lehigh railroad, for which a company has been organized. One of these two projected roads is necessary to perfect what is called the Great Middle route between the West and South-west. Charters have been obtained for both the Allentown railroad and the Reading and Lehigh railroad.—*Exchange*.

North Missouri Railroad.

We understand that the contract for the building of the North Missouri Railroad to the junction with the Hannibal and St. Joseph road, has been, by consent of the parties, cancelled. This arrangement will not, in any way, interfere with the progress of the work on the road. It will go on as usual.—*Republican*.

Iowa.

Stringent railway laws have become customary now everywhere, in consequence of the numerous disastrous occurrences on many of the leading roads; but an enactment of this kind has just been passed by the Legislature of Iowa, which is rather more severe than any other of recent date. It provides that trains shall come to a full stop on approaching crossings, under a penalty of \$500 for non-observance, half of which sum goes to the informer. And in case that life or property should be destroyed by violation of the act, the penalty is double the value of the property so destroyed, and for every life lost, from \$10,000 to \$60,000 is to be recovered by the representatives of the deceased, and to go to the widow and children, if there be any, or if there be not, then to the heirs of the deceased.

We clip the above from an exchange. If there is any truth in the statement, it seems to us these Solons ought to go a little further. They ought to have the trains—locomotives and all—drawn by horses, which should never be allowed to proceed faster than five miles an hour. A full stop should also be made at every joint in the rails; and a scarecrow placed every hundred yards to keep the birds from lighting on the track. Prudence would also suggest several other precautionary measures, as, for example, that passengers should get out of the cars, and cross all bridges on foot. But we cannot think that in the year of grace 1856, of American Independence 79, and of the locomotive 28, such old fogyism in railroad matters can be found in Iowa.

Production of Sugar.

A writer in the *Herald* gives the following statistics as to the amounts of sugar produced and consumed in the world.

Production.

	1854.	Partly Estimated. 1855.	1856.
Cuba, (tons).....	358,000	380,000	400,000
Porto Rico.....	48,700	40,000	50,000
Brazil.....	80,000	95,000	100,000
Louisiana.....	221,000	173,000	125,000
French colonies..	81,400	85,000	85,000
Dutch and Danish			
West Indies....	18,000	18,000	18,000
Br. West Indies..	172,200	170,000	175,000
Br. East Indies..	39,300	37,000	39,000
Mauritius.....	82,300	63,000	80,000
Java.....	100,000	85,000	80,000
Manila, Siam and			
China.....	30,000	30,000	35,000
Beet root—France,			
Belgium, Zoll-			
verein, Russia			
and Austria....	184,000	148,000	170,000

Total..... 1,414,900 1,324,000 1,357,000

The crop of Cuba in 1855 was 1,900,000 boxes, and calculating five boxes to the ton, 380,000 tons. For 1856 it was estimated that it would exceed the last by ten per cent.; it is now found that it will hardly exceed that, and by some it is computed at ten per cent. less, but we may put it at 400,000 tons.

Consumption for 1856.

Great Britain (tons).....	418,000
United States.....	380,000
Continent of Europe.....	265,000
Including beet root.....	148,000
Canada and Provinces.....	20,000
Portugal.....	10,000
Sweden and Denmark.....	9,000
Mexico and South America.....	16,000
Spain.....	70,000
Russia.....	15,000
Cuba and all sugar producing countries not	
mentioned.....	30,000

Total..... 1,381,000
Estimated production of 1856..... 1,357,000

Hempfield Railroad.

The laying of the track on the Hempfield railroad has been completed as far as Triadelphia.—It is the intention of the company to run a daily train between that place and Wheeling as soon as the cars can be had. The trains will connect with the Washington and Pittsb'g coach at Triadelphia. As soon as the spring opens, the work on the remainder of the road, from Washington to Triadelphia, will be completed as fast as possible.

Grand Junction Railroad.

The annual meeting of the Grand Junction railroad company was held on Friday afternoon. The annual report of the Directors was read, which shows, it was stated, a favorable result. It was announced that Mr. S. S. Lewis had gone to England in order to make an arrangement with the Grand Trunk railroad, by which they would take a half million of their stock and make use of their railroad and deep water accommodations at East Boston for the reception of their Canada goods to and from Europe. The meeting, without choosing Directors, adjourned for sixty days, in order to ascertain the success of this mission.

New York and New Haven Railroad.

By the record of decisions in the Court of Appeals, it will be seen that the judgment of the Superior Court of New York, in the case of the Mechanics' Bank against the New Haven Railroad Co., has been reversed, and the case sent back to the Court below for a new trial. The points of the decision have not been received yet in this city, but the *Albany Argus*, of the 17th, states, on what it deems reliable authority, that the decision goes

the full length of holding that the company is not liable in any form for the spurious stock issued by Mr. Schuyler. The amount immediately involved, we believe is only about \$25,000, but the decision affects property to the amount of about two millions.—*Com. Advertiser.*

Memphis and Clarksville Railroad.

The following gentlemen were chosen Directors at the recent annual meeting:

W. B. Munford, Dr. J. Cobb, G. Stacker, R. M. House, W. M. Stewart, G. H. Warfield, J. C. Johnson, Joshua Elder, Wm. Broadus, W. P. Hume, J. G. McKoin, Larkin Bradley, Alfred Robb, W. A. Quarles and W. A. Forbes. The only change made in the Board is the substitution of Alfred Robb for Hugh Dunlap, and the filling of two vacancies with William A. Quarles and William A. Forbes.

The stockholders, by a large vote, left the selection of the route to the Directors.

Railroad Earnings.**OHIO & PENNSYLVANIA R. R.**

The following is a statement of the receipts of this road:

Passenger receipts for May..... \$60,291.03
Freight receipts for May..... 26,607.09

Receipts for May, 1855..... \$86,898.12
88,782.36

Decrease..... \$1,888.34

Operating expenses for May..... \$41,009.80
Amount expended on construction.... 3,740.28

Total..... \$44,750.08

ILLINOIS CENTRAL R. R.

The receipts of the Illinois Central Railroad for May were..... \$214,600

May 1855..... 121,400

Increase..... \$93,200

—or over 75 per cent. in 1856. The receipts for June will also be large.

NORWICH & WORCESTER R. R.

The receipts of the Norwich and Worcester road for May were..... \$29,592

May 1855..... 27,942

Increase in 1856..... \$1,650

CATAWISSA, WILLIAMSPORT & ERIE R. R.

Earnings for May, 1856—

Passengers..... \$10,378.84
Freight, &c..... 12,800.97

Total..... \$23,179.81

May, 1855..... 20,748.67

Increase..... \$2,431.14

INDIANA CENTRAL R. R.

The receipts of this road for May were—

Passengers..... \$25,896.02
Freight..... 9,100.16

Mails, &c..... 1,551.09

Total..... \$36,547.21

May 1855..... 27,111.28

Increase (35 per cent.)..... \$9,435.93

PENNSYLVANIA CENTRAL R. R.

Receipts for May, 1856..... \$452,586.25

" " 1855..... 325,711.94

Increase..... \$127,874.31

Receipts from Jan. 1, 1856, to June

1, 1856..... \$2,181,295.61

Same period last year..... 1,548,285.58

Increase..... \$633,010.03

—or a little over 40 per cent.

MILWAUKEE & CHICAGO R. R.

The receipts of the Chicago and Milwaukee Railroad for April were—

Passengers..... \$22,091.42
Freight..... 9,691.11

Total..... \$31,782.53

N. Y. & HARLEM R. R.

The receipts of the New York and Harlem Railroad Company have been:—

May 1855..... \$82,958.64
May 1856..... 90,961.95

Increase..... \$8,003.31

MILWAUKEE & MISSISSIPPI R. R.

The earnings of this road were for

May, 1856..... \$61,661.44
May, 1855..... 66,944.16

Decrease..... \$5,282.72

The decrease was expected to be still greater, having arisen from the lateness of opening the Erie canal this spring. Twenty-two additional miles of this road, completing it to Maromaniac, were to be opened this week.

INDIANAPOLIS & CINCINNATI R. R.

The earnings of this road for the month of May were—

Passengers..... \$20,724.03
Freight..... 17,963.12

Mail..... 75.028

Express..... 675.00

May, 1855..... \$40,014.23

May, 1856..... 30,895.02

Increase (nearly 30 per cent.)..... \$9,129.21

MORRIS CANAL.

The receipts of the Morris canal have been:

Total to June 9, 1855..... \$69,782.19

Week ending June 16, '55. 8,456.58—\$78,288.77

Total to June 7, '56..... \$64,690.22

Week ending June 14, '56. 12,921.75—\$77,611.97

Decrease in 1856..... \$626.80

GREAT WESTERN (CA.) R. R.

Earnings for the four weeks ending June 13th:

Passengers..... \$140,241.29

Freight..... 55,335.47

Mails, &c..... 7,490.76

Same time last year..... \$203,067.52

151,322.41

Increase, 33 per cent..... \$51,745.11

The total receipts since 1st of Feb'y, have been \$1,100,287.02, against \$780,330.61 for the corresponding period in 1855.

CLEVELAND & PITTSBURG R. R.

The receipts of the Cleveland and Pittsburg railroad for May were..... \$63,739.66

May, 1855..... 55,338.81

Increase..... \$7,900.85

CLEVELAND, COLUMBUS, & CINCINNATI R. R.

Earnings for May—

Passengers..... \$45,547.64
Freight, &c..... 68,855.02

May, 1855..... \$114,402.66

May, 1856..... 97,640.15

Increase..... \$16,762.51

RAILROAD TRACK, LOCOMOTIVE & CAR JACKS.

FOR sale by BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Lawrence Scientific School, HARVARD UNIVERSITY, CAMBRIDGE.

THE next term will open on the 28th day of August, 1886.
For CIRCULAR containing particulars address
6125 E. N. HORSFORD, Dean of the Faculty.

PATTERSON, NEW JERSEY, June 16th, 1886.

NOTICE.—The Copartnership of ROGERS, KETCHUM & GROSVENOR is dissolved by the decease of THOMAS ROGERS. Either of the undersigned will use the name of the firm in liquidation.

The business of manufacturing Locomotive Engines and other machinery will be continued by "The Rogers Locomotive and Machine Works," under a charter granted by the Legislature of New Jersey.

6125

MORRIS KETCHUM.
J. GROSVENOR.

First Class Locomotive

FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and flue sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a FIRST CLASS PASSENGER ENGINE.

For particulars address

ELLIOTT & BOWLES,
118 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above. 251f

TO MACHINISTS. AT PRIVATE SALE.

THE establishment occupied by the late firm of LEES, SMITH & Co., in the Borough of Chester, Pennsylvania; consisting of a large and valuable Lot of Ground, on which there are erected the following buildings:

MACHINE SHOP, 220 by 36 feet, three stories high, with engine house attached, 50 by 20 feet, stack 57 feet high; engine of 25 horse power.

BLACKSMITH SHOP, 40 by 25 feet, containing five fires, fan-blast.

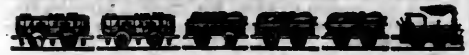
FOUNDRY, 60 by 64 feet, with slate and tin roof and double sky-lights.

The buildings all of brick, new, (built in 1853-'54,) substantially constructed, and provided with a complete set of the most modern and approved tools and fixtures suitable for general mill and factory work, for which there is also a large number of patterns. The whole is in good running order. The establishment is in a district where a large number of factories afford an excellent run of custom work, and offers a very advantageous opening to a practical Machinist. Apply to

ALEXANDER H. SMITH,
In Chester, or at 53 South Fifth street,
PHILADELPHIA.

1125

To Railroad Contractors.



ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C., May 18th, 1886.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock, M., on WEDNESDAY, July 16th, 1886, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad, commencing at Knoxville. There are several heavy jobs of Masonry, among them the Masonry for the bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

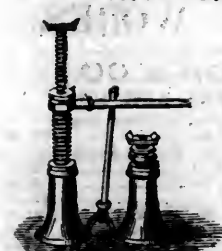
The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 6th of July.

WALTER GWYNN,

MAY 29th, 1886. 6123 Chief Engr Blue Ridge R. R.

BALL'S PATENT JACK SCREW.



For sale by

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

English Blister Steel.

20 TONS on hand, for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.

4124

KASSON'S

RAILROAD IRON EXPRESS, NEW YORK AGENTS, DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the CANALS, LAKES, and RAILROADS for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

W. M. KASSON & SON.

N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay.

INSURANCE at low rates of premium, will be effected when desired.

ELLIOTT & BOWLES,

(LATE ELLIOTT & CO.)

Railroad Commission Merchants, and Agents for the Sale of

FIRTH'S METAL,

The Cheapest and Best Metal for Rail Road Journal Boxes.

118 WILLIAM STREET, N. YORK.

DAVIS & KASSON, GENERAL RAILROAD AGENTS, & COMMISSION MERCHANTS, Have for Sale No. 21 BROADWAY, NEW YORK. Locomotives,

PASSENGER and FREIGHT CARS, RAILROAD IRON, CHAIRS, SPIKES, and all other supplies in use by railroads. Also negotiate the Sale of Bonds, and the Exchange of Bonds for Rolling Stock, Iron, etc. Sole Agents in New York, for Kasson & Son's Locomotive Express and Railroad Iron Express, enabling them to transport Locomotives, Cars, and Railroad Iron, on the most favorable terms.

THEY REFER TO—
PHELPS, DODGE & Co.
JAMES BISHOP & Co.
PIERSON & Co.
GEO. MERRITT Esq., Pres't N.E. Car Spring Co.
C. C. DANNIS Esq., Sup't Buffalo & Erie R.R., Buffalo, N. Y.
E. B. PHILLIPS Esq., Sup't Cleveland & Toledo R.R., Cleveland.

JOHN WILKINSON Esq., Pres't M.R. & N. I. R.R., Toledo, O.
WM. B. OGDEN Esq., Pres't Chicago & Fond du Lac R.R., Chicago, Ill.
JOHN CATLIN Esq., Pres't Milwaukee & Miss. R.R., Milwaukee, Wis.
S. RYDER Esq., V. Pres't Terre Haute & Alton Railroad, Alton, Ill.

Notice to Brick Makers.

THE undersigned wishes to contract for One Million Three Hundred Thousand of hard burnt brick, best quality, and of the ordinary dimensions, to be delivered as follows:

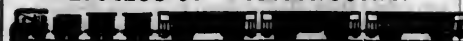
At Petersburg, Va. 600,000
At the Entrance Lock of the Dismal Swamp Canal near Norfolk, Va. 200,000
And at Suffolk, Va. 500,000

The brick to be inspected at the point of delivery. Parties proposing may bid for the supply of either or all of the three lots, stating the time within which they will deliver the quantity proposed for.

They will send the undersigned a sample of the brick they would agree to deliver and define in their bid its dimensions.

WILLIAM MAHONE,
Chief Engr Norfolk and P. R. R.
NORFOLK, Va., May 31st, 1886. 4123

Notice to Contractors.



OFFICE OF STATE ENGINEER BUNAVISTA,
Orange Mill Post Office.

St. Johns River, Fla., August 20th, 1886.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1886, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANCY,
State Engineer, State of Florida.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8½ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 60 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.

Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

TO CONTRACTORS.

PETTES' ROCK DRILL

WILL penetrate the hardest rock in excavations, at the rate of ten feet an hour, with the aid of two men. Three blows are given at each revolution. This Drill is very portable, the fly-wheels serving as rollers in changing its position; it is entirely self-adjusting and weighs altogether but 400 lbs. Price \$100 cash. A working model may be seen at this office where orders are solicited.
4122 N. DAVIDSON, 9 Spruce st., N. Y.

Railroad Iron.

1,500 TONS New York and Erie pattern 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by

THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.

4124

Augustus Schwaab,

CIVIL ENGINEER, MACON, GEORGIA.

Is prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible situations on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

BUSINESS CARDS.**KASSON'S****LOCOMOTIVE EXPRESS**

FOR THE RECEIPT AND TRANSPORTATION OF

**LOCOMOTIVES,
PASSENGER AND BOX CARS
OF ANY GAUGE**

To the Western and South-Western States.

PROPRIETORS—WM. M. KASSON & SON,

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STOCK BROKERS,

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Counsellors at Law, Cincinnati, Ohio.

To Civil Engineers.

WHITE'S PATENT SILVER FOUNTAIN PEN CASE is particularly recommended to Engineers engaged in field work.

This is the only fountain pen we know of, that will not leak in the pocket, or feed too fast in using. The feed of this is perfectly under the control of the writer, who may use it without danger from blots or discoloration of the clothes. Price \$3.

They are adapted to all styles of pen. They will be sent by mail to any address upon the receipt of the price.

Address N. DAVIDSON & CO.,

Sole Agents for the Manufacturer and Patentee,
4ml19 9 Spruce st., N. Y.**CINCINNATI.****HEWSON & HOLMES,**

AUCTIONEERS AND STOCK BROKERS,

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A GREAT VARIETY OF

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NEGOTIATE

LOANS, NOTES, BILLS OF EXCHANGE,

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**THIRD STREET
STOCK EXCHANGE,
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STOCK AND REAL ESTATE BROKERS,

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Public Stock Sales daily

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AT PRIVATE SALE.—J. L. H. & Co always have for sale a choice variety of State, County, City and Railroad Bonds and Stocks; also, Bank and Insurance Works, and other Securities. NEGOTIATE LOANS on Stock, Notes, Bills of Exchange, Mortgages, &c. REAL ESTATE SALES, whenever required, at the Stock Exchange, or on the premises.

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Stock Brokers and Railroad Agents,
NO. 33 WEST THIRD STREET,
CINCINNATI, OHIO.Railroads Stocks, Bonds, &c., bought and sold on commission.
Regular sales at public auction at the MERCHANTS' EXCHANGE.**Cast Steel Boiler Plates.****SHORTRIDGE, HOWELL, & JESSOP,**
STEEL MANUFACTURERS,

ARE now prepared to execute orders for CAST STEEL BOILER PLATES, and invite the public to inspect a sample Plate weighing 573 lbs., 13 ft by 2 feet of their make. This Malleable Cast Steel is entirely a new article, and possesses all the ductile properties of iron, whilst from its great strength, a saving in weight of about 50 per cent. may safely be obtained as compared with Boilers constructed of iron, thus securing many important advantages in Marine and Locomotive work. Apply to

DUNCAN LITTLEJOHN, Agent,
3011 24 Cliff street, New York.**H. M. SMYTH
COMMISSION MERCHANT**AND
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No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axles, wrought iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

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BANKERS, DEALERS IN DOMESTIC AND FOREIGN EXCHANGE, &c., are prepared to negotiate Stocks, Bonds and Financial Securities in general.

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D. R. MARTIN, Pres't O'c'd B'k, CORNELIUS W. LAWRENCE, Esq., N. Y.
SILAS K. EVERETT, of Everett & Brown, N. Y. DEXTER & Co., Bank's, Philad.
V. MILES, FARGO & Co. 181st SAMUEL WILLETS, Pres't of Am. Exchange Bank, N. Y.

H. H. GOODMAN & CO.,

No. 7 WALL ST., NEW YORK,

Dealers in Railway, City, County, and State

BONDS,

RAILS, LOCOMOTIVES, &c.

We have on hand and for sale, of County Bonds—

Hardin County (Ky), 6 per cts. Davidson City (Tenn.), 6 p.cts.
Carter, Bath, and Montgomery (Ky), 6 per cts. Iowa County (Wis.), 8 per cts.
Mineral Point do. do. do.
Also a variety of CITY, COUNTY, and RAILWAY SECURITIES in smaller lots.
April 30th, 1856.

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.

REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

BOSTON RAILROAD SUPPLY STORE,

No. 44 Water Street, Boston, Mass.

WILLIAMS & PAGE,

MANUFACTURERS' AGENTS AND COMMISSION

MERCHANTS for the sale of Engines, Cars, Locomotives, Iron Rails, Wheels, Axles, Tyres, Car Trimmings, and every article used in equipment and repairs of railroads.

THOS. S. WILLIAMS. PHILIP S. PAGE,
Late Sup't Boston & Me. R.R. Late Page, Alden & Co

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JAMES HAYWARD, President GEO. H. KUHN Esq.
Boston and Maine R. R. LAWRENCE, STONE & Co.
Capt. WM. H. SWIFT. DANA, FARRAR & HYDE.
G. M. BEEBEE, RICHARDSON & Co.

Railroad Iron Via Quebec.**JOHN ANDERSON & CO.**COMMISSION MERCHANTS,
SHIPPING AGENTS AND BROKERS,**Quebec and Montreal.**

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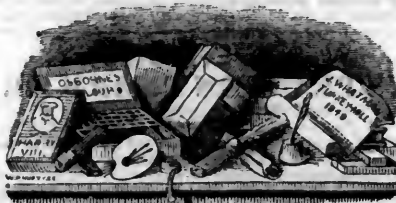
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[WHOLE No. 1,054, VOL. XXIX.]

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American Railroad Journal.

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North Western Virginia Railroad.

The annual meeting of this corporation was held at Baltimore, on the 18th inst. From the report there presented we observe the line is now all but ready for the rails, the sum of \$14,024 only being required to complete the graduation, and \$10,000 for bridge structures. In spite of the successive embarrassments which have presented themselves, the work has continued to progress steadily. The great reaction in railroad securities which has taken place prevented the negotiation of the company's third mortgage bonds. The managers were accordingly under the necessity of depending upon other resources. Already the ballast has been mostly laid down and distributed; the cross-ties are in their places; the tunnels are in the main secured; the station buildings are nearly finished; and six thousand tons of iron have been procured and delivered at Locust Point—now lying in bond and only awaiting means to procure its release. So soon as the state of the Treasury will permit, the superstructure may be

pressed forward at the rate of three-fourths of a mile per day, or even more should it be desired.

One good result from the unavoidable delays attending the opening, will be the less frequent occurrence of slips and sinking of embankments, so common with new works of the sort. This road will not only be safe, but is in every respect one of the greatest engineering triumphs in the country, having, it is believed, surmounted more obstacles than any other line of equal length. Its grades and curves are very favorable, and the line unusually direct, considering the mountainous section which it traverses.

In January last arrangements were completed between the company and Mr. Ross Winans, to furnish on terms similar to that agreed upon between the Baltimore and Ohio road and himself, as many first class engines as might be needed. This contract, though temporarily suspended by pecuniary embarrassments, may be renewed when judged expedient. It is considered advisable that the cars of the B. & O. Co. should pass through to Parkersburg, thus obviating the necessity of transshipment at Grafton.

During the last session of the Virginia Legislature, an application was about being made to that body for aid, in the shape of a loan of \$500,000; but the unfavorable manner in which many other similar applications were met, discouraged further proceedings. The Board next turned their attention to the city of Baltimore, then holding a first mortgage upon the road for \$1,500,000. Authority was asked to extend this half a million; but the request was unsuccessful. At this time the Baltimore and Ohio railroad company had in their hands a large portion of the unexpended balance of the Five Million Loan granted them by the city, which was pledged to go to the construction of the second track; but could not for two or three years. A plan to loan part of this to the Parkersburg company was submitted to the city authorities, and, after considerable delays, received their sanction. Measures will at once be taken to forward the iron from Locust Point, and the work of track-laying be entered upon before the close of the present month.

The report says—

When the Northwestern Virginia railroad was

projected, it is well known that the Baltimore and Ohio railroad company, although authorised to make their connection with the Ohio river at Wheeling, were not secure against rivalries which had long threatened to dispute with them the control of the Western trade. The Legislature of Virginia had been asked, at a very early period, to allow the city of Baltimore the privilege of a connection at some point sufficiently far south to ensure the most direct connection with Cincinnati, and protect her against the influence of Northern capital and enterprise. The jealousy with which this movement was watched, thwarted all efforts on the part of the Baltimore and Ohio railroad company and the city of Baltimore to secure a Southern terminus, until Wheeling had been satisfied, and a location to that point established. The State of Virginia then, but not until then, agreed to relax her policy and permit a junction at the mouth of the Little Kanawha river, the present Western terminus of the Northwestern Virginia railroad.

The acceptance of the Virginia charter of 1847, making Wheeling the terminus of the Baltimore and Ohio railroad, was a measure of necessity.—No one in the city of Baltimore ever looked to that point as securing all that she had been struggling to accomplish for so many years. It was only the first step in the development of more important plans. New York and Philadelphia were both beginning to demonstrate what could be accomplished with facilities far less encouraging than those which nature had thrown in the way of Baltimore. No sooner had the Baltimore and Ohio railroad been put under contract to the city of Wheeling, than a charter securing the privilege of a route to that point through the Pennsylvania and Hempfield railroads was obtained by Philadelphia interests, and a company formed to proceed with the construction of the latter with all possible dispatch. What then would have been the prospects of the Baltimore and Ohio railroad at Wheeling, with an unobstructed right of way open to Philadelphia by a better and more advantageous line? Such a state of things is not unforeseen; and while the city of Baltimore, already seriously drained by the superior facilities of her Northern rivals, could no longer delay the extension of her line of communication with the West to whatever point it might be the pleasure of the State of Virginia to authorise it, it was not without an abiding confidence, fully justified by subsequent events, that the policy thus adopted would secure the charter for which she had been so long striving. The construction of the line to Wheeling has answered a good purpose, and in all probability will continue to do so; but there were wise and far-seeing men, who were prepared if necessary to treat it as a *bonus* to secure the grant of the more eligible Southern terminus,

now embraced in the charter of the Northwestern Virginia railroad, which, situated on the Ohio river ninety-two miles below Wheeling, ensured a connection with Cincinnati and the producing regions of the West, shorter by some sixty miles than any other line that could be projected with a view to an outlet on the seaboard.

This view of the policy upon which the city of Baltimore had been acting, appears to have been wholly lost sight of. With the Hempfield road incomplete, and the Central Ohio road, in the absence of a direct connection with Philadelphia, throwing its business almost exclusively into the lap of Baltimore, some of the citizens of the latter have been lulled into listless inactivity. But their dream may be interrupted at any moment. Philadelphia will not be satisfied until she has secured the commercial facilities which her position gives her. The Central Ohio railroad, whatever may be its sympathies, cannot control the laws of trade. That road cannot develop its full power until it has been placed in connection with Philadelphia, by the Wellsville and Hempfield railroads. It may serve a temporary purpose until Baltimore can do justice to herself by a more Southern line; but sooner or later the Central Ohio railroad, consulting the true interests of its stockholders, must form its combinations with Philadelphia and the North.

Suppose then, that the business men of Baltimore had folded their arms, after drawing the Western trade to the present terminus of the Baltimore and Ohio railroad at Wheeling, and awaited the development of the hostile plans adverted to, what would have been her situation at this time? What proportion of her present tonnage, thanks to the incompleteness of these Northern connections, would have been secured to her?—Would her merchants now rejoice in the busy trade which gives animation to her streets? With a better and more advantageous line, would Philadelphia have made no effort to share it? Is her wealth nothing? Are the commercial facilities she holds out nothing? Is it not as certain as demonstration, that the vast expenditures Baltimore has made would sooner or later have ended in dis-appointment? Philadelphia long ere this would have been appropriating the lion's share of the trade which Maryland capital and Maryland enterprise have drawn to the terminus of the Baltimore and Ohio railroad at Wheeling. Nothing has tended to avert so ruinous a result but the steady progress of the Parkersburg road, and the certainty of arresting at a point ninety-two miles below the present terminus of the Baltimore and Ohio railroad, the trade which at Wheeling the city of Baltimore could only hope to share with Philadelphia and the North.

The President and Directors of the Northwestern Virginia railroad company cannot for a moment doubt that these views must sooner or later control the action of the public authorities and business men of the city of Baltimore. Virginia and Maryland are alike interested in the early completion of this road, and it must soon be determined whether the trade of the West, so much coveted by States less advantageously situated, shall be lost to both.

The following extract is taken from the Chief Engineer's Report, on the subject of western connections:

The Marietta and Cincinnati Railroad has now reached Athens, and, as intimated in my last annual report, its attainment of that point has preceded the opening of this road to Parkersburg.—Much, it is true, remains to be done upon that road west of Athens, in order to put it into proper running order for its business, but it may be expected that with an application of the entire resources of the company to that object, between now and the time of opening this road, it may be accomplished. If so, then when Parkersburg is in communication by rail with Baltimore from the east, and Cincinnati with Athens from the west, the vacant space will be but thirty-five miles upon the line of the Hocking Valley road, by which the connection

must be made as the direct and proper route between the points to be united. The administration of the Marietta and Cincinnati Railroad Company indeed has thus far been averse to any connection but one via Marietta, involving a ferry twelve miles up the river towards Wheeling, and a loss of sixteen miles of distance between Baltimore and Cincinnati. The administration referred to has endeavored to prevent the construction of the Hocking Valley road, east of Athens, by every means in its power, thus testifying its sense of the superiority of this line over the one leading across the ridges of the country to Marietta. They have indeed proceeded so far as to procure the passage of a law which, if unrepealed (as it is expected to be at the adjourned session of the Ohio Legislature,) would make it necessary that the assent of Athens and Washington counties should be procured for the construction of the Hocking Valley road through their territory. Of the vote of Athens county in favor of the Valley road there can be no doubt, as it is the preferred route of her people, on account of its more central and accessible position, and greater length of line, through their line. In Washington county the only part of the line is the two miles next to the Ohio river, —and this will be built by the individuals owning the land, if the law be not repealed or set aside, —or in the failure of all these alternatives, it will be easy to avoid Washington county altogether in the approach to the river. The prospects of the Hocking Valley Railroad are not, therefore, in any degree, impaired by this legislation, and the efforts for its early construction will not be in the least relaxed on that account. It has indeed excited a degree of indignation on the part of the Athens county population, and that of the whole valley, which has made them more than ever determined to have the road constructed upon the route which they prefer, and which nature has indicated as the proper one. Meanwhile the Marietta and Cincinnati Railroad is endeavoring to press forward its line to Marietta from Athens.—The seven miles of this line, from Athens to Warren, is in the valley and upon easy ground, and will be quickly and cheaply built, and is common to the route of the valley road. Thence to Marietta the thirty-two miles is over a very broken country, upon which the proper construction of the road, even with the amplest resources, must be a work of time. It remains to be seen whether and when this line can be accomplished. I have little confidence in the promise that it will be opened next November, as announced to the public; but whenever it be, the North-western Virginia Railroad will at least have an alternative extension to Cincinnati, upon a route which, however circuitous and sure to be superseded by the direct and proper line of the Hocking Valley, may answer the temporary purpose of a through line.

Such is the present condition of the western railway connections of the North-western Virginia Railroad—a gap of about thirty-five miles, of which eight miles to Walker's Crossing will be a steam ferry upon the direct course—an easy road of but twenty miles to build thence up the Hocking Valley to Warren's, and the Marietta and Cincinnati Railroad, seven miles thence to Athens up the same valley. According to a recent carefully revised estimate of the twenty miles between Walker's and Warren's, it will cost but \$550,000 to complete it ready for the trains—the right of way has been secured at prices amounting to a donation—the people of the valley are prepared to make a liberal subscription to the stock—and an amount of aid from other interests of but \$150,000 will justify the placing of it at once under contract, to be completed within a year or fifteen months from its commencement. The Marietta and Cincinnati Railroad will find itself compelled to give the connection at Warren's—but should that be successfully resisted, then it ensures the immediate extension of the road up the beautiful and smooth valley of the Hocking to Lancaster, where, by the Cincinnati, Wilmington and Zanesville line, a route to Cincinnati will be provided, which, although longer than the line through Chil-

licothe, will be of superior grades and curves, and can be run in nearly the same time.

GENERAL ACCOUNT.

Capital stock paid in.....	\$413,583
Loans, Nos. 1 and 2, guaranteed by the city and the B. & O. R. Co.....	2,500,000
Loan No. 3, third mortgage bonds issued and hypothecated.....	1,006,700
Loan No. 4, note held by B. & O. R. Co.....	210,000
Loan No. 5, advanced by citizens of Parkersburg.....	20,000
Bills payable.....	450,857
Other obligations.....	123,516
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	\$4,729,656

Cost of road—expended to close of last fiscal year.....	\$2,528,871
Expended this year—Cost of road.....	\$109,048
Graduation.....	482,384
Bridge masonry.....	59,384
Railroad track.....	388,451
Bridge superstructure.....	55,051
Other purposes.....	95,369
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	1,189,637
Interest.....	281,851
Hypothecated bonds.....	678,000
Miscellaneous.....	58,297
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	\$4,729,656

Thomas Swann is President; Benjamin H. Latrobe, Chief Engineer; and P. G. Van Winkle, Secretary.

The Iron Trade.

The production of iron in the United States for the year ending June 30, 1850, as estimated by the last census, was as follows:

	Tons.	Value.
Pig iron.....	564,755	\$12,748,777
Castings.....	322,745	25,108,155
Wrought iron.....	278,044	16,747,074
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Total.....	1,165,544	\$54,604,006

The number of establishments operated in this production was 2190, employing about \$50,000,000 of capital, and a little more than 57,000 hands.

The value of the product of some of the largest producing States was as follows:

	Pig.	Cast.	Wrought.
Massachusetts.....	\$295,123	\$2,235,635	\$428,320
Connecticut.....	415,600	981,400	667,560
New York.....	597,920	5,921,980	1,423,968
Pennsylvania.....	6,071,513	5,354,881	8,902,907
Ohio.....	1,255,850	3,069,350	1,076,152
Maryland.....	1,056,400	685,000	771,431
Virginia.....	521,925	674,416	1,254,995
Tennessee.....	676,100	264,325	670,618
Missouri.....	314,600	336,495	68,700
Kentucky.....	604,037	744,316	299,700

The amount of capital employed in the above States in 1850, was the largest in Pennsylvania, being between nineteen and twenty millions of dollars. In New York it was about \$6,300,000; Connecticut, \$1,800,000; Massachusetts, \$1,578,850; Ohio, \$4,200,000; Missouri, \$850,000, &c.

The amount of 1,165,544 tons, valued at \$54,604,006, being the total production of iron in a single year within the limits of the Union, is a large yield in this one article of our manufactures. Fifty-four millions of dollars is enough to pay Uncle Sam's yearly expenses, were they brought within the limits which they should be and would be if all the drones and treasury speculators could be turned out of office, and faithful men put in their places. But this yield is only as a grain of sand on the sea shore, when the whole iron resources of the Union are considered. The recent geological survey of Missouri, now one of the smallest iron producing States, sets forth that there is ore enough of the very best quality, within a few miles of Pilot Knob, and iron mountains, above the surface of the valleys, to furnish one hundred million tons per annum of manufactured iron for the next two hundred years! And to work this inexhaustible quantity of ore, that States

Net surplus. \$380,628.45

This result shows an increased surplus of \$65.

000, after paying 22 per cent. in dividends and all expenses and interests properly chargeable to income account.

The gross earnings for the past year exceed the estimate made in June, 1855, by over \$300,000.— This increase may be accounted for in a great measure by the high prices paid for produce during the year, and the great emigration to new Western States and Territories.

The cost of operating the road has been a trifle less than 46 per cent., although the severity of the winter, and the great falling off of business in January, February and March, made it probable that the per centage would be much greater. That account includes about \$53,000 expended for new iron, ties, chairs, spikes, etc., for renewing the track. About \$7,726 have been credited track repairs, for refuse iron on hand for sale, the remainder of the iron taken up has been repaired, and re-laid in repairs and in side tracks, etc., except such portion as is now on hand to be used for that purpose.

A new and much more permanent and expensive bridge has been constructed across the North Branch of the Chicago river, at a cost of \$11,000, and several substantial stone culverts have been substituted for the wood culverts originally constructed on part of the line. These have all been charged to the current operating expenses.

The income account was charged, on the 1st of May, with the purchase of \$40,000 of the second mortgage bonds of this company, at 87½ cents on the dollar, and the sinking fund credited for the same at par. The forty bonds have been "cut and cancelled," in accordance with the terms of the mortgage, and lodged with the Trustee. The amt. of bonds registered by the Trustee on the 1st of May last, was \$500,000.

The Directors beg leave to call your attention to the recent passage by Congress of the "Iowa Land Bill." This appropriation being in part for roads terminating at such points on the Mississippi river as to be feeders to your roads, will, it is believed, tend to increase the value of your stock.

We do not deem it necessary to recapitulate the many advantages this road will derive from its numerous connections and arrangements with other roads and companies, but respectfully refer you to the report published a year since.

In view of the depreciated value of agricultural products since the termination of the European war, and the probable effect upon the freight traffic of your roads, we do not propose to estimate the revenue for the current fiscal year over that of the past year. Say.....\$2,315,000.00

Less for operating expenses and renewal, say.....\$1,157,500.00
Int. on bonds, etc..... 220,000.00
1,377,500.00

Net, say.....\$937,500.00
Add present surplus..... 380,628.45

Showing a net balance, May 1, 1857, of.....\$1,318,128.45

From the Chief Engineer's report we learn that several purchases of land in and near Chicago have been made during the year, in order to accommodate the company's rapidly growing business. Additional sidings have also been laid down. At Oak Ridge a new water house, and an engine house capable of holding twelve engines, have been built. The company own 800 acres of land in and around this point, and it is considered advisable to locate their principal machine shops, &c., there. A passenger house is needed at Belvidere, and another at Rockford. Fifteen miles of the second track, from Chicago to Cottage Hill, have been laid, and ten have for some time been in constant use. The other five will be when gravelled. The second track is graded to Babcock's Grove. From this point to the Junction,

the work is under contract. A new line, 1½ miles long, to avoid the heavy curvature, is being constructed between East Du Page river and Danbury, saving 500 feet in distance and 107 degrees of curvature.

The Chicago, Fulton, and Iowa line was opened from Dixon to Sterling on the 22nd of July last; from Sterling to Morrison, September 23rd; and through to Fulton on the 16th of December. The track is in good condition, and has all been gravelled, except about 15 miles, which can easily be done. There are 55 miles to be fenced, for which about half the materials have been provided. The remainder can be contracted for during the season. At all the stations for watering purposes good tank houses and wood-sheds have been provided. At Sterling an excellent freight house, 40x110, has been erected; also a fine passenger house, 30x36, and a brick engine house, 75x200, at Fulton. The company here own 3,300 feet of river front, on 300 feet of which a permanent stone levee has been constructed, where steamboats can land at all stages of water.

A connection with the St. Charles Air Line Branch has been made at Oak Ridge, 8½ miles from Chicago, so that trains can now pass from the main line at that point to the extensive depot grounds on the South side of Chicago river. These comprise upwards of 40 acres, with a river frontage of 1,600 feet, and are owned by the company in common with the Fort Wayne and Chicago Railroad Company. By means of a draw-bridge recently constructed across the river, a connection is formed with the Illinois Central, Chicago and St. Louis, and Michigan Central Railroads. A similar connection can easily be formed with the Michigan Southern road.

The length of road in operation is 249 miles, and of second track laid 16½ miles. There are 36 miles of side track, of which 8½ are in the city of Chicago. Total, 301½ miles. About three miles of the side track are of strap iron.

The present equipment consists of 52 locomotives, 29 first class and 12 second class passenger cars, 7 baggage, 794 freight, 111 gravel, and 97 hand cars. This is about \$180,000 in excess of previous estimates. The road is now well equipped. Some coal-burners have recently been ordered from Eastern shops.

The total expenditure to date has been \$7,742,613. This is considerably in excess of last year's estimates. At that time, however, the St. Charles and Mississippi Air Line had not been purchased.

The excess in cost of road and equipment has arisen from the following sources:

For Ch. St. Ch. & M. A. L. R. R., say.....\$567,000
For additional furniture..... 180,000
For discount on bonds and interest..... 93,000
For depot grounds and buildings..... 46,000
For additional work at Fulton..... 40,000
For graveling, omitted in estimate..... 40,000
For buildings on the line and extra side tracks..... 23,000

Making a total of about.....\$989,000

On the second track, the grading of new road to straighten the line from Chicago to the Junction, will increase the estimate about \$40,000. Of the new line from Cottage Hill to Elgin, the same reasons exist for building it as did last year, and the estimates for it will remain the same.

The following is a statement of the Company's

GENERAL ACCOUNT.

<i>Construction:</i>	
Main Line.....1.....	\$2,110,991
Beloit Branch.....	409,272
Chicago, Fulton and Iowa line.....	2,188,938
Second Track.....	188,250
Depot grounds and buildings.....	788,440
Equipment.....	1,175,461
C. St. C. and M. A. L. R. R. Co., (including interest on payments assumed).....	548,384
Expended on grounds and track of that Company.....	18,499
Interest to May 1, 1855.....	106,383
Discount on bonds, Incidentals, Exchange and Interest.....	212,905
	\$7,742,614

Cott. Hill and Elgin Line, preliminary survey for straightening..... 268

Materials:
Strap Iron, depreciated T Iron, Timber etc., on hand..... 28,225
Shops—Tools, Machinery, and Materials on hand..... 150,254
Real Estate; 940 acres acquired with Charter..... 20,202
Miscellaneous lands..... 2,736

Beloit and M. R. R. Co. Bonds \$170,000—cost..... 121,003
Beloit and M. R. R. Co. Stock 40 shares full paid..... 2,000

Fox River Valley Railroad Company Bonds..... 88,000
Bonus Stock, issued August 10th, 1854..... 686,430
Bills receivable and debts due from other companies..... 31,819

Operating Department:
Wood on hand..... 192,462
Due for Mail Service..... 7,186
Due from other companies..... 10,183
Balance due from Stations for back charges and freight on goods in warehouses, etc..... 91,627
Henry Tucker, Treasurer..... 35,737

\$9,210,715

Capital Stock, (including \$686,430 Bonus)..... 5,441,500
Bonds—Second Division..... 3,500
First Mortgage..... 1,937,000
Second Mortgage..... 760,000
Litchfield Bonds..... 133,831
Bills payable and Floating Debt..... 438,238
Convertible Certificates, outstanding..... 32,715
Unconvertible " (11th dividend) outstanding..... 944
Unclaimed Dividends..... 11,811
Sinking Fund..... 40,000
Income account, surplus this date..... 380,628
Coupon account, due May 1, 1856..... 30,549

A statement of the business done during the year shows that the number of miles run by freight and passenger trains was 824,833, by other trains of their own, 157,199, and by the Chicago, Burlington and Quincy on their line 101,196, making an aggregate of 1,083,210. The total mileage by all the trains was 40,918,166. Number of passengers carried one mile, 30,791,207. Earnings per mile run, on freight and passenger trains, \$2.50 per mile; working expenses for do. \$1.148, making the per centage of the latter to earnings \$45.935. Cost per ton per mile, assuming one passenger equal to one ton, \$1.48; cost of maintenance of way per mile, \$17.40; cost of repairs to engines and cars per mile \$13.79; cost of fuel per mile run, \$22.54; gross earnings per mile of road in operation, \$9,960.37; net earnings per mile, \$5,385.13.

The principal officers for the year are—John B. Turner, President; Wm. H. Brown, Vice President; Philip A. Hall, Acting Superintendent; W.

M. Larrabee, Secretary, and Henry Tucker, Treasurer. The Directory consists of Messrs. John B. Turner, Walter N. Newberry, Charles Walker, Wm. H. Brown, Benj. W. Raymond, George Smith, Hugh T. Dickey, Flavel Mosley, Orrington Lunt, Jason McCord—all of Chicago; Thomas C. Robertson, Rockford; Dexter A. Knowlton, Freeport, and Chas. S. Hempstead, Galena. Date of last annual meeting, June 4th, 1856.

Growth and Prospects of Toledo.

Whoever has watched the growth of lake towns, especially of Cleveland and Chicago, will be surprised that Toledo has been so backward in comparison with them. Situated at the upper end of Lake Erie at the outlet of the Wabash and Miami Canals, with the whole Wabash Valley behind it, and all of Northern Indiana and North-western Ohio on either side, Toledo is, in fact, one of the very best situated towns for commerce and future growth in the lake country. Why then is it not larger? The reasons were sufficient, however unfortunate for the time being they may have been. In the great speculative fever of 1836, when everybody ran mad, the Maumee River, from above Toledo to the lake, was laid out in a succession of paper towns, in each one of which lots were sold at enormous prices.

Of course, the town could not extend over ten miles in length, and the consequence was that efforts and population enough to have begun favorably a large city, were scattered over the site of a dozen towns. The result was a want of concentration and a discouragement of the settlers; connected with this were other difficulties arising from the non-settlement of the country around. All these obstacles are now removed, and Toledo has commenced a career of growth and prosperity which promises to equal that of any of her sisters on the lakes.

The following are the exports of grain from the three ports of Cleveland, Detroit and Toledo, for the year 1855:

	Toledo.	Detroit.	Cleveland.
Wheat, bushels.....	1,641,650	787,830	586,998
Corn ".....	3,863,924	629,895	323,403
Total.....	5,505,574	1,367,725	860,397

The commerce of Toledo, in grain, already exceeds that of any town on the lakes except Chicago. Besides the articles above enumerated, Toledo exports immense quantities of cattle, hogs, flour, whiskey, wool, and various other articles of domestic produce.

For reasons we have already given, the growth of the population has, by no means, kept pace with that of commerce. From the following table, however, it will be seen that it is now rapidly growing:

In 1830.....	1,000 inhabitants
In 1840.....	1,222 "
In 1850.....	3,819 "
In 1853.....	6,512 "
In 1855.....	15,000 "

Recently there is a concentration of favorable influences which will swell the rising wave of population. The back country is rapidly settling.—Seven hundred miles of canal terminate there. Railroads east, west and north traverse the city. Within the last winter the Wabash Valley Railroad has been opened to the heart of the best quarter of Indiana. In a few days it will be open to Lafayette, and thus open up one of the richest avenues of trade in the west.

We speak thus freely of Toledo because many of our citizens are interested in it, and because by the Dayton and Michigan Railroad, we shall soon be most intimately connected with it. Our great West is not less great than ever, and our cities must and will grow with its growth and strengthen with its strength. We are but on the verge of that great development which will arise, as we see filled up with countless millions the fertile valleys and plains of the magnificent west.

Toledo has been waiting a little only to gather

up her strength, and share with her sisters of Chicago and Cleveland in the commercial spoils of the western giant. When the Dayton and Michigan road is finished, it will only be about six hours from Cincinnati to Toledo. We shall be near neighbors, nearer much more than to Cleveland. But yesterday Toledo was in the woods. Tomorrow it will be surmounted by broad fields of ripening grain. A little while ago, and scarcely a vessel entered its harbor; now hundreds are there to carry off the heavy burden of surplus crops.

Thus, its march is onward; and like other towns which have become cities, it will soon loom up with towering spires and long docks and great depots, the busy mart of commerce, navigation, enterprise and industry, sitting among the queens of the lake.

Railroad Earnings for May.

We annex a statement of the receipts of the various railroads for May, and for five months of the present year:

	1856.	1855.	Increase.
Baltimore and Ohio.....	\$437,466	\$351,605	\$85,862
Balt. and Ohio, Wash. Branch.....	41,851	34,211	7,640
Chic. and Rock Is.....	152,656	128,990	23,666
Cleve., Columbus and Cincinnati.....	114,403	97,640	16,763
Cleve. and Pittsb'g.....	63,739	55,838	7,901
Cleve. and Toledo.....	91,757	76,965	14,792
Erie.....	617,664	475,128	142,536
Galena and Chicago.....	228,797	214,106	14,691
Harlem.....	90,962	82,959	8,003
Hudson River.....	150,716	130,448	20,268
Illinois Central.....	214,434	121,434	93,166
Ind. and Cincinnati.....	40,114	30,895	9,219
Ind. Central.....	36,547	27,111	9,436
La Crosse and Mil.....	41,476	.....	.....
Macon and Western.....	22,820	22,617	203
Mil. and Miss.....	61,661	66,944	*5,283
N. Y. Central.....	696,913	638,381	68,532
N. Y. and N. Haven.....	77,393	72,200	5,193
Nor. and Worcester.....	29,592	27,942	1,650
Ohio and Penn.....	86,898	88,782	*1,884
Penn. Central.....	458,586	325,711	127,875
Reading.....	349,512	449,694	*100,182
Stonington.....	21,985	22,571	*586
Wis. Lake Shore.....	22,020	.....	.....

	1856.	1855.	Increase.
Balt. and Ohio.....	\$1,656,576	\$1,514,242	\$112,334
B. and O. Wash'n Branch.....	183,704	166,622	15,079
Chic. and R'k Is.....	526,106	455,688	70,418
C. C. and Cin.....	.....	.....	.....
C. and Pittsb'g.....	.....	.....	.....
Cleve. and Tol.....	451,437	385,021	66,416
Erie.....	1,996,871	1,750,807	246,564
Gal. and Chic.....	740,372	685,004	55,368
Harlem.....	428,043	423,831	4,212
Hudson River.....	945,027	884,000	121,027
Ill. Central.....	795,276	444,267	351,009
Indianapolis and Cincinnati.....	194,572	148,068	46,504
Ind. Central.....	.....	.....	.....
La Crosse and Milwaukee.....	.....	.....	.....
Macon and West'n.....	141,925	134,385	7,540
Milwaukee and Mississippi.....	194,127	189,085	5,042
N. Y. Central.....	2,765,479	2,547,806	218,173
N. Y. and New Haven.....	353,416	313,823	44,593
Penn. Central.....	2,181,295	1,548,285	632,010

*Decrease.

North Iowa Railroad.

At a meeting of the stockholders of this company held in Dubuque, Iowa, June 5th, the following gentlemen were elected as officers for the ensuing year:

Robert McCabe, President; L. H. Langworthy, Vice President; M. Mobley, Treasurer; D. S. Wilson, Secretary. Lincoln Clark, F. V. Goodrick, Henry A. Wiltsie, Wm. J. Barney, George Greene, Joseph Williams, D. O. Finch, E. Stimson, and Jesse Williams, Directors.

Railroads in Ohio.

The annexed statement, showing the taxable property of Ohio, in 1850 and 1855, will serve to give some idea of what her railroads have done in five years only;

In 1850, before completion of railway system—	
Lands.....	\$266,751,103
City and town lots...	74,637,785
Personal.....	98,487,502—\$439,876,840

In 1855, after completion—	
Lands.....	\$432,261,785
City and town lots...	145,596,754
Personal.....	283,018,815— 860,877,854

The number of acres of land subject to taxation in 1850.....		23,981,350
In 1855.....		25,220,083
Average taxable value per acre in 1850.....		\$11.11
1855.....		17.15

In the former valuation a great part of the property then represented was doubtless created by the same influence. There are still large sections of the State in which the Railroad system was but partially completed in 1855, more particularly in the south-east and north-west. Five years more will lay down a net-work of great lines across these sections extending in every direction. Let it also be borne in mind that in 1855 the country was but emerging from a wide spread financial prostration. With ordinary prospects for the next five years Ohio will, in 1860, foot up to over twelve hundred million dollars, and other Western States will advance in proportion.

Cleveland and Pittsburg Railroad.

A paragraph which recently appeared in the *Stenbenville Herald* states that, at a late meeting of the stockholders, it was decided to have this road completed, stocked, and ready for business, by the 1st of August next.

Camden and Amboy Railroad.

The annual report of the Camden and Amboy Railroad, and Delaware and Raritan Canal companies, shows the magnitude of their operations and the immense increase of business for the last twenty years; averaging in every term of five years 230 per cent.; at the same ratio of increase it will be, in 1860, 165,067 tons, in 1865, 379,630 tons, in 1870, 873,151 tons, and in 1875, 2,008,247 tons.

The increase of 1855 over 1851 is nearly 100 per cent., caused by the opening of the Belvidere and Flemington roads, the real effect of whose completion is only visible in the last year.

The gross receipts of the companies for 1855 were \$2,017,727.16. The disbursements, \$1,923,723.33. After paying a dividend equal to twelve per cent. on three millions of capital and other expenses, there still remains a surplus of \$94,008.83, or six per cent. on over a million and a half of dollars. The expenses of the railroad are about 58 per cent. of the receipts, and of the canal less than 27, thus leaving 15 per cent. clear profit. The revenue of the State in 1855 from these works was \$132,588.75.

All excepting six miles of the road has been relaid with heavy rail. The straight line between Dean's Point and Trenton is nearly completed.—One thousand tons of rails will be required during the present year to replace the original rails, and five hundred tons of rails for the second track of the branch road from Bordentown to New Brunswick. On the canal the new system of steam towing introduced by the company has removed all complaints by the boatmen, and the banks, wood-work, masonry, and the work generally, were in complete repair upon the opening of navigation.—The canal appears to be in a highly prosperous condition, its receipts being \$515,939.59 the past year, and its expense is only \$138,638.29. No less than 1,356,000 tons of coal passed through the canal in 1855.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	90,797	6	65
Androscog. & Kennebec	65	642,343	1,473,080	2,245,020	190,006	none	14	6
Kennebec & Portland	66	1,114,725	1,661,236	2,470,600	270,214	112,467	6	90
Portl., Saco, & Portsm'th	51	1,367,000	119,237	1,486,237	230,224	120,834	6	90
Boston, Ouc. & M'treal	93	1,808,093	1,059,512	2,771,310	330,221	145,646	2	78
Cheshire	53	2,085,925	899,813	3,179,687	330,919	136,454	2	78
Oncore	35	1,500,000	8,242	1,412,673	370,529	138,299	2 1/2	42 1/2
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	42 1/2
Conn't & Passumps. Riv.	81	1,048,145	787,608	1,780,062	162,677	55,173	none	---
Norfolk & Burlington	120	2,233,376	2,062,396	5,878,428	344,971	140,758	none	---
Vermont Central	117	5,000,000	3,550,236	8,463,366	480,119	214,758	6	70
Boston and Lowell	27	1,830,000	325,635	2,185,599	820,754	440,377	6	70
Boston and Maine	83	4,076,974	150,000	4,179,535	864,426	339,000	6	70
Boston and N.Y. Central	74	2,240,300	1,518,671	3,483,139	69,917	7,740	6 1/2	70
Boston and Providence	65	3,160,000	359,132	3,677,154	158,071	219,680	none	6 1/2
Boston and Worcester	68	4,500,000	655,428	4,855,428	1,008,004	404,461	6 1/2	82 1/2
Cape Cod	47	681,690	280,595	997,252	119,221	65,527	5 1/2	43
Connecticut River	52	1,691,110	273,241	1,802,244	268,563	103,787	4 1/2	43
Eastern, Mass.	60	2,883,400	2,947,737	4,621,016	647,181	305,998	44 1/2	71 1/2
Fitchburg	67	3,540,000	153,700	3,765,998	681,163	225,071	---	---
North Eastern	30	800,212	225,555	993,521	In progr.	---	---	---
N. Bedford and Taunton	21	600,000	none	633,968	138,491	55,533	6 1/2	83 1/2
Old Corry and Fall River	87	3,015,100	292,650	3,362,949	284,726	97,313	6	92 1/2
Vermont and Mass.	77	2,232,541	1,033,670	3,206,727	284,726	97,313	6	92 1/2
Western, Mass.	155	5,150,000	5,968,420	10,495,906	633,013	245,760	2	45
Worcester and Nashua	46	1,141,000	203,665	1,51,271	294,750	75,760	2	73
Provinc. and Worcester	43	1,510,020	333,461	1,806,690	311,430	138,057	10	21
Hartford and N. Haven	72	2,359,000	939,000	3,313,939	730,012	362,799	10	21
Hartf., Prov. and Fishkill	120	1,845,610	2,090,124	4,090,869	268,665	119,011	none	---
Housatonic	110	2,000,000	474,177	2,424,065	330,792	15,351	none	---
Naugatuck	57	1,031,800	573,995	1,577,167	238,266	98,877	4	2
N. York and N. Haven	62	3,000,000	2,376,808	5,376,808	884,306	335,877	2 1/2	32
N. Haven and N. London	50	738,258	738,165	1,450,315	88,007	30,318	none	---
N. London, W. & Palmer	66	500,000	1,073,673	1,584,363	124,044	66,331	none	---
Norwich and Worcester	66	2,122,300	873,439	2,995,739	304,226	88,458	2 1/2	32
Albany Northern	32	439,005	1,625,098	1,840,695	117,716	9,904	---	---
Black River and Utica	35	643,330	317,559	974,323	172,476	66,333	none	---
Buffalo, Corn. and N. Y.	100	1,487,871	1,501,183	2,819,096	172,476	66,333	none	---
Buffalo and N. Y. City	92	798,439	2,597,949	3,401,865	298,392	131,898	none	---
Buffalo and St. Line	99	1,300,000	1,040,000	2,484,364	679,740	335,763	10	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,606	---	---
Canandaigua & Niagara F's	98	1,315,000	2,279,854	3,495,832	135,453	48,649	none	---
Cayuga & Susquehanna	35	697,000	508,689	1,187,562	182,087	60,946	none	---
Hudson River	144	3,758,486	9,250,362	12,737,898	1,812,087	603,946	33 1/2	26
Long Island	95	1,875,145	668,949	2,555,986	301,790	110,492	9 1/2	92 1/2
New York Central	134	24,154,860	14,462,742	32,523,913	6,663,581	3,162,126	8	92 1/2
New York and Erie	164	10,723,965	25,126,669	33,439,431	5,434,903	2,927,118	none	---
New York and Harlem	133	6,017,960	4,069,769	8,768,203	1,635,577	724,128	none	---
Northern, N. Y.	118	1,633,022	4,408,874	6,470,714	620,153	136,754	3 1/2	17 1/2
Oswego and Syracuse	35	399,000	216,631	723,683	120,540	69,982	3 1/2	17 1/2
Potsdam and Watertown	29	407,200	294,189	749,883	119,697	62,800	7	---
Rensselaer & Saratoga	25	610,000	140,000	590,423	241,190	21,089	none	---
Saratoga and Whitehall	45	500,000	395,000	719,900	179,900	22,089	none	---
Syracuse & Bingham'n	80	768,389	1,678,804	2,272,777	169,494	22,508	none	---
Troy and Boston	27	457,830	737,079	1,109,522	166,363	55,184	3 1/2	12 1/2
Watertown and Rome	97	1,370,378	700,979	2,068,085	404,374	172,474	3 1/2	12 1/2
Belvidere Delaware	64	1,000,000	1,019,000	2,619,000	161,865	76,534	12	125
Camden and Amboy	94	8,000,000	1,407,200	8,636,523	2,017,127	961,941	12	125
Camden and Atlantic	60	569,520	1,622,131	1,729,642	122,417	50,080	10	122
New Jersey	30	3,482,850	690,000	4,310,011	601,614	600,747	10	122
New Jersey Central	63	2,900,000	2,266,175	3,683,149	333,728	171,603	6	---
Morris and Essex	53	1,167,505	376,000	1,636,560	229,341	90,267	6	---
Alleghany Valley	44	1,337,567	842,564	1,988,817	Recently opened.	---	---	---
Cataw. W. & Eri.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---
Omberland Valley	56	1,099,500	12,211	1,191,633	166,881	66,994	---	---
Del. Lack. & Western	109	3,051,622	3,884,702	6,922,667	528,911	269,263	10	---
Erie and North East	20	800,000	150,000	750,000	69,536	63,335	10	---
Phila. & Sunbury	33	600,000	1,200,000	1,348,812	69,536	63,335	10	---
Little Schuylkill	28	2,606,100	546,222	3,407,651	353,301	256,930	9	---
Northern Penn.	19	2,300,855	731,492	3,267,078	---	---	---	---
Pennsylvania	216	12,356,525	7,519,096	18,434,489	3,533,333	1,829,277	6	95 1/2
Phil. and Reading	96	11,030,309	7,438,900	19,004,180	4,321,793	2,693,916	10	91 1/2
Phil. Will. and Baltimore	98	6,312,805	3,034,003	7,979,486	942,449	371,124	43	---
Phil. Germ. & Norrist'n	38	899,350	376,800	1,274,150	206,981	113,443	9	---
Pittab. and Connelleville	147	1,339,661	111,493	1,369,630	In progr.	---	---	---
Sunbury and Erie	209	2,037,740	262,886	2,075,650	In progr.	---	---	---
Williamsport and Elmira	78	1,105,000	212,364	3,404,45	508,500	258,600	5	58 1/2
Baltimore and Ohio	283	13,500,000	9,670,491	23,031,507	3,711,463	1,001,090	8	---
Washington Branch	41	1,650,000	25,000	1,650,000	309,229	124,981	6	---
Northern Central, Md.	84	1,860,000	2,630,000	5,444,138	658,427	282,182	---	---
Manassas Gap	165	2,800,000	none	In progr.	---	---	---	---
Orange and Alexandria	97	1,457,500	638,622	2,754,647	211,505	111,368	---	---
South Side	123	1,371,700	1,439,012	2,739,382	123,466	69,710	none	---
Pittab. & Steubenville	32	1,221,277	250,000	914,699	In progr.	---	---	---
Virginia Central	138	2,800,000	1,051,248	4,184,616	379,396	172,391	none	---
Virginia and Tennessee	149	2,500,000	2,969,780	5,469,780	255,920	128,329	---	---
Richmond and Danville	127	2,000,000	1,200,000	3,200,000	316,309	144,602	---	---
Richmond & Petersburg	22	685,000	272,086	1,060,495	139,438	47,008	none	---
Richd. Fred. & Potomac	130	1,000,000	730,506	1,708,169	232,172	120,212	7	---
Petersburg and Roanoke	63	769,000	168,502	1,009,116	263,874	123,661	4	---
North Carolina	228	4,000,000	4,235,000	Recently opened.	---	---	---	---
Wilmington & Manchester	171	1,070,775	1,373,989	2,330,877	339,800	151,064	none	---
Raleigh and Gaston	97	973,300	120,573	1,135,451	173,923	103,392	2 1/2	---
Charlotte and S. Carol.	109	1,201,000	830,000	1,719,045	291,219	138,876	6	---
Greenville & Columbia	165	1,293,484	968,800	1,999,000	214,845	908,774	---	---
South Carolina	203	4,188,020	2,731,545	7,133,545	1,585,991	883,402	9	---
Atlanta and La Grange	87	719,842	225,000	1,092,222	251,076	161,193	7 1/2	---
Georgia	211	4,156,000	260,991	4,416,991	1,068,202	560,360	7 1/2	---
Georgia Central	191	3,833,140	none	3,833,140	1,280,570	645,774	10	---
Waco and Western	102	1,230,560	167,712	1,647,940	380,802	96,104	10	100
Montgomery & W. Point	110	1,274,000	664,916	1,929,416	249,126	112,624	8	---

U. S. GOVERNMENT SECURITIES.]

Loan, 6 per ct.	OFF'D. Per ct.	ASKED. Per ct.	Loan, 6 per ct.	OFF'D. Per ct.	ASKED. Per ct.
Do. 6 do.	1866-104 1/2	---	Do. 6 do. comp'n.	1868-118 1/2	---
Do. 6 do.	1867-118 1/2	---	Do. 6 do. Tex. ind.	1868-106 1/2	---

STATE SECURITIES.

Maine, 6 per ct.	1870-101	104	Indiana, Can. Loan, 6 per ct.	---	---
Massachusetts, 5 per ct. 1869-97	99	99	Do. do. pref. 5 do.	---	---
Do. 5 stg.	100	101	Kentucky, 6 per ct. 1869-72-104	105 1/2	---
New York, 6 per ct. 1860-62-104	108	108	Louisiana, 6 do. cp. long.	94 1/2	96
Do. 6 do. 1864-65-108	112	112	Maryland, 6 do. cp. 1870-90	106	---
Do. 6 do. 1866-67-108	113	113	Do. 6 do. cp.	---	---
Do. 6 do. 1867-115	119	119	Missouri, 6 do. cp. 1872-87 1/2	87 1/2	87 1/2
Do. 6 do. 1860-61-102 1/2	104	104	N. Carolina, 6 do. cp. 1873-86	86	88
Do. 6 do. 1866-106	101 1/2	101 1/2	Ohio, 6 do. cp. 1866-90 1/2	90 1/2	100
Do. 6 do. 1868-60-100	101 1/2	101 1/2	Do. 6 do. cp. 1869-100 1/2	102	102
Do. 6 do. 1866-106 1/2	106 1/2	106 1/2	Do. 6 do. cp. 1870-101	104	104
Do. 4 1/2 do. 1868-69-64-99 1/2	100	100	Do. 6 do. cp. 1871-102	105	105
Alabama, 5 do. comp.	85	95	Do. 6 do. cp.	86	86
California, 7 do. comp. 1870-84	85	85	Penna., 6 do. cp. 1877-85	85 1/2	85 1/2
Georgia, 6 do. cp. 1872-100	101	101	Do. 6 do. cp. 1877-85	86	86
Illinois Int. Imp. 6 per ct. 1847-105	116	116	Tenness., 6 do. cp. 1877-85	86	86
Do. 6 do. Int. est. 77	84	84	Do. 6 do. cp. 1877-85	86 1/2	86 1/2
Indiana, 6 do. cp. 1866-84	86	86	Do. 6 do. cp. 1877-85	86 1/2	86 1/2

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$388,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	97 1/2	
Bellefontaine and Indiana	800,000	Do. convertible	7	Jan'y, July	"	1866	90	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	85	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	98	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	86	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	70	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	66	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90 1/2	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94 1/2	
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88	88 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	91	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	82 1/2	
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	86	
Lake Erie, Western, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	75	
Little Miami	1,500,000	Do. inconv.	6 1/2	May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	100	100 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96 1/2	
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	95 1/2	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77 1/2	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	92 1/2	
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	85	
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	78	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	73	75 1/2

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83 1/2	83 1/2
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	88	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	98	100
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	97 1/2	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	96	100
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	92 1/2	95
Do. do.	4,851,000	Convertible, Inscription	7	Feb'y, August	"	1871	85 1/2	86
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	100 1/2	101
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	88 1/2	89
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67	67 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	88	88 1/2
Do. (Free Land)	3,000,000	Mfge 345,000 acres priv. 1 share	7	March, Sept.	"	1860	91	92 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	93	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	88
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-68	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	93 1/2
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92	95
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85 1/2	86 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89	89 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100 1/2	100 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	104	106
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	104	106
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	84 1/2	85

CITY SECURITIES.	Int't payable.	Off'd	Asked
New York, 7 per ct. 1857	Feb'y,	100	101
Do. 5 do. 1858-60	May,	98 1/2	98 1/2
Do. 5 do. 1870-75	August, and	94	95
Do. 5 do. 1880	November,	94	95
Albany, 6 per ct. coup. 1871-81	Feb'y, August,	97 1/2	97 1/2
Albany, 6 per ct. coup.	Jan'y, July	97 1/2	97 1/2
Baltimore, 6 per ct. 1879-90	Quarterly	95	97 1/2
Boston, 6 per ct. coup.	April, October	100	101
Brooklyn, 6 per ct. coup. Long	Jan'y, July	100	101
Clev'rd, 7 per ct. op. W.W. 1879	Do. do.	101 1/2	101 1/2
Cincinnati, 6 per ct. coup.	Divers	89	90
Chicago, 6 per ct. coup. 1873-77	Jan'y, July	97	97
Do. 7 per ct. coup. 1880	Jan'y, July	100	100 1/2
Detroit, 7 per ct. op. W.W. 1873-78	Feb'y, August	99 1/2	102 1/2
Dubuque, 8 per ct. op. Long	March, Sept.	101	105
Jersey City, 6 per ct. op. W.W. 1877	Jan'y, July	94	97
Louisville, 6 per ct. op. 1880-88	Divers	79 1/2	79 1/2
Mompha, 6 per ct. coup. 1882	Jan'y, July	70	70

CITY SECURITIES.	Int't payable.	Off'd	Asked
Milwaukee, 7 per ct. coup.	X Divers	87	88
New Orleans, 6 per ct. op. R.R. X	Do.	75	80
N. Orleans, 6 per ct. op. municip. X	Jan'y, July	84	87
Philadelphia, 6 per ct. 1870-96	Jan'y, July	89	89 1/2
Pittsburgh, 6 per ct. coup.	X Divers	72 1/2	74
Quincy, 8 per ct. coup. 1868	X Jan'y, July		
Racine, 7 per ct. coup. 1878	X 10 Feb'y, Aug.		
Rochester, 6 per cent. coup.	X Divers	95	85
St. Louis, 6 per ct. coup. Long	Do.	77	79
Do. do. Municipal.	X Do.	79 1/2	80 1/2
Sacramento, 10 p. ct. op. 1862-74	X Do.	74	75
S.F. & C. 7 p. ct. op. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 10 p. ct. op. 1871	X Do.	84	86
Do. 10 p. ct. pay. N.Y.	X Jan'y, July	102	
Do. 6 per ct. pay. N.Y. 1876	X Do.	69	
Wheeling, 6 per ct. coup.	X Divers	87 1/2	87 1/2
Do. 6 per ct. op. Mun. 1874	X March, Sept.	81	81
Zanesville, 7 do.	X April, October	97 1/2	

Cincinnati Stock Sales,

By KIRK & CHEEVER.

For the week ending June 17th, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2nd Mort. 7 per ct.	64
Ohio & Mississippi, 2nd Mort. 7 per ct.	48
Indianapolis & Cin., 2nd Mort. 7 per ct.	76
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	82
Covington & Lexington, 10 per ct. Income	58
Indianapolis and Cincinnati Dividend	70

STOCKS.

Bellefontaine and Indiana, 35.—Cin., Ham. and Dayton, 57.	
—Col. and Xenia, 83.—Cincinnati & Chic., 6.—Covington and Lexington, 15.—Dayton and Western, 18.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 60.—Little Miami, 90.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 17.—Ohio and Mississippi, 7.—Hillsboro' and Cincinnati, 17.—Peru and Indianapolis, 17.	

Marie & Kanz' Money Circular for the European Steamer of the 25th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, June 24th, 1856.

Our circular of the 16th inst. reported weak prices and indisposition to operate in stocks. The news since received per Cunard steamer *America* inspired new confidence in the undisturbed maintenance of a friendly intercourse between our Government and Great Britain; and this favorable impression being justified by the *Atlantic's* news, with Liverpool dates to the 11th inst., which came to hand yesterday morning, and which seem to hold out well founded hopes that the steps taken by our Government against Mr. Crampton will not even be followed by the dismissal of our representative at the English Court, the stock market immediately felt the influence, and prices advanced rapidly from 1 1/4 per cent., re-acting slightly at the close. The business transacted during the last two days was large, but, with very few exceptions, only for domestic account, the foreign demand for our securities remaining as limited as heretofore. The continued abundance of unemployed capital also contributes largely to the upward movement; and, as the fears of any political difficulties seem to have almost entirely vanished, a greater activity and higher prices are generally expected. State stocks have been tolerably active at improving prices. California 7s, 1870, advanced 3/4; Missouri, 2 1/2; Tennessee, 3/4; Virginia, 2 1/4. City and County bonds without important changes; we note some sales of Chicago and St. Louis and Sacramento 10s, all at a slight reduction. Railroad bonds—Only Illinois Central bonds have been active, showing an advance of 2 1/2; for Erie 1875 bonds; 92 1/2 is bid and none offering. Erie 1871 bonds are in demand at 85, and offered at 86. Railroad Shares—The greater activity has been in Erie, which advanced 3; Reading rose 2 1/2; New York Central, 2; Panama, 4; Harlem, 3/4; Hudson River, 1/4. The Western road stocks were more dealt in than for some time past, and are, without exception, close at higher prices; Cleveland, Columbus, and Cincinnati rose 1; Cleveland and Pittsburgh, 3; Cleveland and Toledo, 3 1/2; Galena and Chicago, 3 1/2; Michigan Southern, 3; Milwaukee and Mississippi, 5; Michigan Central 2 1/2; the latter is quoted ex-dividend.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 25th Inst.

[TRANSLATED.]

NEW YORK, Tuesday, June 24, 1856.

The advices from Europe, which successively reached us during the week, have entirely changed the aspect of our market. The moderate tone of the English Government, and of the press in general, has given increased confidence in the pacific solution of the questions that threatened an interruption of our friendly relations with England, and which had an unfavorable influence. Arriving upon a market favorably predisposed by its healthy situation, as regards money as well as commercial affairs, this news was received in an unequivocal manner; a general activity on the Stock Exchange was the immediate consequence, in which State Railway and fancy stocks participated, occasioning a general and considerable rise in prices. The

securities for permanent investment, City, County and Railroad Bonds, have been but little affected by the general improvement, although signs may be noticed which indicate that they also may soon participate in this revival. State Stocks—Transactions have been large in Missouri 6s at $2\frac{3}{4}$ per cent. advance, also in Virginia 6s at $2\frac{1}{2}$ per cent. advance. Considerable business was done in Tennessee 6s, at a rise of $\frac{3}{4}$, and in North Carolina 6s, at a rise of 1 per cent. City and County Bonds have not given rise to any important transactions. We notice, however, a little more movement in them. There have been sales of Detroit 7s, Chicago 6s, St. Louis 6s, Sacramento 10s, the two last ones at weaker rates. We notice also sales of Des Moines County (Iowa) 8s, and Henry County 8s. Railroad Bonds—At the Stock Exchange there has been a great activity in Illinois Central construction at a rise of $2\frac{1}{2}$ per cent. In New York Central 6s and 7s, and Hudson 1st mortgage, there have been moderate sales. At private sale nothing of importance has taken place. The balance of the Cincinnati, Hamilton and Dayton 2d Mortgage Bonds offered for sale by the Company have not been awarded, the bids not being satisfactory. This circumstance with respect to a security which seems to be safely based, indicates yet a good deal of timidity in taking hold of this class of stocks. Railroad Stocks have, without exception, advanced considerably, varying from $2\frac{1}{2}$ to $4\frac{1}{2}$ per cent. This important rise, as well as a renewed activity of transactions, constitute features in the market. The greater animation prevailed in Erie, Reading, New York Central, and Cleveland and Toledo. There have been considerable transactions in Pennsylvania Coal Co. at $1\frac{1}{2}$ per cent. advance. Money remains very abundant from 5a7 per cent. for loans on call. Business paper 7a9 per cent. European exchanges are less abundant and rates somewhat higher, although the demand has been limited. Principal business in London 109 $\frac{3}{4}$ 110; on Paris, 5.15a5.16 $\frac{1}{2}$.

DE COPPET & CO.

Circular of Robt. Benson & Co., per Arable.

LONDON, May 30th, 1856.

The business of this week has been much interrupted by holidays; nevertheless the prices of nearly all kinds of Securities steadily advanced till yesterday. The last published returns of the Bank of England show an increase both in specie and in the reserve of notes; and the arrival of gold from abroad, since the date of that return (17th May) are upwards of £1,500,000, a large portion of which, it is supposed, has gone to swell the bullion in the Bank. Other circumstances combine also to give confidence to the anticipation of a still farther accumulation of gold.

The Directors of the Bank of England yesterday reduced the rate of discount to 5 per cent. The Joint Stock Banks have lowered their rate of interest on deposits, one per cent.

We last quoted Consols 94 $\frac{3}{4}$ a $\frac{1}{2}$ for money. They gradually advanced till yesterday morning, when they reached 95a95 $\frac{1}{8}$ for money, from which point they declined a little. The announcement of the lowered rate at the Bank of England made them more firm again; and they are quoted to-day at 94 $\frac{3}{4}$ a94 $\frac{7}{8}$ for money, and 95 $\frac{3}{4}$ a $\frac{1}{2}$ for the 10th of July.

In American Securities the transactions have not been numerous. Yesterday those entered into were at lower prices, owing to the intelligence brought from Philadelphia, of the intended recognition of General Walker by the United States Government. Illinois Central Railway Freehold Bonds were 85 $\frac{1}{4}$, and have fallen to 85, 84 $\frac{1}{2}$, and 84 $\frac{1}{4}$. Construction Bonds were dealt in at 80 $\frac{1}{4}$, and are now 79 $\frac{1}{2}$. Shares were $1\frac{1}{2}$ discount, and are $1\frac{1}{2}$ discount. Erie Sinking Fund Bonds, 82 $\frac{1}{2}$ and 82 $\frac{1}{4}$. Michigan Central 1869 Bonds, 94 $\frac{1}{2}$. Pennsylvania Railway 1st Mortgage Bonds, 91 $\frac{1}{2}$. Ohio and Pennsylvania Income Bonds, 78 $\frac{1}{2}$.

In State Stocks transactions have taken place; Pennsylvania 5 per cent. at 73 $\frac{3}{4}$; Alabama Steri-

log at 94; Dollar Bonds, 78 and 80; Kentucky at 90; and Virginia 6 per cent. at 86 and 87.

In the Liverpool cotton market the sales for the week will be about 40,000 bales. Prices are steady without material change. The Manchester market continues dull, and prices are maintained with some difficulty, buyers holding off, unless when tempted by prices below those generally current.

The corn markets are also without much change, the tendency being toward lower prices.

Railway iron can be bought on easier terms. The price is quoted as about £8.5s cash.

Yours truly,

ROBT. BENSON.

American Railroad Journal.

Saturday, June 28, 1856.

Map of the Railroads of the United States.

We have previously, in the columns of the JOURNAL, called attention to a Map in process of construction, and designed to illustrate the railway system of the United States. This map will be finished during the present week; and in course of the next will be exhibited in the Merchants' Exchange in this city for a few days, when it will be taken to Europe, where it will permanently remain.

The compilation of this map was first proposed with a view of displaying it at the great Paris Exhibition of 1855. As the work progressed, it was found impossible to have it completed in season for this object. It was, consequently, thought best not to hasten the work, but to render it much more elaborate and perfect than it could have been upon short notice. This has been done, and we may safely affirm that no work of the kind is so correct, or so well fitted to convey a clear idea of the geography and public works of this country.

The dimensions of the map are about 30 feet by 17. The scale is six inches to the degree. It embraces a complete section of the continent from ocean to ocean, and from the south shore of Hudson's Bay to the mouth of the Rio Grande. The hydrography and topography are laid down from the best authorities. The outlines of the coast are all copied from the coast survey. In reference to the Western portion of the continent, the map contains a large amount of information not shown on any other. Whatever information has been brought to light by the recent numerous exploring parties, appears upon it. Particular attention has been given to what may be termed the political geography of the country. The boundaries of all the States and Territories are well defined. All the important towns are conspicuously laid down, and every considerable one has been given.

But all these matters have been made subordinate to the great object in view, which was to display the railroad system of the United States. All the roads in progress and in operation are laid down, with the proper marks of distinction between the two. A person at a glance, therefore, may take in the whole system. We are so much accustomed to study the geography of the country upon maps of the States, that we fail to get distinct ideas of it as a whole.

A person cannot look at this map without being struck at the vastness of the works which have been accomplished by our people within the last five years. There are now in this country 23,000

miles of railway in active operation, and from six to eight thousand more in an advanced stage of construction. These will soon carry the total mileage to 30,000, a much greater mileage than all other countries can show.

The map has been got up mainly for the use of foreigners. It will remain for permanent exhibition, probably in London. It will afford foreigners a good opportunity to study the geography of this country in connection with our public works; and will, we have no doubt, excite wonder and admiration at what our people have accomplished.

A complete list of the railroads of the country with their correct titles, or names, together with the lengths of their several lines, will be placed on the margin of the map. Other valuable information will be added.

The work has been done entirely with the pen, and only one copy will be made unless upon order. It is proper to say that the map has been executed by Mr. GEORGE SCHACHTER, or under his direction.

Warsaw and Rockford Railroad.

The Warsaw and Rockford railroad is now under contract from Warsaw to Keithsburg, in Mercer Co., a distance of 68 miles. At Oquawka it connects with the Oquawka and Peoria railroad, and it is also under contract from Rock Island to Port Byron, a distance of 18 miles around the upper Rapids of the Mississippi. The grading will be completed the present season, and the ties delivered upon the road. At a meeting of the Directors, held June 18th, the following officers were chosen. S. S. Phelps, President; John E. Johnson, Vice President; L. Andrews, Treasurer; and J. G. Fonda, Secretary.

Rogers' Locomotive and Machine Shop.

The decease of Mr. Thomas Rogers, the managing partner of the firm of Rogers, Ketchum & Grosvenor, in the manufacture of Locomotive Engines, necessarily led to a re-organization of the concern. A joint stock company, incorporated under the laws of New Jersey, takes the place of the old firm. Of this company, Messrs. Jacob S. Rogers, Morris Ketchum, Jasper Grosvenor, Morris K. Jesup and Wm. S. Hudson are the Directors. This company, embracing the surviving members of the old firm, with abundant capital, will continue at the old works the manufacture of Locomotive Engines and other railroad machinery. The new company retain all those parties formerly employed, to whose skill as mechanics, the former reputation of the "Rogers' Engine" was in a great measure due. Mr. Hudson, one of the Directors of the new company, and Superintendent of the Mechanical Department, was for many years first assistant to Mr. Rogers, and is well known to be one of the most skilful and competent mechanics in the country. Under their new organization, the company express the confident belief that the former reputation which has at all times, and under all conditions of the money market, filled their shops with orders, will be fully sustained.

Messrs. Clark & Jesup, of this city, are the agents of the new company for the sale of their engines. We can speak in a very favorable manner of the high standing and business capacity of this firm, and can commend it to the attention of all parties who are wanting any article used on railroads.

Cleveland and Chattanooga Railroad.

This is the name of a very important "Cut-off" for the East Tennessee and Georgia and the Memphis and Charleston lines. At present, passengers proceeding from the one to the other have to deflect from a direct line to Dalton, Ga., losing thereby a distance of some 40 miles. The completion of the Memphis and Charleston with the lines through Eastern Tennessee and Western Virginia, will call for the most favorable connections between the several roads that can be made. The Cleveland and Chattanooga line will be only 28½ miles long, and follows the general course of the Tennessee river between its termini. The President of the East Tennessee and Georgia road, Major Wallace, who is now engaged in building this line, says that but for a tunnel, 900 feet in length, he could have the whole finished within twelve months. By that time the connecting lines are expected to be in operation. The grading and bridging on the East Tennessee and Virginia line (Knoxville to the Virginia State line) are now well advanced; and the assistance recently granted the company by the Legislature of Tennessee, will enable them to progress steadily with their work to completion. All the other lines are in a more advanced condition, except perhaps the link between Lynchburg and Charlottesville, on the Orange and Alexandria road, which the wants of travel will call for as early as it can be constructed.

Texas Western Railroad.

The annual meeting of this company was held in the city of Marshall, Texas, on the 14th of April last. Judging from the number of Resolutions passed (over 40 in number) we should say that the business transacted was of the most important character. Among these we find it stated that the capital stock of the company shall be \$100,000,000, of which no one person is to hold more than \$500,000; that only \$25,000,000 be disposed of, the assessments on this being limited to five per cent., and that "the only expedient (?) for the issue of more shall be an entire exhaustion of all other means and plans;" and that those who have paid on the assessments from two and a-half to five dollars per share, be allowed seven per cent. per annum interest on the same—payable in cash or five per cent. stock, at their option. Lands are held liable to pay all interest on stock. There has been realized from the sale of stock, on which assessments from one and one-tenth to five per cent. have been levied, the sum of \$364,725 in all. An increasing demand for their stock is said to be shown. A resolution in favor of consolidating with the Vicksburg, Shreveport, and Texas, the Cairo, Little Rock, and Union, and the Gains' Landing railroads was adopted, and a committee appointed to confer with the other parties to that effect. It is expected to have the first ten miles, commencing near the city of Marshall, graded as soon as possible. This will be at the least a *beginning*, though not the end of the good work. The meeting seemed to entertain no very favorable feeling towards the city of New York, having ordered "the removal of the deposits" therefrom; in the shape of the company's office with all the "accompanying documents." The Rev. Joshua Starr was appointed to obtain relinquishment of the right of way. An item of \$600,000 of full paid (i. e. five per cent.) stock of the

Atlantic and Pacific Railroad Company, issued in full consideration of Texas Western and Texas and Louisiana Railroad stock, was authorized to bear interest similarly to other stock. The integrity and perseverance, &c. of Robert J. Walker were again endorsed; and a communication received from this gentleman that on the day previous he had purchased one thousand tons of rails at the Montour Iron Works, so that Pennsylvania was about to enjoy the great honor of furnishing the first rails to this magnificent enterprise.

Reading and Lehigh Railroad.

Mr. Lyons, the Engineer on the line of this proposed road, estimates the cost, graded and bridged for a double track, in the most permanent and substantial manner, with single track and 5 miles of sidings laid down, at \$1,079,040. In his report he says that manifold as are the local advantages of this route, and they are rarely exceeded, they almost sink into insignificance when we come to consider the proposed road as a portion of that magnificent highway already completed, or in process of construction, stretching from New York to Council Bluffs, a distance of 1,352 miles, without break of gauge, drawbridge or ferry, except one at New York. This great line will be composed of the following roads, viz:

	Miles.
New York to Easton, N. J. Central railroad, [in operation].....	75
Easton to Allentown, Lehigh Valley railroad, [in operation].....	16
Allentown to Reading, Reading and Lehigh railroad, [to construct].....	34
Reading to Harrisburg, Lebanon Valley railroad [nearly graded].....	53
Harrisburg to Blairsville, Pennsylvania Central railroad, [in operation].....	194
Blairsville to Cleveland, Northwestern, Cleveland and Mahoning railroad, [under construction].....	172
Cleveland to Toledo and Chicago, Southern Michigan and Northern Indiana railroad, [in operation].....	324
Chicago to Rock Island, Rock Island railroad, [in operation].....	181
Rock Island to Iowa City, [in operation].....	55
Iowa City to Council Bluffs, [to construct]..	248
New York to Council Bluffs, unbroken gauge. 1352	

Railroad Employees.

The dividing line between faithfulness and officiousness is one of the most difficult to be drawn. In railroading the public want to be served by men who are vigilant, attentive, polite. At the same time, when it is considered with how many different classes of characters railroad agents come into contact, how decision and promptitude as well as kindness and affability are requisite, it must be acknowledged that comparatively few, combining superior judgment with the proper disposition, can be found. It is quite an easy matter to make stringent regulations; but a very different affair to enforce them. Indeed it is questionable whether the rigorous enforcement of a Draconic code would not tend to drive first-class men away from the service of railroad companies altogether.

In the present system of management, large numbers of agents, as conductors, &c., believing it impossible to carry out the letter of the different regulations, relax into a "free and easy" system of interpretation, and often let the company's interests "slide" in comparative indifference and unconcern.

In other cases, individuals would seem to have been born full members of the poking-your-nose-into-other-people's-business-society; are repulsive, overbearing, tyrannical to passengers and others, and calculated in no very small degree to injure the business of a railroad.

The best method of arriving at success in this as in any other department or career, is to secure employees who are or can be fired with an ambition, an enthusiasm, to excel in their profession. This is in fact a universal pre-requisite. It is one prominent element in the superiority of man over the machine. With it, we have often been astonished to see how men of second rate qualifications in other respects, have distanced parties who intellectually were vastly their superiors. Without it, man is but a beast of burden; and labor is drudgery.

Let our companies and principal railroad managers then try and infuse this element into their subordinates, every profession and situation being regarded as honorable. Let them throw open the doors of distinction to all. The effect is almost electrical. It at once elevates men from the mire to dignity, to greatness, and re-acts with ten-fold advantage on their own pecuniary interests.

Texas.

From the recent report of the Comptroller we learn that, during the last four years, the quantity of land assessed has increased 8,000,000 of acres, while the value of the same has advanced \$25,000,000, or \$6,250,000 per annum. The average value of land per acre, which in 1852 was only 87½ cents, is now \$1.28 per acre. In other species of property there has been a corresponding increase.

New York and New Haven Railroad.

We have the opinion of the Court on the question of the validity of the over-issues of stock in the New York and New Haven railroad. The opinion was delivered by Justice Comstock, whose conclusions on the main issue may be thus summed up in his own language:

"1. The certificate was void in the hands of KYLE, the first holder, because it was fraudulently issued, and he paid nothing for it.

2. It was also void in his hands because issued by an agent without authority, there being no surrender of a previous certificate, and no transfer to him on the books of actual stock, and this want of authority was known to him.

3. It was void, because the stock it professed to represent had no existence, and could not exist under the Charter of the Company, all the powers of the corporation in the creation and issue of stock being exhausted.

In respect to the conclusion last mentioned, it must be, and I think is, conceded that as a further result the certificate is void under all possible circumstances, so that no person, in whatever situation, can claim under it the rights of a stockholder, or damages on the ground of a refusal to admit him to such rights. As the law will not require the defendants to violate their charter by creating an excess of stock to supply this spurious certificate, so it will not punish them in damages for refusing simply to be guilty of such violation. *** The Corporation may be compelled to respond to the holders of certificates, amounting in the aggregate to more than its capital, because it cannot distinguish those which are spurious and those which are genuine. Thus the number of shares to be recognized may be practically increased not for the reason that all over-issues are not void, but because, in a given instance, the Corporation cannot show that the shares claimed are of that

character. No question of this kind arises in the case before us."

We shall give the opinion in full in our next.

Railroads in Mexico.

The Mexican *Extraordinary*, a new paper published in the English language, in the city of Mexico, states that the railroad between that city and Vera Cruz is to be forthwith proceeded with in good earnest. An engineer from New York has recently arrived, and commenced making the surveys. Six hundred tons of rails are to be ordered immediately. One locomotive and two passenger cars from this city are expected shortly. The rails will weigh 40 lbs. per yard. A section between the city of Mexico and the plains of Apam will be first put under contract. The *Extraordinary* urges strongly upon the people of that country to imitate the example of Great Britain and the United States in building railroads, and points to their triumphant results in both countries, in contrast with the comparatively stand-still condition of Mexico for the last quarter of a century.

Milwaukee and Horicon Railroad.

The company constructing this work now offer for sale \$420,000 of their first mortgage bonds, or \$10,000 per mile for the 42 miles in operation and under contract.

These bonds are dated May 1st, 1856, bear an annual interest of eight per cent., payable semi-annually, are convertible at the option of the holder, at any time within five years from date of issue, and are redeemable in 1882, at the Bank of the Republic in New York. They are secured by a first mortgage on that part of the road between its junction with the La Crosse line, at the village of Horicon, and the village of Berlin, together with all the rolling stock and other property; and by a sinking fund of \$5,000 per annum from the date of issue. In case of failure to meet this sum as required by the mortgage, the Trustee is authorized to foreclose the mortgage, in the same manner as in default of payment of interest or principal when due.

The road has been in operation to Waupun, 15 miles, since February last. An agreement has been made with the La Crosse Company, to be in force for 20 years, affording a favorable connection with the city of Milwaukee.

The total expenditure to date has been about \$400,000. The grading of the remaining 27 miles is proceeding rapidly; cross-ties have been purchased sufficient to complete it, together with about 1,600 tons of iron.

The equipment consists of three locomotives, three passenger and two baggage cars, and about eighty freight cars—all of first class character.

The earnings for the three months ending May 26th were \$12,400, or \$3,330 per mile per annum. Even this amount—large as it is for a new road—would have been greatly increased, but for the great fall in produce which prevented farmers from sending their grain forward to market.

Several thriving villages are springing up along the line. Waupun, where the State's Prison is located, already contains 1,500 inhabitants. Eight miles further on is the flourishing village of Brandon. Ripon, 16 miles from Waupun, contains a population of about 2,000; and Berlin, the present north-western terminus, about 3,000 inhabitants.

The country along the line is believed to be not exceeded for agricultural purposes.

The means available for completing the above 42 miles, are—

Bonds of this issue.....	\$420,000
Do. the town of Berlin.....	100,000
Do. the town of Ceresco.....	50,000
Do. the town of Waupun, voted, but not yet issued.....	50,000
Amount from stockholders to be paid on stock subscriptions.....	186,000
Amount of stock to be paid contractor..	36,000
Bonds of towns and counties that will be voted when called for.....	220,000
Unperfected real estate mortgages.....	100,000
	\$1,162,000

Estimated cost of road to Berlin.....	\$840,000
Amount expended up to last report.....	354,000

Estimated amount required to complete the road to Berlin..... 486,000

Leaving an excess of..... \$676,000

The stock basis is as follows:

Stock held on the line of the road.....	\$383,100
Do. by the City of Milwaukee.....	166,000
Stock to be paid contractor.....	55,100
	\$604,200

And the stock books are now open; and from the success of the stock agents, thus far, the company is warranted in setting down the amount of stock subscriptions that will be added to the list this month at not less than..... 500,000

\$1,104,200

—which, when completed, will make a stock basis of over a million of dollars.

It is not designed to carry the road any further till this division is completed. The next move will be its extension to Stevens' Point on the Mississippi. In order to assist in carrying it through, a bill is now pending in Congress for a grant of land, which is expected to become law at an early day.

No line will ever be built which can successfully compete with the present.

An estimate of the wheat grown within eight miles of the line, made two years ago, gives an aggregate of 1,700,000 bushels annually. The country beyond Berlin, which is properly tributary to the road, will more than double that. Deducting for home consumption, we have left over 2,000,000 bushels to be carried annually to market. At eight cents per bushel this would yield over \$160,000, from which deducting 40 per cent. for working expenses, would alone leave 12 per cent. on cost.

Milwaukee, Watertown, and Madison R. R.

This is the title of a newly projected work to extend from Madison, the capital of Wisconsin, to Watertown, on the line of the Milwaukee and Watertown road. So far as the surveys have been run, it has been ascertained that a saving of twenty miles can be effected over the present route. A very favorable route is stated to have been found, passing by what is almost an air line, through a beautiful and productive section of country. The farmers on the route are deeply interested in the undertaking.

In Watertown we learn that nearly \$200,000 of stock have been subscribed; and at a late meeting in Madison over \$62,000 were taken on the ground. With such encouragement, the undertaking will doubtless be commenced at an early

day. Responsible contractors are ready to take the whole line, and agree to complete one-half this season and the balance next Spring.

In addition to the above, the recent grants of lands to railroads will be certain to secure the construction of a line somewhere near the route of this. When once the latter has been secured, we may look forward to the commencement of this work without delay.

The Parkersburg Railroad Loan.

It was generally expected at the session of the City Council yesterday afternoon, that the Mayor would return the ordinance authorizing the Baltimore and Ohio Railroad Company to make a loan to the North-western Virginia Railroad of \$500,000 of the bonds of the city, without his signature. For some reason, however, it was not done, but it will probably be sent up to-day or tomorrow. There was not a full branch yesterday, but it is doubtful if it will be possible to repass the ordinance by a constitutional vote over the veto of the Mayor.—*Balt. American*, 24th.

Ashtabula and New Lisbon Railroad.

The Directors and President of the Ashtabula and New Lisbon railroad company met here on Wednesday of last week, to receive proposals, and on Thursday, held a meeting at New Lisbon for the same purpose, and to let the work. Proposals were offered by quite a number of contractors.—The contract for the work from Austintown to the O. & P. R. R. was taken by Baldwin, Williams & Co., who had the contract from Niles to Austintown. Britton & Bro. have the contract of the work from the O. & P. R. R. to New Lisbon.—The terms, we understand, are favorable, but have not learned the particulars. It is the intention of the company to commence the work about the 1st of July. Some ten thousand dollars additional stock was subscribed at the meeting at New Lisbon. Much enthusiasm is manifested along the line. Stockholders meet the instalments promptly, and the prospects of the work look well.—*Cleveland Plaindealer*.

Statistics of Foreign Emigration.

A valuable report on British emigration has just appeared. It contains some curious facts. It is stated that from the close of the Peninsular war to the end of 1855, a period of forty-one years, no less than 4,203,765 persons left the United Kingdom, and of that number 2,621,609 emigrated during the last nine years. The largest emigration in any one year was in 1852, when it amounted to 368,764; but the last year the emigrants amounted to only 176,807. The larger portion of emigrants was from Ireland; the number of Irish who emigrated in 1851 having been 254,537. The estimated emigration from Ireland between 1841 and 1854, was not less than 2,000,000. It is stated that the sums of money remitted to Ireland from the American emigrants since 1848, amounted to £8,393,000, and during the last three years they exceeded three millions and a half. There has, of late years, been an increased tendency to emigrate to the United States in preference to the North American colonies, which were most resorted to prior to 1835. The report includes in its notice, the emigrants who returned to Great Britain last year. The numbers were—from America, 11,402; from Australia, 4,419. The greater wealth of the latter, compared with the returning emigrants from America, is inferred from the relative proportion of steerage to cabin passengers. Of those arriving from Australia, 16½ per cent. were cabin passengers; whilst of those from America, there was only 1½ per cent.

From the first of the present year up to the 18th of June, 47,531 foreign immigrants arrived at the port of New York, of whom 15,586 were Germans, and 14,522 Irish. During the first six months of last year, the arrivals at that port were 69,476.—Every month of the present year shows a decrease in the number of arrivals, as compared with the last year excepting only March.

New Jersey Railroad and Transportation Company.

In our issue of March 29th, we gave an abstract of the business of this road for 1855. The report recently published adds but little, beyond details to the above. It appears that since opening the road, over twenty millions of passengers have travelled on it, *not one of whom has been injured in life or limb, while in the cars.* This is a statement which can be made by very few companies, either in this or any other country. Accidents from other causes have been not unfrequent, particularly trespassing on the track. Serious damages and delays have been caused by encountering cattle running at large, especially in the neighborhood of cities and towns. The double track was opened to Rahway in December last. It is intended to proceed with this improvement, and finish it to New Brunswick without delay. The sum of \$37,694 was paid out, during the year, for new rails on the line. The Jersey City improvements have been steadily proceeded with. The erection of the bridge and railroad on the direct route across the Passaic at Newark has been deferred, until the decision of the United States District Court shall have been given, which is expected in September next. It is in contemplation to provide a connection with the six foot gauge line at Elizabeth, by laying down an additional rail from that place to Jersey City. For the first five months of 1856, the company's receipts have been \$227,188, against \$220,543 in 1855.

Much of the report is taken up with a discussion of the impropriety of constructing competing lines. The great desire of the community is for frequent trains and low fares. This the New Jersey road has conferred to a greater degree than probably any line in the country. On many of the New England roads, the rates had recently been raised to three cents a mile or over. The effect of this was to diminish travel to an equal or greater degree. It was a well established principle in railroading, both in this country and in Europe, that a single corporation, with large capital and comprehensive powers, was better able to serve the public than if the business was divided among several competing interests.

We give the following business statistics, in addition to those already published.

Numbers of passengers—

Over the whole line.....	257,610½
Between Jersey City and Newark.....	1,099,338½
Do. do. Elizabeth.....	106,217
Do. do. Rahway.....	69,426
Do. do. Uniontown & Metuchin.....	8,501½
Do. do. New Brunswick.....	87,884
Do. all other intermediate places.....	535,998½
Total.....	2,164,471

The tonnage transported was—

Over the whole line.....	1,531
Between Jersey City and Newark.....	31,961
Do. do. Elizabeth.....	3,124
Do. do. Rahway.....	4,498
Do. do. New Brunswick.....	15,162
Do. all other intermediate places.....	8,783
Total.....	64,049

The following resolutions were adopted by the annual meeting:—

Resolved, That the annual report of the Board of Directors, presented this day, be accepted and approved.

Resolved, That, as stockholders of this company, we cordially and entirely approve of the fidelity and action of the Board of Directors in reference to their new ferry improvements, and the superior accommodations afforded to the travelling public.

Resolved, That we particularly commend to the notice of the public the elaborate statistics of the annual report, whereby it appears that passengers are carried over this road with greater facilities and at a cheaper rate than on any other road in the country.

Resolved, That we have entire confidence in the present Board of Directors, and that the thanks of the stockholders are eminently due them for the wisdom, prudence, and economy with which the affairs of the company have been conducted.

Resolved, That it is a source of the highest gratification, notwithstanding the large amount of travel over the road, no serious accident or loss of life has occurred the past year.

Resolved, That the increased expedition to the United States mail and express lines, and the urgent desires of the public to avoid the delays and dangers of passing around the Centre street curves at Newark, and the erection of the bridge and straight track, crossing the Passaic river at the Commercial dock, render it highly desirable that the obstacles to the prosecution of this important improvement should be speedily removed.

Resolved, That the great importance to the community on the line of the New Jersey Railroad of an abundant supply of coal, both in winter and summer, by having a direct connection with the railroads from the coal mines of Pennsylvania, over our road, to Jersey City, increases the importance of the early completion of the direct route over the Passaic river, at Newark, thereby furnishing an ample avenue for the supply of coal on the line of our road from Elizabethtown to Jersey City and enabling places or roads connecting with ours also to participate in the more abundant supply of fuel, at reduced prices.

Resolved, That the Directors cause to be embraced in their report, at the next meeting of the stockholders, as to the cost of fuel per mile now, for freight and passengers, what the freight costs to unload the same; what would be a proper contingent fund to set aside for wear and tear, and damage done by accidents to the rails, cars, engines, &c., so that the stockholders can determine whether it would be advisable to change the tariff of fares; also, to report whether it would be advisable for the company to do its own express business.

The Great Northern Lakes.

Statistics relating to our great Northern Lakes, their extent, importance, and the influence they exercise upon the settlement and prospects of the country; the wonders of their commerce, the marvellous growth of the cities on their banks, and the rapid influx of emigration which is concentrating within their area and in the contiguous territory, a great north-western empire, are constantly presented in our public papers, sometimes in isolated facts and at others in prepared articles. Yet with this constant iteration of the subject the impression created of the immensity of the Lake country, the vastness of its productive resources, and rapid increase of its population still falls short of the reality. The extent of the whole coast line of our Northern Lakes exceeds three thousand miles in length, and embraces portions of Vermont, New York, Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin and Minnesota Territory, on the one side, while the line is of nearly equal reach, and in some parts of not inferior fertility, on the Canadian shore. The greatest length of Lake Ontario, is 180 miles; that of Erie, 246; Huron, 260; Michigan, 320; and Superior, 355—making a total length of 1,555 miles, and an area of 90,000 square miles.

The entire area drained by these great inland seas is estimated at 345,615 square miles. They empty their waters into the ocean through the St. Lawrence, which is navigable from Lake Erie downwards, to all vessels not exceeding 180 feet

keel, 26 feet beam, and 10 feet draught. The aggregate traffic of the Lakes is at this time, stated in money value, much more than \$800,500,000, eighty odd thousand tons of steam, and 138,000 tons of sail; though a late as the year 1800 there was scarcely a craft above the size of an Indian canoe trading on the Lakes. The first American schooner on Lake Erie was built at Erie, Pa., in 1797, but she was lost soon after and not replaced for some time.

Of these lakes and their rivers the commerce in 1851, foreign and coastwise, was valued at \$326,593,335, being carried on by means of enrolled tonnage of 77,061 tons of steam, and 138,914 tons of sail, or an aggregate licensed tonnage of 215,975 tons. Of this amount of trade the value of \$314,458 went coastwise, and \$12,193,877 Canadian or foreign. The actual money value of the coastwise exports, by the lowest estimates, was \$12,000,000, in round numbers, being the mere value of the property passing over the lakes, exclusive of passage money, passengers carried, cost of vessels, expenses of crews, or anything in the least degree extraneous. During the season of 1851 the amount of grain alone transported equalled an aggregate of 27,882,801 bushels of cereal produce.

Grand Trunk Railway of Canada.

The following is in substance the proposed Government measure for the relief of the Grand Trunk Railway.

1. That, for the purpose of enabling the Grand Trunk Railway Company of Canada to complete their undertaking, it is expedient to authorize the Governor in Council to carry into effect an arrangement provisionally entered into between the Government of Canada and the said Company, based upon the following terms, viz:—

That the Railway Company shall be allowed to issue preferential bonds to the extent of two millions sterling; the holders of such bonds to have priority of claim therefor, over the present first lien of the Province.

That such issue shall not take place until the railway from St. Thomas, Lower Canada, to Stratford, Upper Canada, shall have been finished and in operation.

That the proceeds of the said bonds shall be paid over to the Provincial Agents in London, and released on the certificates of the Receiver General upon proof of progress of the work.

That the said proceeds shall be appropriated to the aid or construction of the following works and in the proportion hereinafter mentioned.

The Railways from St. Mary's to London and Sarnia.....	£450,000
The Railway from St. Thomas, L. C., to Riviere-du-Loup.....	525,000
Victoria Bridge.....	800,000
Three Rivers and Arthabaska.....	125,000
To enable the Grand Trunk to assist subsidiary lines, such as the Port Hope, Cobourg, and Prescott.....	100,000
	£2,000,000

That the St. Mary's and London Branch and subsidiary lines shall be finished by

the.....	1st Sept. 1857.
Stratford and Sarnia.....	" 1858.
Arthabaska and Three Rivers.....	" 1859.
The Victoria Bridge.....	1st Jan'y, 1860.

St. Thomas and Riviere-du-Loup Line, as follows:
From St. Thomas to Riviere-Ouelle..... 1st Jan'y, 1859.
From Riviere-Ouelle to Riviere-du-Loup..... 1st Jan'y, 1860.

That in order to restore to the Trois Pistoles road the guarantee diverted from it by the Act of 1854, and expended on the Toronto and Stratford section, there shall be reserved from the proceeds of the Preferential Bonds as they are paid over to the Provincial Agents such a portion for the section of the road from St. Thomas to Riviere-du-Loup, as shall ensure its progress equally with the works above mentioned.

That the interest accruing on the Provincial Bonds during the period of five years, being the time necessary for the completion of the works, and for the development of the through traffic, shall be advanced by the Province, and such advances as they are made shall be repaid to the Province in share capital of the Company.

That the lien of the Province, subject to the preceding condition, shall rank, as to dividend or interest, with that of the Company's Bondholders.

Salaries of Canadian Officials.

The Governor gets \$31,000, his house rent, and servant hire. The ten ministers get each \$6,000, \$6 a day during the session of Parliament, and "immense patronage." The engineer of the Grand Trunk Railway has a salary of \$13,000. Sir Cusac Runey, agent for that work, gets the same. Chief Justice Robinson has \$6,666 per annum, \$500 for traveling expenses, and a pension of \$4,444 whenever he shall see fit to resign. The Register of Hamilton, Dundas, and Wentworth, (he is minister also,) gets \$6,500. The Register of Toronto and York gets \$12,000. The Governor has a Secretary to whom the Canadians pay \$3,000 annually for the privilege of quill driving.

Description of a New Expansive Valve Motion for Steam Engines.

By Mr. GEORGE M. MILLER, of Dublin.

The object of the valve motion described in the present paper (the invention of Mr. John Wakefield, of the Great Southern and Western Railway, Dublin,) is to obtain an expansive action more simple and more perfect than the motion usually employed, the whole motion being obtained from a single eccentric upon the crank shaft.

The general arrangement of the valve motion consists of an eccentric, which, instead of being keyed upon the axle in ordinary manner, is mounted upon a transverse slide, which is capable of being moved at right angles to the axle by means of a handle that takes the place of the ordinary reversing handle or lever. The effect of moving the transverse slide is to alter the throw of the eccentric, or to reverse its position,—thereby enabling the valve of the one engine or cylinder to which it belongs to be worked expansively or reversed. The valve of the second engine or cylinder (in the case of the usual pair, with cranks at right angles to each other,) is worked by a second rod, connected with the same eccentric by means of an arm projecting at right angles to the direction of the first eccentric rod, so as to give to both valves a similar motion, but corresponding to the relative position of the two cranks at right angles to each other.

Upon the crank axle, and close up against one of the cranks, is fitted a concentric collar, fixed to the axle either by keys, or by screws tapped into the crank-cheek, through lugs, cast on the collar on the side next the crank. On the other side of the collar are cast two parallel beveled slides, situated transversely and equidistant from the centre of the axle. Upon these is fitted a corresponding sliding frame, carrying a circular ring cast upon it, projecting from its face, which is situated not equidistant between the two parallel slides, but is set eccentrically—that is, nearer to one slide than to the other, by the amount of the minimum throw of the eccentric. The circular ring on the sliding frame, thus takes the place of the ordinary eccentric, and is fitted with the eccentric strap, on the front edge of which is forged the end of the rod, by means of which the spindle of one of the valves is worked. On the back edge of the eccentric strap, and in the same straight line with the eccentric rod, is forged a slotted arm, having a horizontal slot fitted with a slide block; in which is inserted a pin projecting from the arm of a loose ring, concentric with the axle, and working in a groove in the fixed collar, which is keyed thereto. This loose ring is furnished with a second arm, at right angles to the arm first mentioned, and also with a balance-weight. To the second arm is attached a rod,

similar to the eccentric rod, by which the spindle of the second valve is worked.

The reversing action is effected by means of a crank lever, which is connected by a strap to a collar that is free to slide along the axle, but revolves with it. This collar carries two racks, which drive the two pinions set at opposite sides of the axle. The pinions are screwed internally to fit on two large four-threaded screws, which are secured in the sliding frame previously described; and being placed in cavities in the fixed collar, they are incapable of any lateral motion. In reversing the engine, the crank lever is rocked, and the collar with its racks slid along the axle. This causes the pinions to rotate, and the screws on which they work being held fast in the sliding frame, a transverse motion is communicated to the frame, which, with the eccentric ring attached to it, is carried along the parallel slides,—thus reversing the position of the eccentricity.

It has to be observed, that with this motion the engine can never be thrown entirely out of gear. When the engine is reversed, the centre of the eccentric describes a chord line, not the diameter of the circle of eccentricity,—and, consequently, the minimum to which the throw can be reduced, is the distance of this chord line from the centre of the axle, or the sum of the lead and lap of the slide; but the same circumstance applies to the ordinary link motion, and although, for this reason, the expansive action of the steam cannot be extended indefinitely, yet practically this is no objection to the valve motion; since between the positions of maximum and minimum throw, it admits of as great a range for the application of the expansive principle as can be made practically available where the link motion is employed.

In the new valve motion the lead is constant for all positions of gear; whilst in the ordinary or shifting link motion it varies to a certain extent with every change of position, increasing as the throw of the valve diminishes; in the new valve motion, accordingly, the expansive action alone is altered by regulating the amount of throw, whilst the lead is not affected by the change.

A practical trial of this valve motion has been made in two locomotive engines on the Great Southern and Western railway, which have been working with it $1\frac{1}{2}$ and $1\frac{3}{4}$ years respectively, since March and July, 1854. One of these, a passenger engine, is fitted with the new motion as shown in the drawings and model exhibited to the meeting. In the other, a freight engine, a slight modification has been made, the construction being simplified by dispensing with the slotted arm, projecting from the back edge of the eccentric strap, and substituting a similar slot in the eccentric rod; the arm of the loose eccentric ring is thus brought round to the front, and the balance weight is placed behind.

The passenger engine, No. 9, has 15-inch cylinders with a 20-inch stroke, and 5 feet 6 in. driving wheels; it has been working regularly between Dublin and Thurles (a distance of 87 miles), with two other engines, Nos. 17 and 19, by the same maker, and similar in all respects except that they are furnished with the ordinary link motion.

The results of the working of these three engines during the 14 year, from the 18th March, 1854, to 12th October, 1855, are as follows:

	Miles run.	Coke per mile. lbs.	Average load. Carriages.
No. 9.....	44,150	20.3	6.0
No. 17.....	42,741	23.6	5.9
No. 19.....	27,194	23.9	5.8
Mean with link motion.....		24.25	5.85
Mean with new valve motion.....		29.03	6.00

The carriages are six-wheeled, and weigh seven tons empty.

A comparison of the results of the performance of these engines for the periods before stated, shows an average saving in consumption of coke of $4\frac{1}{4}$ lbs. per mile, or $17\frac{1}{2}$ per cent. in favor of the engine having the new valve motion.

The freight engine, No. 53, has worked well, but the variable character of the work assigned to the freight engines on the above line renders it difficult to compare their performance.

The No. 9 passenger engine has now had it more than $1\frac{1}{2}$ year in constant work. The motion has undergone no repair during the whole time, except that a thin lining of white metal has been recently put upon the face of the beveled slides, which had worn a little slack, having been in the first instance made of brass.

The No. 53 freight engine has been more than $1\frac{1}{2}$ year in constant work with the new valve motion, and has run during that time 23,581 miles. The motion has had no repairs, and has never even been taken to pieces and examined since first got to work until a fortnight ago; and when the parts were then detached for inspection, they were found in excellent condition, the working faces all in good order, the teeth of the racks and pinions showing no signs of wear, and the whole play of the apparatus amounting to only about 1-16th of an inch, being little more than it had when originally set to work.

It may be thought that the application of this new motion encumbers the crank axle with more complex machinery than is the case when four eccentrics are used; but it must, on the other hand, be observed, that the remainder of the space under the boiler is left more free for examination and cleaning; also, the eccentric rods have at all times only the same extent of motion as the valves, whilst with the link motion most of the working parts reciprocate over the same space, whether the engine be working expansively or not.—*Newton's London Journal, March, 1856.*

Montgomery and West Point Railway.

The following is the exhibit made at the quarterly meeting of the Board of Directors held on Thursday, the 5th inst., of the operations of the road for the quarter ending on the 1st day of June, 1856:

Number of Passengers—Through	6,073
Do. Way	16,863
Total.....	22,936
Money from Passengers.....	\$49,572
Do. Freight and Mail.....	40,826

Total receipts.....\$90,398

The above exhibit shows an increase over the same period last year of 5,193 in the number of passengers, \$11,732 in money from the same, \$4,817 on freights and mail, and a total increase on receipts from all sources of \$16,450.

The work of re-laying the road with heavy iron is rapidly progressing, and enough iron has been provided to re-lay it to Fort Decatur, which is as much work as can be done by the opening of the cotton season. Additional locomotives have been constructed, and the car-factory force sufficiently increased to turn out fifty freight cars by the press of the winter's business, to meet and satisfactorily perform which the company are making every effort.

Iron and Coal.

In the United States there are 160,000 square miles of coal beds; in Great Britain less than 12,000. The proportions of iron are about the same. The coal and the iron which she possesses are the source of nearly all the power of the British Empire. Iron forms the body and the coal the soul of her strength; iron the nerve and sinew, but the coal the vital heat and energy that puts the whole in motion. The iron fingers of her machinery spin the most delicate and cunning laces, and the iron arms of her shafts move with huge force, accomplishing the labors of hundreds of millions of men; but it is the carbon of her coal that has imparted life-like force and direction to the cold, hard metal, and thus enabled England, while only having to support a population of 25,000,000 to

perform an amount of physical labor more than equal to that of all the human beings in the world unaided by machinery. All the teeming swarms of her Indian possessions, consuming as they do and must, perform not half the valuable labor for the world that her coal, generating the motive power of steam, is momentarily effecting. This it is that rears all the wealth of British manufacturers and the peaceful arts of industry, and this that enables her to carry so easily her unheard-of public debt, fight battles all over the world, conduct campaigns to a successful issue, in spite of her numerical feebleness.

300 TONS 60 LBS. T RAIL.
FOR SALE AT
WASHINGTON MILL,
WHEELING, VA.

June 21st, 1856. DRAKELEY & CO.

DIVIDEND DECLARED.

NOTICE.—The President and Directors of the RICHMOND AND PETERSBURG RAILROAD COMPANY have declared a dividend for the six months ending 30th June, 1856, of two dollars and fifty cents per share, payable on and after that day to all who shall be stockholders on the same.

JNO. WILLIAMS, Treasurer.
RICHMOND, June 24th, 1856. 422

English Blister Steel.

20 TONS on hand, for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
New York.
4124

**RAILROAD TRACK,
LOCOMOTIVE & CAR JACKS.**
FOR sale by BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

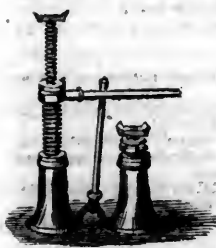
Railroad Iron.

900 TONS best quality Welsh Rails "Erie" pattern, weighing 60 lbs. per yard, now at New Orleans, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.,
New York, June 14th, 1856. 1m24

Railroad Iron.

1,500 TONS New York and Erie pattern 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by
THEODORE DEHON,
10 Wall st., near Broadway,
New York.
4124

BALL'S PATENT JACK SCREW.



No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	3 in.	12 in.	9 in.	17 in.	\$3
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

For sale by
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

To Railroad Contractors.



ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C., May 16th, 1856.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock, M., on WEDNESDAY, July 16th, 1856, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad, commencing at Knoxville. There are several heavy jobs of Masonry, among them the Masonry for the Bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 5th of July.

WALTER GWYNN,
MAY 29th, 1856. 6123 Chief Engr Blue Ridge R. R.

KASSON'S

RAILROAD IRON EXPRESS,

NEW YORK AGENTS,

DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

W. M. KASSON & SON.

N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay.
INSURANCE at low rates of premium, will be effected when desired.

ELLIOTT & BOWLING,

(LATE ELLIOTT & CO.)

Railroad Commission Merchants, and Agents for the Sale of

FIRTH'S METAL,

The Cheapest and Best Metal for Rail Road Journal Boxes.
118 WILLIAM STREET, N. YORK.

DAVIS & KASSON, & GENERAL RAILROAD AGENTS, COMMISSION MERCHANTS,

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These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Duneville, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of,—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried

either in wagons, or interrupted water (cross) sections increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

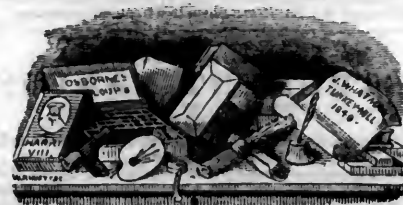
Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, Ill.

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May 14, 1854

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MONAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

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AND
STREET RAILWAY CO.**

Office Nos. 8 and 10 Wall st.,
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TO THE

MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,

AND TO

RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, **GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.**

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

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STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, July 5, 1866.

New York and New Haven Railroad.

DECISION OF THE COURT OF APPEALS IN THE CASE, MECHANICS' BANK VS. NEW YORK & NEW HAVEN R. R. CO., IN THE MATTER OF THE OVER-ISSUES OF STOCK.

This cause was heard in the last April Term of this Court at Albany, before Hon. HIRAM DENIO, Chief Justice, and Hons. A. S. JOHNSON, G. F. COMSTOCK, WM. B. WRIGHT, WM. MITCHELL, and F. HUBBARD, Justices; and was argued by Messrs. WILLIAM CURTIS NOYES and GEO. WOOD, (with whom was associated NICHOLAS HILL, Jr., Esq.,) for the defendants; and by Messrs. E. S. VAN WINKLE and DANIEL LOAD, for the plaintiffs.

It was kept under advisement until the 17th June, 1866, when the following unanimous opinion of the Court was delivered:

COMSTOCK, J.—This is an action for damages founded on a certificate for eighty-five shares of stock in the defendants' corporation, issued to Alexander Kyle, upon the security of which the plaintiffs loaned to that person a sum of money; and the first inquiry naturally is, what was the force and effect of the certificate in his hands? The mode of presenting this inquiry most favorable to the plaintiffs is to consider it as free from the difficulty that there was no power in the Corporation, its Board of Directors, or any of its

agents, to create the shares of stock in question. Assuming that the Corporation had stock at its own disposal, and that Robert Schuyler, as agent, had full power to sell it in market, and issue the proper certificates therefor, it is clear that any person, dealing with him in good faith, and paying value, would become entitled to all the rights and privileges of a stockholder, although the agent, by a secret fraud, intended the transaction to be for his own benefit, and used the funds which he received for his own private purposes. In such a case the acts of the agent being such as the Corporation was competent to perform, and strictly within the powers delegated to him, upon principles entirely familiar, the law would not permit third persons to suffer by a secret abuse of the trust.

But it is equally clear that no rights would be acquired by a party not dealing with the agent in good faith, and receiving a certificate of stock without paying any value therefor. To say that the original holder of such a certificate could not be admitted to a participation with the genuine and *bona fide* stockholders in the property, franchises and revenues of the Corporation, is a proposition so plain that it needs only to be stated. Such was the situation of Alexander Kyle, the original holder of the certificate now in question. To what extent he was implicated in the frauds of Schuyler is not material. The certificate is admitted to have been issued fraudulently and he paid nothing for it; on this ground it was in his hands spurious and void; and this is a conclusion which is reached without calling in question the power of the Corporation to create the stock, or of Schuyler as agent to issue the proper evidence thereof to a purchaser in good faith.

The certificate in the hands of Kyle was also void, for the reasons which will now be mentioned: 1. Schuyler, as the agent of the Company, had no power to issue a certificate for shares of stock, except upon the conditions precedent of a transfer on the books by some previous owner, and the surrender of that owner's certificate. He was the transfer agent merely, and his powers were expressly limited to that department of the business of the Corporation. He had no general certifying power, nor any power at all to certify, except as incidental, to a transfer of stock by its owner to some one else, and as an incidental power it could only be exercised upon the conditions named. 2. Neither the Board of Directors by whom Schuyler was appointed agent, nor the whole body of the Corporation had power to create the stock which the certificate issued to Kyle professed to represent; and if the stock itself could not be brought into existence by the whole power of the Corporation, the certificate issued as the evidence of its existence, and the right of the holder thereof was necessarily void. Upon the premises last

stated the conclusion would be the same, even if Kyle had paid to the transfer agent the full value of the stock. He could purchase stock of any person who owned it, but he could not under any conditions obtain it from the Corporation or its agents, because there was none to be had, and none could be created.

Thus far I do not understand that my conclusions differ essentially from the views of the counsel who have argued the cause for the plaintiffs; and if I was not mistaken in regard to the general scope of their argument, they conceded the following result, that the plaintiffs, holding the certificate by transfer from Kyle have no rights as stockholders, merely for the particular reason, that the stock cannot exist under the charter, the essential ground of the action in the view of the counsel, being the injury sustained by dealing upon the faith of the false representation of stock which the certificate contains. The opinions however of the Judges in the Court below are before us for examination, as well as those of eminent lawyers who have not appeared upon the argument, and I think it proper to refer to these opinions for the purpose of bringing into view all the theories upon which it has been supposed the plaintiff's rights depended.

Mr. Justice Hoffman, in the opinion pronounced by him, holds that the certificate was not void, as transcending the powers of the corporation in the creation of stock and issuing certificates therefor, or those delegated to Schuyler as the transfer agent. He, therefore, considers the obligation to be one which the defendants can perform, and ought to perform, according to its terms. He admits that the effect of an over-issue is to increase the number of shares, but not in the actual capital; and, according to his view, the spurious certificates are to be made good by a reduction in the actual value of those that are now genuine.—He holds, therefore, that the defendants were bound to admit to plaintiffs as stockholders, and to register their shares on the books accordingly; and that this suit depends purely and simply on the non-performance of that duty, after being requested to perform it. "Without a demand," he says, "and refusal to transfer, there would be no ground of action whatever."

Directly opposed to these views are those of Chief Justice Oakley. He holds the certificate utterly void, because it transcended the powers of the transfer agent, whose commission, he thinks, was special, and not general; and if the action depended on the action of the certificate, he says, the following questions would have to be answered: 1. Whether the plaintiffs, as *bona fide* holders, could acquire any rights under it superior to those of Kyle, in whose hands it was void? And 2.—Whether the plaintiffs can be considered as *bona fide* holders?

As to the last point, he inclines to think that the plaintiffs were bound to see that Schnyler, as agent, did not exceed his special powers, and, therefore, if they chose to deal in the stock without inquiring as to that fact, they took the certificate from Kyle at their peril. But the learned Chief Justice, nevertheless, holds the defendants liable, on the ground that the certificate was a false representation that Kyle held stock, when in truth he did not. He thinks that Schnyler the agent, had an implied authority from the company to make such a representation—an authority resulting from his constant habit of issuing certificates in the same form in the course of the regular business of the corporation. If, as he assumes, the certificate was void, tested simply by the authority given to the agent, and if, as he also assumes, the plaintiffs were bound to take notice of the want of authority, with deference, it appears to me that they are effected by the same considerations when they change the grounds of complaint to misrepresentation and fraud. Can an agent's authority to misrepresent in the course of a dealing be inferred, when it is admitted he has no authority to enter into the dealing at all?

Justices Bosworth and Slosson, if I do not misunderstand them, both admit, that there was no power in the corporation to create the shares of stock which the certificate professes to represent, and that the instrument considered as a real representation of stock, was void for that reason; thus discarding the only ground upon which, in the opinion of one of their brethren, the action can be maintained. They nevertheless hold, that the suit is not founded upon the motion of misrepresentation and fraud, thus as distinctly rejecting the theory of the other. They appear to me to have found a middle ground of liability which is perhaps fairly expressed in the following language of Justice Bosworth: "The certificate," he says, "so far as any inferences can be drawn from its terms or appearance, purports to be and is as much the act of the defendants as any certificate that has been issued by the company representing genuine stock. The plaintiffs took it believing it to be what it purports to be, and their action is based on the theory that, as between them and the defendants, it is in judgment of law, the act of the defendants; and that the defendants are estopped from asserting the contrary, so far as the question of their liability for refusing to reimburse to the plaintiff the amount of their loan to the extent of the value of the stock is concerned." And again, he says: "The action is based on the assumption, so far as the right to be compensated in damages is concerned, that the company has given an assurance that Kyle owned the stock which the certificate represents stood to his credit on its books." The reasoning by which these results are reached is in substance, that the act of Schnyler in issuing the certificate was within the apparent scope of his powers, and therefore, although the contract was void because it transcended all the powers of the corporation, and was impossible to be performed for the same reason, the defendant must, nevertheless, make it good in damages upon an assurance that it was valid, the assurance being a part of the contract itself. I confess my own impression to be that this reasoning is too refined. Admitting that the agent acted within the scope of the power delegated to him by the Board of Directors, I do not clearly see how certificates of stock which they themselves had no authority to issue, void in their origin and under all conceivable circumstances, can be made the basis of a liability ruinous to the genuine stockholders, by turning the spurious instruments into a promise or undertaking that the stock in fact existed.

The extreme difficulty which has been encountered in endeavoring to find a principle on which to rest the action, may be further illustrated by reference to the professional opinions which have been submitted to our examination. In one of them—certainly entitled to the very highest respect, the reasoning of which, I think, must have been in substance approved by Mr. Justice Hoffman—it is claimed that all the over-issued certifi-

cates are valid, so far as the question of corporate power is concerned; that the multiplication of shares did not increase the capital stock, but merely reduced the value of the shares; that the acts of Schnyler, in issuing such certificates, were done within the scope of his authority as agent; and as a conclusion from these premises, that all the holders in good faith who had not already received new certificates in their own names were entitled to receive them, and so to be admitted to all the rights and privileges of stockholders. In another of these opinions, distinguished by great acuteness and force of reasoning, the clear and emphatic concession is made, that the defendants have no corporate right to create a valid title to a single share of stock beyond the prescribed number; that the corporation, being prohibited from issuing more than 30,000 shares, was, by necessary consequence, forbidden to recognize as a part of its stock, any share known to have been issued contrary to that prohibition, and consequently, that the Directors might refuse to recognize all shares which could be clearly traced to an origin in the over issue. In respect to all such shares it is claimed, however, that compensation in damages must be made by the corporation to the innocent holders who, by dealing in them, have suffered pecuniary loss. The issue of false certificates, it is insisted, was a failure of corporate duty, an act of negligence by the corporation, for which it is liable to the party injured. The company, it is also said, is bound by an estoppel in favor of the innocent shareholder, and must either recognize him as a stockholder, or respond in damages as a wrong doer for withholding his apparent right.

If those who assert that this action can be maintained had been able to agree upon a reason for that opinion, there would be fewer propositions to discuss than I shall feel obliged to examine.

I have already stated in general terms my own conclusion to be on the side of the invalidity of the so called spurious shares, upon the ground of a want of corporate power to create them, and I will now give some further expression to my views on that question. By the charter of this railroad company its capital stock was limited to \$3,000,000, to be divided into shares of \$100 each. It is admitted that the whole capital was subscribed and paid in, and that certificates of stock were issued representing the 30,000 shares actually subscribed and paid for. Now if it is plain, as all concede, that the capital could not be increased beyond the \$3,000,000, it seems to me equally plain that no more than 30,000 shares could be created. Both are unalterably fixed by the charter; the capital, by expressing the aggregate amount, and the number of shares by expressing the amount of each. The whole capital is divided into shares of \$100 each, and the mathematical result is 30,000 in all. Viewing the question, therefore, as one of abstract power, nothing appears to be wanting to a complete demonstration that additional shares could not be created. There is under the charter no more capacity to increase the nominal capital by multiplying the shares to an indefinite extent, than to increase the real capital by an actual subscription, indefinitely beyond the specified limit.

But it is important to observe that the question has other relations than those which belong to it as one of simple capacity and power. The 30,000 shares of original stock subscribed and paid for by the persons to whom the genuine certificates were issued, belonged to them in their individual right, and were as much their separate and individual property as any other possession which they could acquire. The entire capital was represented in the property and franchises of the corporation, and the owner of each share was entitled to a fixed and unalterable proportion of that capital. And from this it follows that any attempts to create a greater number of shares by the issue of additional certificates, is not only a violation of the organic law of the corporation, but a direct invasion of the contract between it and each holder of its original stock. Now while it cannot be denied that the value of every share may be reduced

by misfortune or accident in the management of the business of the corporation, or by the neglect and misconduct of its agents acting within their acknowledged powers, it is equally plain that this result cannot be effected by a change in the fixed proportion which each share bears to the aggregate number. It has been said that the limitation of the capital and the number of shares was imposed from considerations of public policy alone. This is not so. Those who asked for the charter, and proposed to invest their private capital in the enterprise which it contemplated, required such a limitation for their own protection; and every individual who subscribed and paid for shares of stock, must be deemed to have done so relying upon the charter for the safety of his investment.

The conclusion to which I am brought upon this question is not impeached by the consideration (if such is the fact) that there are shares and certificates of stock beyond the original limit which cannot be traced to an over-issue by the fraudulent agent of the company. I know not how the facts may be in this respect, nor is it material to the argument. The corporation may be compelled to respond to the holders of certificates, amounting in the aggregate to more than its capital, because it cannot distinguish those which are spurious and those which are genuine. Thus the number of shares to be recognized may be practically increased, not for the reason that all over-issues are not void, but because, in a given instance, the corporation cannot show that the shares claimed are of that character. No question of this kind arises in the case before us.

I have also stated in general terms, as one of my conclusions, that the certificate issued to Kyle was void in his hands, upon the more special ground that the agent could not certify, except upon conditions which did not exist in respect to that transaction. I observe now further, that a third person dealing with Kyle, and taking from him a transfer of the certificate, doubtless had reason to suppose that it had been duly issued.—Whether a dealing with him under that belief created new rights against the corporation, I shall presently examine. But Kyle himself dealt directly with the agent of the company, and he knew the conditions had not arisen in which the power to certify depended. He knew this, because he surrendered no previous certificate, and had no transfer on the books or otherwise from any actual shareholder. Now, I do not understand it to be claimed, on the part of the plaintiffs, that the acts of the agent in issuing the spurious certificates were within any actual power which the corporation ever attempted to confer upon him, nor that all persons proposing to deal in the stock were not chargeable with a knowledge of the extent and limit of his authority. He was known to be a transfer agent merely of existing and genuine shares, and in that character his name was signed to the certificate in question and all others. What is claimed I understand to be precisely this:—That the false certificates being regular on their face, and the same in form as those which were genuine, presented to third parties dealing in them, all the appearances of having been duly issued, although in fact, the agent had no authority to issue them, and although the exact extent of his authority was known. But these appearances were known to be false by those who dealt directly with the agent; and with that knowledge it is not pretended that they can assert any claim against the corporation. Such was the situation of Kyle.

It is as well in this connection as any other to notice a special feature of the transaction which I think imparts neither strength nor weakness to the plaintiff's case. The facts as they appear in the finding of the Judge are, that Kyle received the certificate not for his own but the agent's use, and having negotiated with the plaintiffs a loan by pledging it as security, paid the proceeds of the transaction over to the agent. But these facts were not known to the plaintiff. They dealt with Kyle as the owner. Upon that theory they have a right now to rely, and I understand them to do

so. It is the best the case will admit of. If they choose to take the facts as they actually are, and to regard Kyle as a negotiator merely between them and the fraudulent agent of the Corporation, they would then stand in the position of an immediate dealer with the Agent, receiving from him a certificate of stock issued without authority; and this position, as I have shown, would be fatal to their claim. They justly prefer to be regarded, and I do regard them, as third parties, dealing with Kyle as the apparent owner of stock.

In order to keep in view the exact conditions of the general question, I think it proper to state the conclusions which I consider thus far established. They are as follows: 1. The certificate was void in the hands of Kyle, the first holder, because it was fraudulently issued, and he paid nothing for it. 2. It was also void in his hands because issued by an agent without authority, there being no surrender of a previous certificate; and no transfer to him on the books of actual stock, and this want of authority was known to him. 3. It was void because the stock it professed to represent had no existence, and could not exist under the charter of the Company, all the powers of the corporation in the creation and issue of stock being exhausted. In respect to the conclusion last mentioned, it must be, and I think is conceded, that as a further result the certificate is void under all possible circumstances, so that no person, in whatever situation, can claim under it the rights of a stockholder, or damages on the ground of a refusal to admit him to such rights. As the law will not require the defendants to violate their charter by creating an excess of stock to supply this spurious certificate, so it will not furnish them in damages for refusing simply to be guilty of such violation. I consider this result so necessary and so evident as not to require further discussion.

I will proceed, however, to a more particular examination of the plaintiff's rights as the transferee of Kyle, and giving them the most favorable view of the case, will consider the certificate as void in his hands only on the grounds that it was issued fraudulently, without consideration, and without any authority contained in the terms of Schuyler's appointment as transfer agent. In this view the defendant's Corporation is regarded as *compelled* to recognize the certificate, and if they are bound to do so, they must respond in damages upon their refusal. The question, therefore, will be, are they so bound; or to state it in another form, are the plaintiffs in a situation to assert any rights against the Company, which Kyle, their assignor, did not possess?

By the Charter of this Corporation, the shares of its capital stock were made transferable in such manner and in such places as the by-laws should direct, and the by-laws declared that all transfers should be made in the transfer-book, kept at the proper office, and where a certificate of the stock had been issued, that the same should be surrendered prior to the transfer being made. The certificate now in question, as all others, declared on its face the same conditions. The certificate has in fact never been surrendered, and no such transfer has ever been made. The plaintiffs on making their loan to Kyle took from him an assignment and power of attorney in blank, but paid no regard to the fundamental conditions on which alone a legal title to the stock could be transferred. Of these conditions of course they had notice.

I am aware it is common to deal in this manner in the stock of Corporate Companies, and I do not say that any rule of law or of public policy is violated by it. The dealer undoubtedly acquires an equitable title to the stock of his vendor, and if the vendor's title is open to no impeachment, he has a right to call upon the Corporation to clothe him also with the legal title by permitting a transfer to himself on its books, and to demand a new certificate in his own name. But the question here is, not whether the purchaser is clothed in equity with all the rights of the seller, but whether by a transfer not made according to the laws of the Corporation, he acquires new and superior rights as against the Corporation itself; in short, whether

his title is good when that of his vendor was good for nothing.

So too it is common to deal in this manner with respect to obligations, of every description. If extreme caution is exercised the purchaser will inquire of the maker of the obligation, and procure his admission of its validity and his assent to the transfer; and having done so, an estoppel will arise in his favor, not because he has invested his money in the purchase, but because he purchased after procuring such admission or consent and upon the faith thereof. Where there is no estoppel of this sort to rely upon, then the question whether the transferee of an obligation apparently sound and from the apparent owner, acquires any better right to enforce it than his assignor had, depends on the nature of the obligation itself. The general and familiar rule is, that he does not. If the instrument has negotiable qualities, then he may. In the case of negotiable instruments, the legal title passes by mere endorsement or delivery. When they are not negotiable an equitable title is all that can be acquired; and this suggests the further observation that as between equities merely, the prior one as a general rule prevails. The prior equity, as well as the law, is in favor of the party who made the obligation, if for any good and valid reason he ought not to be bound by it. The principal is so familiar that authorities need not be cited.

It seems to me, therefore, that we are brought directly to the question whether certificates of stock in the defendants' corporation are to be regarded as negotiable instruments, in the sense of the commercial law, so that by their endorsement and delivery to a purchaser in good faith, a title to the stock they profess to represent may be acquired, although in the hands of the vendor they are spurious and void, and although the company itself has never recognized the transfer. This question, I think, must be answered in the negative. They contain, in the first place, no words of negotiability. They declare simply that the person named is entitled to certain shares of stock. They do not, like negotiable instruments, run to the bearer, or to the order of the party to whom they are given. They commence, it is true, with the words, "be it known," but such words have no tendency to show that they possess the quality claimed for them. A phraseology quite similar may be found on bonds and other instruments which no one ever thought to be negotiable.

But aside from the absence of any language of these certificates which can impart to them a negotiable character, both the laws of the Corporation and the certificates themselves contain special restrictions, which seem, to me, to put this question at rest. I do not suppose that a corporation, without something very extraordinary in its charter, can place such restraints upon the sale of its stock, that the individual holder may not transfer as good a title in equity as he himself possesses, by any mode of assurance good upon general principles of law. But if a natural person has an undoubted right so to express the terms of his obligation that it shall not be negotiable in the commercial sense, or in any sense which can give to the purchaser a title superior to that of his vendor, I see no reason to doubt that corporations possess the same right. Have the defendants so expressed themselves in these certificates of stock? I think they have. They have distinctly declared both in their by-laws, and on the face of the certificates, that shares can be transferred only on the books, and on the surrender of the evidence of the previous owner's title. If an illustration were wanting of the value of such a restriction, it is furnished in the present case. But whatever its value, the restraint is lawful in itself, and one which the Corporation has an undoubted right to impose. I do not say that it prevents the owner of stock from selling his shares by an outside transfer, so that his vendee will acquire in equity his own rights; but to say that the holder of a false and fraudulent certificate, by indorsing and delivering it to another person, can create a title

hostile to the Corporation itself, would be to deny to the restriction any meaning or effect whatever.

I have examined attentively the authorities cited upon the question, but do not find that the doctrine contended for has in them the least support. In the case of Kortright vs. The Commercial Bank of Buffalo, (20 Wend. 91, L. C. in error, 23 Wend. 348,) it was held that an action of assumpsit will lie against a corporation in favor of the assignee of a stock certificate, for refusing to permit a transfer on the books. This and the class of cases to which it belongs prove that a transfer not made according to the charter or by-laws of a corporation confers upon the transferee, in an equitable sense, the title of the previous owner; that, being thus clothed with the equitable title, it is the duty of the corporation to permit him to take a legal transfer on the books; and that the law will imply an assumpsit for the performance of that duty. For a breach of this duty, actions of assumpsit and case have been indifferently maintained. In principal the remedy should have been a special action on the case. Such was the opinion of Chief Justice Nelson in the case referred to—but he adds, "it being once settled, (that assumpsit will lie,) there is no occasion for disturbing it." It is only material to observe that the assumpsit is not in the certificate itself, and so passing by endorsement and delivery to the transferee, but is implied after the transfer from the duty of the corporation to clothe the equitable owner with the legal title. Such cases, so far from tending to show that a dealer in certificates acquires rights better than those of the person with whom he deals, seems to me to justify quite an opposite conclusion. They necessarily assume that the change of title is incomplete until the proper transfer is made on the books.

In the case of Fatman vs. Loback, (1 Duer, 354) no question arose involving the rights of the Corporation. The decision is directly opposed to that of Chancellor Walworth in Stebbings vs. Phoenix Bank, (8 Paige, 350,) and my own impression is that it cannot be sustained. I find in it, however, nothing which can affect the question I am considering. The case was disposed of upon principles which were not asserted as having any peculiar application to dealing in stocks or negotiable securities. The case of Stoney vs. The American Life Insurance and Trust Company, (11 Paige, 635,) only held that the negotiable security of a Corporation, appearing on its face to have been duly issued, was valid in the hands of a *bona fide* holder, although, in fact, issued contrary to law. The case of Delafue vs. The State of Illinois, (2d Hill, 159,) related to State Bonds, payable to bearer and strictly negotiable. Such securities are sometimes called Stocks, but a confusion of terms should not involve principles in obscurity.

In the case of Fisher vs. The Morris Canal and Banking Company, (3 Am. Law Reg., 423,) the question was whether the bonds of a railroad corporation, payable to bearer, issued for the purpose of raising money, with interest coupons annexed also payable to bearer, were negotiable in such a sense that a purchaser for value took them free from any equities between the company and the seller. The decision was in favor of the purchaser, and I fully concur in the doctrine. The distinction between such a security and a stock certificate, which by its very terms is not negotiable, and which is not a security for money at all, it seems to me is too plain to escape observation.

These are the only authorities cited in favor of the doctrine contended for. It is quite evident that they have no tendency in that direction. I will now mention some which are decisively the other way. In the case of the Union Bank of Georgetown vs. Laird, (2 Wheaton, 390,) the stock was transferable only on the books of the corporation. The precise propositions decided were, that no legal title to shares could be acquired except by a transfer made according to the requirement, and that the equitable title of the transferee was subject to all the rights of the corporation against his assignor. The same doctrine was held by

Chancellor Walworth in *Stebbins vs. Phoenix Insurance Company*, (8 Paige, 350.)

In the State of Connecticut there have been a series of cases going still further. There the registry on the books, when required by the charter or by-laws of a corporation, is deemed the originating act in the change of title to stock, and a transfer not so made, is regarded as ineffectual for any purpose. (2 Conn., 529; 3 lb., 541; 5 lb. 236; 6 lb., 552. So rigorous a doctrine has not been followed elsewhere, and I think the established rule now is, that a transfer of stock not made in the manner prescribed is nevertheless valid so as to pass in equity all the rights of the seller, but no greater. See further, (Angell and Ames on Corporations, §52, §53, 3d ed.,) where the rule is stated, and the cases cited.

Looking at the question upon principle, I am not aware of anything in the nature or uses of this kind of property which requires an application of the rules which belong to negotiable securities. Stocks are not like bank bills, the immediate representative of money, and intended for circulation. The distinction between a bank bill and a share of bank stock is not difficult to appreciate. Nor are they like notes and bills of exchange, less adapted to circulation, but invented to supply the exigencies of commerce, and governed by the peculiar code of the commercial law. They are not like exchequer bills and Government securities, which are made negotiable either for circulation or to find a market. Nor are they like corporation bonds, which are issued in negotiable form for sale, and as a means for raising money for corporate uses. The distinction between all these and corporate stocks is marked and striking. They are all in some form the representative of money, and may be satisfied by payment in money at a time specified. Certificates of stock are not securities for money in any sense, much less are they negotiable securities. They are simply the muniments and evidence of the holder's title to a given share in the property and franchises of the corporation of which he is a member. The primary use and design, I must be allowed to say, of this species of property, is to afford a steady investment for capital, rather than to feed the spirit of speculation. I am aware that people will speculate in stocks, as they sometimes do in lands, and there is no law which absolutely forbids it; but such, I am persuaded, is not the use for which we should hold them chiefly intended.

The question is capable of some further elucidation by attending to the rules which have been settled in regard to the transferability of other instruments and the effect of transfer. A certificate of stock is in some respects like a bill of lading or a warehouse or wharfinger's receipt. Each is the representation of property existing under certain conditions, and the documentary evidence of title thereto. They are all alike transferable by indorsement and delivery, and the title to the property thus represented passes by such transfer. So far they resemble each other, but there are distinctions to be noted. Bills of lading and wharfingers' receipts are commercial instruments, and their transferability, or as it is sometimes termed, their "quasi negotiability," depends on the custom of merchants and the conveniences of trade. Certificates of stock are not commercial instruments, and the title to the property they represent passes in equity only by indorsement and delivery, whereby any law or rule of the corporation the transfer is required to be made on the books. With these resemblances and the distinctions, if a bill of lading is not negotiable in the sense which must be contended for in the present case, there is much greater difficulty in affirming that such a quality belongs to a stock certificate.

In the great case of *Lichbarrow vs. Mason* (2 Term Rep., 63; 5 id., 367,) it was held that the consignee of goods had lost his right of stoppage in transitu, when the consignee, holding the bill of lading indorsed in blank by the consignor, delivered it to a third person, who received it in good faith and made advances upon it. This has been the settled rule ever since. But, in such

cases, it is to be observed, the legal title to the goods has vested by the sale and consignment in the consignee, subject only to the peculiar and anomalous right of arresting their delivery, in the event of insolvency. If, therefore, before this right is exercised, the consignee transfers the bill of lading to another person, who takes it in good faith and for value, the latter acquires the title which his vendor had at the time of the transfer, and which the consignor cannot afterwards take from him, by stopping the goods before they have reached their destination. In this doctrine, which was settled after a very remarkable contest in the Courts of England, is contained all the negotiable quality that belongs to a bill of lading, and it requires but little discrimination to see that this is not negotiability in any just sense of that term. On the other hand, it has been held by the Supreme Court and the late Court of Errors of this State—*Sattus vs. Everett* (15 Wend., 475; 20 id., 267)—that a bill of lading covering goods shipped, but made without the owner's authority, cannot affect the owner's title, into whatsoever hands the instrument may come. So it has been lately held in the English Queen's Bench, (*Gurney vs. Behrend*, 3 Ellis and Bl., 622,) that if a bill of lading is misappropriated, as if to be endorsed in blank by the consignor and sent to his correspondent, but not intending thereby to have it transferred, and the person receiving the bill transfers it for value, the title to the goods is not affected by the transaction. Lord Campbell, in delivering the judgment in that case, very explicitly denied the negotiability of such instruments. In *Covill vs. Hill* (4 Denio, 323) Chief Justice Bronson had occasion to say, "If the master of a vessel after signing a bill of lading to the owner of the goods should give one to another person, it would confer no rights upon those who were misled by the false and fraudulent paper. See also *Thompson vs. Dominey*, (14 Mees and W., 402) *Zachrisson vs. Ahman*, (2 Sand, 63) *Commercial Bank of Rochester vs. Cole*, (15 Bar. 506).

(To be continued.)

Brunswick and Florida Railroad.

From the report submitted to the stockholders, at their annual meeting in the city of Brunswick, on the fifteenth of May last, we learn that the company has at length a section of this road completed. The progress of the work was much retarded by various kinds of obstacles, in some instances almost insuperable. Lately, delays attending the delivery of iron have been experienced. A quantity of rails has been received, however, sufficient to lay the road to the west bank of the St. Illa river. There are now about 230 hands employed on construction. The grading of about 26 miles of the road is finished, and about 14 miles of rails have been laid. The ties are being rapidly delivered, and track-laying is going on at the rate of over three miles a week. The balance of the grading and bridging is under construction, with the intention of crossing to the west bank of the St. Illa river some time during the month of August.

The Board of Directors have instructed the Chief Engineer to survey and locate a branch line from some convenient point on our main line between the Okefenokee swamp and the Allapaha river, southwardly, to the north line of Florida, at such point as will best secure the trade of that region.

The Board has also instructed him to survey and locate a branch line from or near Thomasville to the Florida line, on the most direct route to Tallahassee that the country will admit of, so as to form the most eligible connection with a road from Tallahassee.

They have also instructed him to survey and locate a line from Albany, in continuation of our Albany branch, as now designated, on the most direct line the nature of the country permits,

with a view to the best accommodation to the business of the country to Eufaula, in Alabama.

The financial condition of the company is substantially as follows:—

LIABILITIES.	
Total amount received on stock.....	\$143,000
Outstanding bonds.....	240,000
Due Ocean Bank.....	40,000
	\$423,000
ASSETS.	
Iron on hand, paid for.....	\$190,000
Paid on construction.....	183,000
Equipment, paid for.....	15,000
Miscellaneous, freights, engineering, &c.	35,000
	\$423,000

The original issue of \$1,200,000 of bonds made by the company and placed out of their hands pending the iron contract in England, is now, we are happy to say, in the control of the company, except \$80,000 placed as collateral with the Ocean Bank, to secure the payment of its debt of \$40,000, long since contracted; and excepting also one thousand dollars in the hands of D. R. Martin, and three sterling bonds of five hundred pounds each, placed by a former President in England—making in all \$88,500. Out of this sum \$80,000 will be returned on payment of the Ocean Bank debt before alluded to—thus leaving \$1,191,000 of the old issue of mortgage bonds with the control of the Company.

The most important obstacles were those connected with legislation. Public opinion had been calling for a line across this section of the State. But the measure granting State aid to this enterprise, after barely passing through the Senate, was defeated in the House. A new and rival project, the Atlantic and Gulf railroad, started into notice, thereby discouraging effort at home, and the confidence of moneyed men in the enterprise elsewhere.

After reading the report, the President, C. F. Welles, Jr., announced that he had closed a contract for the grading and bridging of the road from the St. Illa river to Big Creek, 18½ miles; and that he had also closed a contract with twenty-one gentlemen from Thomas and Lowndes counties, for the grading and bridging of the road from Big Creek to the Allapaha river, a distance of 53 miles—all payable in stock, being in compliance with former pledges and subscriptions made to this company; and thus securing the completion of the road for 100 miles from Brunswick within the next fifteen months. The President also stated that he had positive assurances from the gentlemen from Lowndes and Thomas, of their willingness and determination to grade and bridge the road from Allapaha to Thomasville, upon the same terms—payment to be made in stock of this company, as heretofore subscribed.

The President also stated that he had received assurances of gentlemen from Albany and vicinity, of their willingness and determination to grade and bridge a branch line from the main line to Albany, as soon as the main line was so far advanced as to warrant the commencement of the work, in compliance with their subscriptions to the stock, and with pledges heretofore given.

Ample evidence was thus given of the good feeling existing towards our road, and of the firm determination of the people along the line to give ample material aid towards grading and bridging the road to Thomasville and Albany, in compliance with their former subscriptions and pledges.

The Pittsburgh, Fort Wayne, and Chicago Railroad.

We learn that the uncompleted portion of this road, between Fort Wayne and this city, is progressing finely. It is the design to have it completed at the earliest possible period. That done, there will be unbroken railroad communication between Chicago and Philadelphia.

The election of officers for the consolidated road will take place on the 2nd proximo, and then the previous arrangements for consolidation will be perfected.

The Presidency of the Company will be a very responsible position, requiring great ability and experience. We have heard the name of Geo. W. Cass Esq., now of the Ohio and Pennsylvania Railroad, mentioned in this connection, and we feel confident, from our knowledge of the character and qualifications of this gentleman, that he is admirably adapted to the position.—*Chicago Dem. Press.*

Indianapolis, Pittsburgh, and Cleveland Railroad.

The report of this company shows that their business for 1855 was—

Passenger earnings.....	\$117,860
Freight ".....	96,766
Mails, &c. ".....	11,432

Total.....\$226,058

—which is a gain of \$41,879 over the previous year. The various expenditures were—

Working expenses.....	\$183,048
Interest.....	62,952
Taxes.....	3,966

Total.....\$199,966

—leaving \$26,092 as net profits.

The Report says:—

The comparatively small increase in passenger earnings is attributable to two causes: 1st, the general reduction in travel during the year, arising from the pecuniary embarrassments of the country; and 2nd, the fact that until late in the season the connections west of Terre Haute were not so completed and arranged as to give to the line the advantages of travel. Those connections are now perfected, affording two lines from Terre Haute to St. Louis, the one by the Evansville and Crawfordville and Ohio and Mississippi roads, and the other by the Terre Haute, Alton, and St. Louis line. These not only give us direct connections with St. Louis and Cairo, but also with the central portions of Illinois and Iowa. They cannot fail to furnish a large increase of travel for the future. The increase of freight earnings, in view of the low prices produced by an unwise competition, and the continuous navigation of the rivers during the season, of which competing lines had the advantage, has fully realized our expectations. Should the harvest prove good the present year, an equal increase may be anticipated. Owing to the want of complete arrangements, very little advantage has been derived from the merchandize transportation to Illinois and St. Louis. These difficulties will be early obviated, and material advantages are anticipated from this trade. Although estimates of earnings, in view of the eager competition for business, are somewhat hazardous, the managers of the road feel warranted in anticipating an increase of earnings the present year fully equal to that of the last; and that expenses may be proportionally reduced. In that event, if the road was relieved from the embarrassment of its floating debt, the income would make a handsome return to the stockholders.

The working expenses, it will be observed, are 59 per cent. of gross receipts. In explanation of this, the following facts are submitted:

1. The comparatively light earnings by passenger trains, for which we were compelled, from the nature of our connections, both east and west, to perform a large amount of service. The same trains would have carried double the amount of travel, without materially increasing the expense.

It is confidently hoped that as the western lines get into working order, the amount of this service can be very considerably reduced.

2. In the original construction of the western division of the road, sawed timber was used for ties, which decayed so rapidly, as to render the road insecure. About thirteen miles of this track was re-laid during the year with new ties, and re-ballasted, the expense of which was charged to repair account. Nearly the same amount will have to be replaced the present year, which will leave the road in very good working order.

3. The supply of machinery was inadequate to the demands made upon it. As a consequence it was overtasked, and the expense of repairs necessarily increased. Two first class engines were added late in the Fall; and the service of the present year will thereby be aided, and the expenses reduced.

A large amount of ballasting was done during the year, and the road, with the exception above stated, is in very good working condition. The iron is wearing very well, and will not require any material expenditure for renewals for several years.

The fencing of the line has been a heavy item of expense; and yet it was necessary to incur it, no less for the safety of trains, than the saving of expense, in the payment for stock, which we are compelled by statute to make in all cases where the road is not fenced. The amount so paid during the last two years has been a serious item in our expenditures. A small amount of fencing now remains to be done to enclose the entire line, which will be accomplished as soon as possible. Though the expenditure may be somewhat embarrassing at the present time, it will prove a large saving in payments for stock, damages to machinery and trains; and remove a fruitful cause of trouble and annoyance with the people along the line.

The Capital Stock of the Company is...	\$826,825
1st Mortgage Bonds.....	661,000
Income Bonds.....	191,000
Domestic Bonds.....	35,400
Floating Debt.....	212,000

Total.....\$1,926,225

Deduct estimated value of lands taken for Stock.....	\$70,000
Unencumbered Real Estate.....	26,000

95,000

Balance.....\$1,831,225

—Being for cost of road and equipment, equal to \$21,800 per mile.

In June last the Board authorized an issue of \$400,000 of Second Mortgage Bonds. Of these \$191,000 were placed in the hands of the Trustee, Simon Yandes Esq., of Indianapolis, as a protection to the same amount of Income Bonds, for which he was authorized to exchange them, if the holders of the latter should desire. The balance, \$209,000, was appropriated to the payment of the floating debt. This debt, which was contracted mostly for equipment, has been the great incubus upon the road. If that were in a funded form, the income would undoubtedly protect the interest and yield a return to the stockholders.

The local business of the road has shown a steady and important increase during the year. With completed connections, and forming a part of the shortest, most direct and advantageous line between the Atlantic and Lower Mississippi, the present year will constitute the first period since the opening of the road that may properly be termed a fair test of its value and usefulness. It will yet realize the soundness of the policy that created it, and justify the expectations of those who have contributed to that end.

The principal officers for the present year are—John Brough, President; Fred. W. Judd, Secretary; Thomas H. Sharpe, Treasurer; Homer Ward, Superintendent; and W. H. Roberts, Master Machinist.

The Directors are—Daniel Yandes, Alfred Harrison, Douglas Maguire, James W. Yandes, and John Brough—all of Indianapolis; S. V. B. Noel, of Fortville; William Sparks; of Anderson; Allen Makepeace, of Chesterfield; D. Kilgore, of Yorktown; S. P. Anthony, of Muncietown; Stillman Witt, Henry Wicks, E. T. Sterling, and Wm. A. Otis—all of Cleveland; and Joseph Ridgeway, of Columbus.

The Southern Pacific Railway.

The Galveston News of the 18th inst., says:

Col. A. B. Gray has just arrived in our city from a reconnaissance of the upper country, from Shreveport towards the Colorado of Texas, with a view to a more full understanding of the Southern Pacific Railway. Col. Gray has heretofore established the entire practicability of the Atlantic and Pacific Railroad through Texas. His present exploration is of the upper country of Texas towards the Colorado. He has fixed the latitudes of the crossings of the Sabine, the Trinity and the Brazos rivers, with reference to the parallel of 32 degrees north latitude, having previously fixed the crossings of the Pecos and Rio Grande. He has obtained good observations, for determining the latitude and longitude of the crossings of the Sabine, the Neches, the Trinity and the Brazos rivers, with reference to the parallel of 32 degrees. He has also fixed the positions of the county towns of Marshall, Tyler, Corsicana and Hillsborough, the county seats through which it is proposed the Pacific Road shall pass. Other matters of interest will be furnished in Col. Gray's report which will soon be published.

Col. Gray informs us that the whole country from Marshal to Fort Graham, a distance of near three hundred miles, is rapidly improving. The lands are everywhere worth from \$2.50 to \$3 per acre. During this whole distance, he was rarely out of sight of corn or wheat fields, and never stopped at night without having abundance of milk, eggs and chickens. Col. Gray is now proceeding direct to Washington City, to report to the Company.

Railroad Earnings.

NEW YORK & ERIE R. R.

The earnings of this road for May were...\$617,664
May 1855..... 475,127

Increase in 1856, 30 per cent., or.....\$142,547
The increase in April was..... 107,072

Making for two months.....\$249,609
or nearly 24 per cent. increase on the capital stock in two months. The aggregate earnings for the eight months of the present fiscal year have been \$4,190,584; expenses and interest, partly estimated \$3,350,000; net earnings, \$840,584, or over 8 per cent. of the capital stock.

PHILADELPHIA & COLUMBIA R. R.

The following is a statement of the business on this road for the month of May, 1855 and 1856, and for the first six months of the fiscal years 1855-56:

May 1856.....\$91,321.88
May 1855..... 77,899.71

Increase.....\$13,920.65

From Dec. 1, 1855, to May 31, 1856..\$465,423.63
Same period last year..... 394,510.54

Increase during 6 months.....\$70,924.09

STONINGTON R. R.

The receipts of the Stonington Railroad Company in May were:

	Passengers.	Freight.
1856.....	\$13,417.40	\$8,567.69
1855.....	13,267.10	9,304.42

Increase.....\$150.80 Dec....\$736.73

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.....	149	1,538,100	2,973,700	6,019,929	470,647	6	65		Brunswick and Florida, Ga.	80	300,000	300,000	550,000	In progr.	-----	-----	-----
Androscoog & Kennebec.....	55	842,343	1,473,080	2,245,020	190,605	90,797	14		South Western.....	92	1,097,494	465,500	1,624,920	253,306	141,168	8	
Kennebec & Portland.....	56	1,174,725	1,361,236	2,470,000	240,000	none	6		Tennessee and Alabama.....	90	248,480	-----	-----	-----	-----	-----	-----
Portland, Saco, & Portsmouth.....	61	1,367,000	1,102,287	1,456,327	270,214	112,491	6	90	Tennessee and Mississippi.....	90	170,981	-----	-----	-----	-----	-----	-----
Boston, Concord, & Montreal.....	93	1,808,093	1,050,512	2,771,310	233,234	120,834	6		Memphis and Charleston.....	217	2,179,440	2,127,002	4,028,796	311,631	159,572		
Ohio.....	53	2,086,925	899,313	3,179,687	380,221	143,565	2		Mobile and Ohio.....	183	2,568,555	1,802,921	4,536,412	199,932	109,236		
Concord.....	35	1,500,000	8,242	1,412,076	385,919	130,454	6	78	Miss. Central.....	188	642,534	-----	-----	-----	-----	-----	-----
Northern, N. H.....	82	2,768,400	none	8,016,633	167,629	138,299	2 1/2	42 1/2	N.O., Opelousas & G.W.....	55	2,930,425	671,645	2,657,555	In progr.	-----	-----	-----
Con't & Passumpsic Riv.....	61	1,048,145	787,608	1,780,062	370,087	55,173	none		Vicksburg, Shreveport & Tex.....	111	1,117,600	-----	-----	-----	-----	-----	-----
Rutland & Burlington.....	120	2,233,376	2,662,896	5,378,428	324,971	-----	-----		East Tennessee and Ga.....	111	1,000,000	1,500,000	2,500,000	In progr.	-----	-----	-----
Vermont Central.....	117	1,530,000	825,635	2,188,595	489,764	140,877	6	70	East Tennessee and Va.....	116	825,425	938,593	1,033,781	In progr.	-----	-----	-----
Boston and Lowell.....	27	4,076,974	150,000	4,179,535	844,426	339,000	6	73 1/2	Nash. and Chattanooga.....	151	2,319,330	1,497,081	3,843,694	816,090	112,177	none	
Boston and Maine.....	74	2,240,300	1,518,671	8,463,118	99,317	8,740	none	5 1/2	Owington & Lexington.....	98	1,802,804	2,235,939	3,738,753	290,295	138,694	16	
Weston and N. Y. Central.....	55	3,160,000	359,132	3,077,154	558,671	219,689	6 1/2	82 1/2	Lexington and Frankfort.....	29	430,055	158,099	637,071	93,263	43,635	6	
Boston and Providence.....	68	4,500,000	655,428	4,865,449	1,008,004	404,461	6 1/2	82 1/2	Lexington and Danville.....	29	694,444	52,784	747,178	In progr.	-----	-----	-----
Boston and Worcester.....	67	681,690	280,593	997,252	119,221	65,527	3	49 1/2	Louisville and Frankfort.....	65	898,236	669,081	1,589,690	244,014	98,902	6	
Cape Cod.....	52	1,591,110	273,241	1,802,244	286,563	103,787	5 1/2	48	Atlantic & Gt. Western.....	244	806,939	77,294	613,231	In progr.	-----	-----	-----
Connecticut River.....	60	2,583,400	2,947,737	4,621,016	647,281	306,998	44 1/2		Belleville and Ind.....	118	1,831,635	2,025,925	2,852,692	298,293	140,828	none	36
Eastern, Mass.....	67	3,540,000	153,700	3,765,968	681,163	225,071	71 1/2		Clev., Col., and Cin.....	141	4,647,020	122,857	4,813,722	129,295	732,056	9	202
Fitchburg.....	30	800,242	225,685	968,621	In progr.	-----	-----		Cleveland and Toledo.....	200	2,678,425	2,689,301	6,124,629	786,272	396,966	10	78 1/2
North Eastern.....	21	500,000	none	533,953	198,491	50,533	6 1/2		Clev. and Mahoning.....	103	-----	-----	-----	-----	-----	-----	-----
N. Bedford and Taunton.....	57	3,015,100	292,650	3,362,940	653,499	295,738	6	83 1/2	Clev. and Pittsburg.....	133	2,780,744	3,043,992	6,587,466	581,877	309,613	60	
Old Colony and Fall River.....	77	2,232,541	1,033,670	3,209,727	385,726	87,313	none	6	Cin., Hamilton & Dayton.....	90	2,153,900	1,321,213	2,987,767	508,271	278,012	67	
Vermont and Mass.....	155	5,696,420	10,495,906	1,858,678	638,013	7	92 1/2	Cin., Wilm. & Zanesville.....	131	1,120,450	1,181,263	2,326,459	In progr.	-----	-----	-----	
Western, Mass.....	155	4,141,000	205,565	1,351,271	290,760	76,760	2	45	Columbus and Xenia.....	55	1,484,550	149,000	1,481,738	535,395	187,518	10	88
Worcester and Nashua.....	43	1,610,920	336,461	1,806,696	311,430	138,057	73		Dayton, Xen. & Belpre.....	63	437,838	422,658	860,496	In progr.	-----	-----	-----
Providence and Worcester.....	72	2,359,400	939,000	3,313,932	730,015	552,799	10	21	Dayton and Michigan.....	140	1,076,092	393,011	1,185,826	In progr.	-----	-----	-----
Hartford and N. Haven.....	125	1,845,810	2,090,124	4,060,869	268,682	119,611	none		Dayton and Western.....	35	310,000	500,000	733,760	-----	-----	-----	18
Hart'd, Prov. and Fishkill.....	110	2,000,000	474,177	2,429,066	330,792	18,351	none		Easton and Hamilton.....	42	454,090	904,489	1,155,135	171,929	65,000	20	
Housatonic.....	57	1,031,800	573,995	1,577,167	328,266	none	4		Little Miami.....	65	2,963,921	1,171,738	3,648,172	681,562	336,708	90	
Naugatuck.....	62	3,000,000	2,376,803	5,376,803	884,306	338,577	24		Mad River and L. Erie.....	205	2,451,650	2,572,832	4,446,661	-----	-----	-----	15
N. York and N. Haven.....	50	738,258	735,165	1,450,818	88,007	30,318	none		Central Ohio.....	138	1,520,927	3,485,076	4,283,443	Recently opened.	-----	-----	none
N. Haven and N. London.....	66	609,200	1,073,673	1,594,383	124,044	66,331	none		Ohio and Penn.....	187	2,451,700	3,219,000	5,070,700	1,111,626	662,117	9	
N. London, W. & Palmer.....	66	1,222,300	873,489	2,597,153	304,236	88,458	2 1/2	32	Pittsburg, Mayv. & Cin.....	50	371,350	31,000	390,933	In progr.	-----	-----	-----
Norwich and Worcester.....	32	439,005	1,625,098	1,840,695	117,716	9,904	none		Sand'y, Manaf. & Newk.....	127	1,360,000	2,206,357	3,562,357	328,958	164,479	none	
Albany Northern.....	35	643,330	371,859	974,823	In progr.	-----	-----		Scioto & Hocking Valley.....	136	403,976	509,050	888,858	In progr.	-----	-----	-----
Black River and Utica.....	100	1,487,871	1,601,183	2,819,096	172,476	66,338	none		Spring Mt. Vernon & P.....	113	1,000,000	950,000	-----	In progr.	-----	-----	-----
Buffalo, Con. and N. Y.....	92	798,439	2,597,849	3,401,868	288,392	31,896	none		Tol., Wabash & St. Louis.....	242	2,500,000	4,590,000	-----	In progr.	-----	-----	-----
Buffalo and St. Line.....	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10		Cin., Log. and Chicago.....	255	4,196,679	1,006,126	2,080,433	In progr.	-----	-----	6
Canadaigua and Elmira.....	47	434,111	922,393	1,276,796	174,089	69,506	none		Evansville & Crawfordav.....	109	706,945	1,177,696	1,844,641	127,400	64,552	7	60
Canadaigua & Niagara Fd.....	98	1,315,000	2,279,854	3,495,832	-----	-----	-----		Ind. and Cincinnati.....	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60
Yaduga & Susquehanna.....	35	687,000	506,689	1,187,682	135,438	48,649	none		Indiana Central.....	68	611,400	1,261,179	1,907,911	380,176	134,375	50	
Hudson River.....	144	3,758,468	2,503,362	12,737,898	1,812,087	603,946	none	36 1/2	Ind. Clev. & Pittsburg.....	83	834,167	1,101,971	1,671,444	-----	-----	-----	none
Long Island.....	95	1,875,148	668,949	2,555,966	301,793	116,462	none	26	Jacksonville.....	64	1,014,282	694,000	-----	206,544	94,318	none	
New York Central.....	134	2,154,880	14,462,742	29,523,913	6,593,581	3,162,126	8	93 1/2	Madison and Indianapolis.....	87	1,647,700	1,836,816	1,205,000	286,146	112,880	none	
New York and Erie.....	144	10,023,958	25,126,669	33,439,431	6,598,983	3,627,118	none	62 1/2	New Albany and Salem.....	288	2,535,121	5,281,948	6,643,189	645,827	371,402	none	
New York and Harlem.....	138	5,717,100	4,069,769	8,768,203	1,635,577	234,126	none	17	Peru and Indianapolis.....	73	-----	858,814	-----	165,000	90,000	none	17
Northern, N. Y.....	118	1,633,022	4,406,874	6,470,714	320,153	138,764	none		Ferre Haute and Ind.....	78	974,800	604,356	1,602,166	287,512	189,702	10	
Oswego and Syracuse.....	35	399,000	216,681	723,683	126,540	59,982	3 1/2		Chicago and Rock Is'd.....	182	3,141,500	2,387,165	5,214,162	In progr.	-----	-----	98
Potsdam and Watertown.....	29	487,200	294,189	749,683	In progr.	-----	-----		Chicago and St. Louis.....	220	-----	-----	-----	1,077,312	-----	-----	-----
Rensselaer & Saratoga.....	25	610,000	140,000	896,423	241,149	82,600	7		Chicago, Burl. and Quincy.....	58	1,639,100	1,634,736	2,884,622	722,580	379,821	20	
Saratoga and Whitehall.....	48	500,000	393,600	-----	71,909	21,089	none		Central Military & Trd.....	88	1,202,500	1,183,050	2,920,241	471,399	219,558	-----	
Saratoga & Bingham'n.....	80	768,389	1,678,804	2,272,777	169,484	22,503	none		Chic. St. Paul & Ft. de Lao.....	178	2,300,000	2,125,000	3,826,000	In progr.	-----	-----	-----
Troy and Boston.....	27	437,830	737,079	1,109,822	166,363	55,184	none		Galena and Chicago.....	259	5,441,500	3,318,039	7,742,614	2,315,786	1,192,042	22	114
Watertown and Rome.....	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2		Illinois Central.....	627	2,271,060	19,416,392	20,744,461	1,532,118	527,962	100	
Belvidere Delaware.....	64	1,000,000	1,619,000	2,610,000	161,855	75,534	none		Peoria and Oquawka.....	93	599,899	818,454	1,388,342	In progr.	-----	-----	-----
Camden and Amboy.....	94	3,000,000	11,407,200	6,836,523	1,071,127	961,941	12	125	Ohio & Miss. (Wat. Div.).....	147	1,780,295	3,292,403	4,870,586	Recently opened.	-----	-----	-----
Camden and Atlantic.....	60	369,320	1,622,131	1,729,642	122,417	50,080	none		Terre Haute and Alton.....	173	2,281,420	1,256,000	3,957,424	In progr.	-----	-----	-----
New Jersey.....	30	3,482,850	690,000	4,310,011	861,514	500,747	10	122	Detroit and Milwaukee.....	185	638,000	1,128,964	1,969,969	In progr.	-----	-----	-----
New Jersey Central.....	63	2,000,000	2,296,176	3,683,149	398,728	171,063	-----		Mich. Central.....	282	6,032,444	5,996,018	10,668,155	2,215,283	679,656	10	92 1/2
Morris and Essex.....	53	1,167,805	875,000	1,636,550	229,341	96,267	6		Mich. South'n & N. Ind.....	478	6,928,900	6,319,224	11,645,208	2,410,000	876,000	10	98 1/2
Albany Valley.....	44	1,637,867	842,564	1,988,317	Recently opened.	-----	-----		Green Bay, Mil. & Oh.....	155	764,076	442,726	1,193,765	In progr.	-----	-----	-----
Cataw. W. & Erie.....	63	1,700,000	1,940,000	3,640,000	219,253	62,450	-----		Milwaukee and Miss.....	106	1,826,428	2,467,839	3,578,757	691,843	417,443	17	82 1/2
Cumberland Valley.....	56	1,099,500	12,211	1,191,838	146,381	66,994	-----		Milwaukee & Water'n.....	72	864,361	132,000	514,238	In progr.	-----	-----	-----
Del. Lack. & Western.....	109	3,051,622	3,884,702	6,022,667	626,911	259,263	6		Milwaukee and Horicon.....								

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1886	97 1/2	
Bellefontaine and Indiana	900,000	Do. convertible	7	Jan'y, July	"	1886	90	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1888		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1889		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1885		
Cincinnati, Hamilton, and Dayton	800,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1887	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1887	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July	"	1888	82 1/2	75
Cincinnati, Wilmington, and Zanesville	1,800,000	Do. convertible	7	May, Novemb.	"	1882		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1881	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1880		
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873		75
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863		87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	70	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883		66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875		90 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		80
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1883	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88	88 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		91
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	94	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		75
Indiana Central	800,000	Do. do.	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	82 1/2	
Indianapolis & O'm'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874		85
Lake Erie, Western, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865		75
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883		81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	100	100 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	800,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1869		96 1/2
Do. do.	550,000	Do. 2d do. 1858	8	April, October	"	1863	95 1/2	96 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,825,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		77 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	92 1/2	96
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1876		86
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Staubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	73 1/2	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83 1/2	83 1/2
Do. do.	1,123,500	Do.	6	Jan'y, July	Balt.	1875		88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	98	98 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	98 1/2	99 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	96	100
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	94	95
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86 1/2	87
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	100 1/2	101
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	88 1/2	89
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	68	68 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	88 1/2	88 1/2
Do. (Free Land)	3,000,000	M'gs 345,000 acrs. priv. 7 shars	7	March, Sept.	"	1860	92	94
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	84 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-67	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92	94
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	86	86 1/2
New York Central	8,287,000	No mortgage, do.	8	May, Novemb.	"	1883	58 1/2	59
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100 1/2	100 1/2
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July	"	1866	104 1/2	105 1/2
Do. 2d do.	1,478,000	Do. till 1855	7	Jan'y, July	"	1866	104 1/2	104 1/2
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	
Do. do. 1849	3,400,000	Do. inconvertible	6	April, October	"	1870	84	84 1/2

CITY SECURITIES.	Int'at payable.	Off'd	Ask'd	CITY SECURITIES.	Int'at payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y, May, August, and November.	100	101	Milwaukee, 7 per ct. coup.	X	Divers	87
Do. 5 do. 1858-60		96 1/2	96 1/2	New Orleans, 6 per ct. op. R.R. X		Do.	75
Do. 5 do. 1870-76		94	96	N. Orleans, 6 per ct. op. municip. X		Jan'y, July	80
Do. 5 do. 1880		94 1/2	96	Philadelphia, 6 per ct. 1876-98		Jan'y, July	89
Albany, 6 per ct. coup. 1871-81	X	Feb'y, August.	97 1/2	Pittsburgh, 6 per ct. coup.	X	Divers	71 1/2
Allegheny, 6 per ct. coup.	X	Jan'y, July	76	Quincy, 8 per ct. coup.	X	Jan'y, July	
Baltimore, 6 per ct. 1879-90	X	Quarterly	97	Racine, 7 per ct. coup.	X	10 Feb'y, Aug.	85
Boston, 6 per ct. coup.	X	April, October.	98	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long	X	Jan'y, July	101	St. Louis, 6 per ct. coup.	X	Do.	77
Clev'Pd, 7 per ct. cp. W.W. 1879	X	Do. do.	101 1/2	Do. do. Municipal	X	Do.	79 1/2
Cincinnati, 6 per ct. coup.	X	Divers	89	Sacramento, 10 p. ct. op. 1862-74	X	Do.	74
Chicago, 6 per ct. coup. 1873-77	X	Jan'y, July	89 1/2	S. Francisco, 7 p. acp. 1866 pay. N.Y. X		May, Novemb.	80
Do. 7 per ct. coup. 1880	X	Jan'y, July	100	Do. 10 p. ct. op. 1871	X	Do. do.	86
Detroit, 7 per ct. W.W. 1873-78	X	Feb'y, August.	100	Do. 10 do. pay. N.Y.	X	Jan'y, July	102
Dubuque, 8 per ct. cp. Long	X	March, Sept.	101	Do. 6 per ct. pay. N.Y. 1876	X	Do. do.	59
Jersey City, 6 p. ct. cp. W.W. 1877	X	Jan'y, July	96	Wheeling, 6 per ct. coup.	X	Divers	87 1/2
Louisville, 6 per ct. cp. 1880-83	X	Divers	79 1/2	Do. 6 p. ct. Maa. 1874	X	March, Sept.	81
Memphis, 6 per ct. coup. 1882	X	Jan'y, July	70	Zanesville, 1 do.	X	April, October	97 1/2

Cincinnati Stock Sales,

By HEWSON & HOLMES.

For the week ending June 25th, 1886.

BONDS.		
\$5,000 Covingt. & Lex., 7 per ct. 2nd Mortgage	64	
2,000 Columbus & Xenia, 7 per ct. Dividend	92	
5,000 Little Miami, 6 per ct., 1st Mortg.	80	(& Int.)
1,000 Ohio and Miss., 7 per cent. 1st Mortg.	65	"
3,000 Ohio & Miss. 7 per ct. 2nd Mort.	60	"
1,000 North-Western Virginia, 6 per cent.	60	"
800 Ind. & Cin. 7 per cent Dividend	70	"
STOCKS.		
100 Shares Mad River and Lake Erie	15	
50 " Indianapolis, Pittsb. and Clevel.	20	
200 " Cin. & Chicago	4	
20 " Cin., Ham. and Dayton	67	
85 " Covington and Lexington	16	
15 " Columbus and Xenia, ex. Div.	82	
50 " Eaton & Hamilton	25	
72 " Ohio Central	12 1/2	
124 " Little Miami	80	

By KIRK & CHEEVER.

For the week ending June 4th, 1886.

BONDS.		Per ct
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2nd Mort. 7 per ct.	64	
Ohio & Mississippi, 2nd Mort. 7 per ct.	77	
Indianap. & Cin. 2nd Mort. 7 per ct.	47	
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	80	
Covington & Lexington, 10 per ct. Income	57	
Indianapolis and Cincinnati Dividend	70	
Columbus and Xenia Dividend	90	
Cincinnati and Chicago, 10 per cent. Real Estate, Butler	40	
Do. do. do. Corwin and Sample, Trustees	60	
Cin. Hamilton and Dayton, Divid. Scrip. due 1887, stat. 102 1/2	102 1/2	
STOCKS.		
Bellefontaine and Indiana, 30—Cin., Ham. and Dayton, 60.		
—Col. and Xenia, 83—Cincinnati, 4 1/2—Covington & Lexington, 15—Dayton & Western, 17 1/2—Eaton and Hamilton, 20—Indiana Central, 49—Indianapolis and Cincinnati, 59—Little Miami, 90—Mad River & Lake Erie, 15—Marietta and Cincinnati, 17—Ohio and Mississippi, 8 1/2—Hillsboro' and Cincinnati, 17—Peru and Indianapolis, 17 1/2—Cincinnati, Wilm. and Zanesville, 10.		

Circular of Robt. Benson & Co., per Asia.

LONDON, June 6th, 1886.

Under the influence of an abundant supply of money our Government Securities have, notwithstanding the uncertainty attending the American question, continued to advance. We quoted Consols in our last Circular at 95 1/4 for the July acct, including the interest. They have since touched 94 1/4 ex interest, but are again rather flatter, and we now quote them at 93 7/8.

There has been no further reduction in the Bank of England rate of discount—at present 5 per cent, but the current rate in Lombard street has been about 1/2 per cent. under that rate, and money has been readily obtained on loan on Government Securities at 4 1/4 per cent., notwithstanding the payment yesterday of an instalment of £1,000,000 on the late loan.

The transactions in American Securities continue limited. United States 6s were sold in the early part of the week at 102 1/4, but are now lower. Maryland Sterling have changed hands at 89 1/4. Illinois Central Railway Construction Bonds, 6s, have been sold at 74; 7s Bonds at 77 1/2 at 78 1/4; Shares at 1 1/2 discount. Ohio and Pennsylvania Income Bonds at 78 1/4. Erie 3rd mortgage at 84; and New York Central 7s Bonds at 91 1/4.

ROBT. BENSON.

Marie & Kan's Money Circular for the European Steamer of the 2d Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday July, 1st, 1886.

The foreign news, with Liverpool dates to the 14th inst., received since our last report, though leaving us yet in uncertainty about the issue of our controversy with Great Britain, had no effect upon our market. The rise in Stocks, noticed last week, has been maintained with few exceptions, the leading Railroad Stocks, especially Erie, have further advanced under heavy purchases on speculation, as well as for investment. Some orders for stocks from Europe have also been received and business generally shows more activity than for many weeks. The abundance of money continues, and probably will be increased yet by the heavy semi-annual payments of interest to-morrow. State Stocks—Missouri at a rise of 3/4, and Virginias at a decline of 1/4, have been active. Indiana 5s advanced 1/2, and Tennessee 6s 1/4.

Some considerable lots of United States Stocks sent back from Europe, have been sold at a fraction above the government price. City and County Bonds—There are no sales of importance to notice. Railroad Bonds—Illinois Central Bonds have again been active at a rise of $\frac{1}{4}$; Erie, 1875, Bonds, advanced 2, and are in demand; New York Central 6 per cent. bonds sold at a decline of $\frac{1}{2}$ per cent. Western Railroad Bonds remain very quiet. Railroad Shares—Erie sold to a very large extent, closing at an advance of $2\frac{3}{4}$; Reading also was active, advancing $\frac{1}{4}$; Cleveland and Toledo $\frac{1}{2}$; Hudson River $\frac{1}{4}$; Chicago and Rock Island declined $\frac{1}{4}$; Cleveland and Pittsburg $\frac{1}{2}$; Milwaukee and Mississippi 1 per cent. Money continues very abundant at 5a7 per cent. on call; first-class paper 6a7; names less known 8a9; stock contracts 8a10. Exchanges firm, but only a small business doing. Sterling, 109 $\frac{3}{4}$ a110; Paris, 5.15. MARIE & KANZ.

American Railroad Journal.

Saturday, July 5, 1856.

Railroad Dividends.

The prompt payment of coupons due on the large number of railroad securities on and about the first instant, and the very satisfactory rates of dividends paid on the stocks of a large number of roads, is gratifying evidence of the improved condition of this great interest. Our railroad companies are gradually working out of their embarrassments, and are placing themselves on strong and independent footing. Their traffic is increasing in a very rapid ratio, and must continue to do so. Capital now exists in sufficient abundance for the development of our resources, and for the promotion of all useful enterprises. The condition of the country was never so sound as at this present moment, nor was its internal trade ever so active or prosperous. We can see no reason why there is not an exceedingly active and prosperous future before our people.

New York and New Haven Railroad.—Decision in Reference to the Schuyler Stock.

We give in another column the decision of the Supreme Court of this State, in reference to the fraudulent issues of the stock in the above road by its late President and Transfer Agent, declaring, in the case before them, the company not to be liable, upon reasons that would seem to cover nearly all the over-issues. The reasons upon which the decision is based are so thoroughly amplified, that there is no necessity for again recapitulating them.

The decision will be received with general disappointment; but upon a careful examination of it, it will be difficult to perceive how it could be otherwise. The great variety and untenableness of the positions assumed from first to last, in maintenance of the action, show the extreme weakness, in a legal point of view, of the grounds upon which it was based. Where there is no question as to the intent of the law, courts cannot be influenced by arguments based upon what may appear to be the hardship of a particular case. The office of the courts is to interpret and enforce the laws, not to enact them. In the present case, the hardship would be equal on both sides. Unless therefore the defendants be the party most in fault, upon the ground last stated, the decision could not be otherwise than it is.

But whatever may be the justice or injustice of the decision, we are confident that its effect will

not be injurious upon the value of Railroad Securities. There need be no difficulty in ascertaining whether shares be properly or improperly issued. A purchaser, if he will take the trouble, can ascertain this fact. But we should like to know what security he has for the value of his stock, if a transfer agent may fraudulently create any additional quantity and bind the company thereby? None whatever. The powers of agents must be limited or there must be an end of all business transactions. All that companies can do is, to prescribe certain rules for the guidance of their agents. Any assumed authority beyond such rules must be at the risk of other parties.

The Locomotive.

No. 4.

By THEODORE KRAUSCH, Civil and Mechanical Engineer.

Very great attention must be paid to a constant water line; if it falls too much, very serious hindrances must follow. The influence which arises from the injection of cold into heated boiler-water is just the same as we observe when cold water is put into any vessel filled with hot water: the hot water becomes more or less cooled, in proportion to the quantity of cold water put in. If we diminish the first quantity of hot water about one-half, and put in the same quantity of cold water as at first, the hot water will be cooled twice as much as in the first case. Just so the same effect is produced when cold water is thrown into a larger or smaller volume of heated boiler-water. The smaller the volume of heated water, the greater will be the effect produced; and when it is considered that the production of steam depends upon the temperature of the volume of water in the boiler, the importance of the consequences (in regard to running engines with safety) will not be doubted.

Raising the necessary quantity of steam is attended with difficulty, when cold water is injected into the boiler with the heated water below its proper line; especially is this the case on heavy grades of great length; because the steam-space increases as the water volume decreases, and therefore a volume of steam must be generated larger than with the usual water line, which requires more time.

But should the water fall below the crown-sheet, an explosion is hardly avoidable. In such a case nothing can excuse the engineer, because it is the consequence of total ignorance or the grossest carelessness. The following, perhaps, may show it in a stronger light. For instance, if the water line be 5 inches above the crown-sheet, the evaporation 2 $\frac{1}{2}$ cub. ft. of water per minute, the area of the surface of the water volume at the point of the water line, 60 sq. ft. (the proportion of the boiler being, as before mentioned, viz: cylinder part, 11 ft. long and 4 ft. diameter, with a fire-box 4x4 ft.), if the water line sinks 4 in., it is necessary that 20 cub. ft. of water be evaporated, which consumes about eight minutes.

The construction of the boiler is the most difficult problem for a machine builder, especially at the present time, when steam is sometimes worked at 200 lbs. pressure per square inch. Great carefulness must be used in regard to the safety of every part, and particularly so to those which expose the passengers as well as the engine-men to the greatest danger.

The builder has to thoroughly convince him-

self that the plain surfaces of the fire-box will resist such great pressure, and that every part of the boiler will resist equally. A knowledge of the strength of the materials applied, carefulness, with a practical and correct judgment in distributing the materials, are indispensable requisites to the builder.

The experiments of a few years past have proved that rolling out the sheets of boiler iron does not increase the strength in the direction of their length over that of their width, which is the reverse of the supposition of former times. The result of these experiments proves that no difference exists in the strength of boiler iron sheets. The power which is required to draw the sheet asunder, in the direction of the fibre, is also required to draw it asunder in its cross direction. Therefore we may make use of the sheets with perfect safety, without regard to their being placed length or crosswise.

The strongest connection of the boiler iron sheets, is the next in importance; for this the praxis recommends the rivet, notwithstanding that a weakness, in regard to the strength of the boiler is the consequence; which arises from the holes cut through the sheets at their ends; this also has been proved by experiments, the results of which, in regard to the different riveted connections, were found by drawing them directly apart.

The strength of the two different ways of riveting, viz: single and double, was proportional to the strength of the perfect sheet as 100, 70, 56.

100 The strength of the perfect sheet.

70 Double riveting.

56 Single riveting.

These proportions ought to be used as a rule in the praxis.

The same experiments have proved at the same time, that the strength of common boiler sheet iron does not exceed 46,000 lbs. per sq. inch, and as almost all locomotive boilers are built with single riveting, 2-5ths must be subtracted, according to the above rule (100, 56.); thus 27,600 lbs. per sq. inch, will be the pressure, beyond which such a boiler may be expected to burst.

We learn that Mr. Cuyley's Grand Trunk Railway bill, a copy of which we gave last week, has passed the Canadian Parliament by a vote of 53 to 34. This bill will provide sufficient means for the speedy completion of this road.

Alabama and Tennessee Railroad.

We learn that this Company have purchased a sufficient quantity of rails to carry their road across the Coosa River, and that the same will be immediately laid. This extension will add largely to the business of the road.

Peru and Indianapolis Railroad.

This road which has been somewhat embarrassed, paid their over-due January coupons, and those due on the 1st instant, at Messrs. Winslow, LANIER & Co. in this city. The road is now being placed in a very efficient condition, the track being nearly all laid with a heavy rail, and a sufficient amount of equipment being supplied for the rapidly increasing business of the line. The completion of the Wabash Valley Line gives a new importance to the Peru and Indianapolis railroad; and renders it a very excellent route for business.

Northern Central Railroad.

A writer in the Baltimore *Patriot* communicates some interesting facts in regard to the condition and character of this work, between Bridgeport and Sunbury, Pa. The former of these places is situated on the Susquehanna river, opposite the city of Harrisburg. The road commences here by penetrating a deep embankment, 65 feet above the track, at one point, and cutting through a solid rock, 700 feet long. This is to be completed in less than a year. Ten miles beyond this point, and a mile and a half above the Pennsylvania Central railroad bridge, the road will cross the Susquehanna. The work is already graded to this point. The bridge is already commenced, the foundations of all the piers being laid, several partially erected, and one entirely completed. This structure will be nearly a mile long, and is to be a model for strength and beauty. The scenery at this point is superlatively grand.

We learn that most of the remaining distance to Sunbury is already graded, that a large proportion of the cross-ties is already delivered, and about two-thirds the rails on the ground. A route from Baltimore to the Lakes will thus be opened, 45 miles shorter than any other, while the immense coal-beds of Pennsylvania will be penetrated by this road, over which coal can be carried to Baltimore more conveniently than by any other route. The writer says—

A contract has already been made with the Treverton company, to continue for ten years, by which said company obligates itself to send to Baltimore—or Canton, its depot being there—300,000 tons of coal annually, which added to the present revenue of the Northern Central railroad, would serve to pay the interest on all its debt, and enable it to declare a dividend of six per cent. on the capital stock besides. The Coal company above named, however, may, in time, instead of sending hundreds, transport millions of tons over this road. There are also numerous other extensive miners in the same region, who must in like manner avail themselves of the facilities of the road in question. The company must then not only make money, but Baltimore is destined to increase her trade, whilst competition and an abundant supply must reduce prices of an indispensable article to consumers. It is, therefore, plainly to be seen, that the coal trade, aside from all else, which is naturally destined to pass over this important thoroughfare, must become to the road and your city a matter of enormous interest, producing a new era to Baltimore trade and commerce. The trade of the Northern lakes, of the interior of Pennsylvania and elsewhere, which now seeks other channels, will, in time, flow thro' this. The fact scarcely admits of a doubt. In view of future operations, the Treverton company heretofore named, has already leased property in Canton for depots, storage, &c., to the amount, I believe, of \$120,000.

I am not, like some, disposed to look upon the Northern Central in the light of an opposition, or rival with the Baltimore and Ohio. Both have their natural advantages, legitimate rights, which one cannot divert from the other. Both are mighty auxiliaries to Baltimore, to the regions of country through which they pass and where they terminate. Both are destined, beyond the shadow of a doubt, at no distant period, to have as much as they can do and pay handsome dividends to those who own them. One looks to the North and the Northwest, the other to the West and Southwest. Both have an interest in all beyond the Alleghenies, and must derive advantages therefrom, whilst each tends powerfully to maintain and build up your cherished city, establishing her firmly in proud rivalry with other competing commercial emporiums of our Union.

Androscoggin and Kennebec Railroad.

The annual meeting of this corporation was held at Waterville, on the 25th ult. From the report presented on that occasion, we learn that the receipts for the year ending 31st of May last, were as follows:

Passengers	\$107,417
Freight.....	94,931
Other sources.....	7,127

\$209,475

Add sale of stock bonds..... 47,500

Total.....\$255,975

The expenses for the same period were as follows:

Stock Penn. and Kennebec railroad taken, as per contract of August, 1853.....	\$14,425
Cash in full paid on same contract.....	12,000
Int. on bonds and floating debt.....	101,196
Working expenses.....	99,228

\$226,849

Leaving net balance..... \$30,126

No accident has occurred during the year resulting in injury or loss of life to any person on the road; nor any damage to property, except a loss by fire at Danville Junction, in December last, which originated in a wood-shed belonging to the Grand Trunk road. The loss to this company was about \$3,000. The trains have been run with great regularity, and subject to but few and trifling delays, during the severe storms of last winter. The floating debt has been considerably reduced; but complaint is still made that it is a source of much embarrassment to the Board.—From January 1st to April 14th, and from May 7th to June 1st, one of the two daily trains passing each way was discontinued, in order to diminish the operating expenses, it is believed, however, that during the spring, summer, and fall, two daily trains will be required. With the Grand Trunk railroad company, whose road connects with this at Danville Junction, a running contract has been entered into for fifteen years from December last. It is believed this agreement is equitable, and will receive the approbation of both parties. No contract of the sort at present exists with the Androscoggin company, but each party charges its own rates.

The Treasurer's statement shows the company's liabilities to be as follows:

Capital stock	\$588,042
Stock coupons, outstanding.....	21,440
Stock bonds, sold.....	498,800
Stock due sundry persons.....	8,500
Million loan bonds.....	1,000,000
Interest, bonds sold.....	26,700
Floating debt.....	67,465

\$2,210,947

The immediate liabilities, as bills and accounts payable, bonds past due, &c., are stated to be \$147,507, against which the company have on hand assets of various kinds, including \$29,800 of the Million Loan Bonds, amounting to \$114,426, or, deducting discounts, \$80,042; leaving \$67,064 to be met from other sources.

The mileage made, during the year, was—	
Passenger trains.....	67,000 miles.
Freight ".....	41,000 "
All other ".....	16,110 "

Total.....124,110 miles.

About three thousand dollars have been ex-

pended for new iron rails, and re-rolling old ones. Twenty thousand new cross-ties have also been put down. At Lewistown extensive excavations and heavy stone abutments have been built. One locomotive has been almost entirely re-built. Five new covered freight cars and one platform car have also been added to the equipment. This now consists of 9 first class locomotives, 10 passenger, 4 baggage, 53 covered freight and 6 other cars.

The people of Danville, N. C., had, a few days since, a great celebration, on account of the completion of the Richmond and Danville Railroad to that place.

Georgia and Florida Railroad.

This road, according to its charter, granted in January, 1852, is to proceed from some point on the South Western line to Albany, whence it may be extended to Thomasville, and to the Florida line, in the direction of Tallahassee. Americus, the terminus of the South Western railroad, has been selected as the point of Junction. The company's stock is fixed at \$500,000, in shares of \$100 each, an annual interest of seven per cent. being allowed on all stock payments. By their recent report we observe that a line between Albany and Americus has been surveyed and located, giving 95 per cent. of straight lines. The estimated cost of construction, with a 38 lb. rail laid on continuous string-pieces, is \$358,042; and with a 56 lb. rail on cross-ties, \$429,901; to which \$40,600 should be added for equipment. Twelve miles have already been put under contract, for graduation and bridging, at prices below the estimate. The county of Dougherty has subscribed \$150,000 to the stock, by a vote of over five to one. The other available means are \$106,000 in cash subscriptions, and about \$50,000 which will be taken by contractors. These will make a total of \$306,000, leaving \$101,461 additional necessary for the light rail, or \$170,968 for the heavy pattern. It is believed that this deficiency will be supplied by the citizens of Dougherty, Lee, and Baker counties; as also by parties in Savannah and other places.

The right of way has been donated almost throughout, and the best feeling is shown to the work.

The road will be 35½ miles long, and at Albany will reach the centre of the best cotton region in the Union. It is estimated that the counties of Dougherty, Baker, and the southern part of Lee will produce this year 40,000 bales of cotton; which would go over the road if completed. Adding parts of the counties contiguous, this amount would be increased to 60,000. The travel is already 25 each way per diem. Quadrupling this, according to the experience of railroads everywhere, we have the following estimate of business:

Passengers, 73,000@ \$1.80.....	\$31,400
Cotton, 60,000 bales, @75 cts.....	45,000
Return freights.....	36,000
Mail service.....	2,500

Total.....\$114,900

Expenses 40 per cent..... 45,960

Net balance.....\$68,940

—or more than 16 per cent. per annum on cost.

The total length authorized by charter is about 106 miles. This line is destined to form a great

north and south avenue for trade and travel between the Gulf coast of Middle Florida and the interior of Georgia. Should the Brunswick and Florida and the Atlantic and Gulf roads be built, these would both become important feeders to it.

Col. Nelson Tift is President, and Wm. N. Mussey, Chief Engineer. The company's office is in Albany, Ga.

Earnings of the Commercial Shipping of this Country.

The register tonnage amounts to 5,612,011 tons; its carrying capacity, 9,646,002 tons; its value at \$40 per ton register, is \$224,840,440.

These ascertained, and these assumed facts, are based, in part on official returns, and partly on answers to inquiries among persons qualified, by their general intelligence and their professional experience, to furnish facts and opinions of a reliable character.

The establishment of the next point under discussion—the earnings of the shipping—is not, as will readily be perceived, so susceptible of proofs as were the preceding statements; but there cannot, it is believed, be such a variation from the reality, as to have an important bearing on the purposes had in view in this discussion.

In most statistical inquiries, all that can be expected is an approximation to truth, and in hardly any great branches of industry are there so many facts to rest upon as in the shipping and commercial concerns of the country.

Notwithstanding the comparative facility of obtaining this information, and the magnitude of the interest to which it relates, the earnings of the shipping have been omitted in the National and in the State censuses. This is the most surprising as it is the most productive branch of business to the country at large, and pre-eminently so to the large navigating States, for instance, New York, Massachusetts, and Maine.

A return of the shipping to the present month, will show that New York owns about 1,600,000 tons, carrying at $1\frac{1}{2}$ ton for one register, 2,650,000 measurement. The freights alone, at what are deemed to be an average of five years, will amount to within a trifle of \$40,000,000, without taking into consideration several millions for passage money.

The State of Massachusetts has about 1,900,000 tons of carrying ability, which, at average rates of freight would give nearly \$29,000,000, with several millions passage money.

Maine has 854,000 tons, with a carrying ability of 1,380,000 tons, earnings of which, independent of passenger money, amounts to \$20,835,000. By far the most valuable branch of business in that growing and prosperous State.

To show the comparative value, to Massachusetts, of her shipping, we refer to the census of 1855, wherein it appears that the largest product of any branch of business, is that of boots and shoes. It amounts to \$37,489,932. From this must be deducted the cost of the raw materials used in their fabrication. If we call it one-third, there remains \$24,993,282, as the result of Massachusetts capital and labor, the materials referred to, being imported from other States and countries.

The next largest product is "cotton goods of all kinds," valued at \$26,140,538. The cost of materials from abroad has usually been estimated 50 per cent. If we call it 40 per cent., there remain as the returns of Massachusetts labor and capital, \$15,684,323, against \$29,000,000 of freight money—nearly all the product of Massachusetts capital and labor—to which may be added several millions of dollars for the conveyance of passengers.

These facts must serve to convince the people of this State, of other navigating States, and of the nation at large, how important it is to make such changes in the tariff as will help maintain the present quantity of tonnage, and to give such further encouragement as will extend it, in somewhat the ratio of its past increase. And what

better measures can be adopted for the attainment of that end, than giving support to Mr. Secretary Guthrie's proposed plan of removing the duties on raw materials, used in many branches of manufactures?—*Boston Daily Advertiser.*

New York Sub-Treasury.

The following statement shows the business for June, at the office of the Assistant Treasurer in this city:

June 1, 1856, by balance.....	\$10,031,926.78
On acc't of Customs.....	\$3,576,198.88
On acc't of Pat. Fees.....	8,046.68
On acc't Post Office Department.....	437,795.56
On acc't of Transfers.....	100,000.00
On acc't of Miscel's.....	9,683.48
	4,181,724.60

Payments.....	\$14,163,651.88
Treasury Drafts.....	\$8,200,988.13
Post Office Drafts.....	191,807.00
	8,392,795.13

June 30, 1856, by balance.....	\$5,770,856.25
By Balance, Cr., Disbursing acc'ts.....	\$1,370,189.67
By Receipts dur'g the month.....	1,367,390.26
To payments.....	3,737,579.93
	1,071,970.09

Balance.....	\$1,665,609.84
By Balance, Credit Int. Acc't.....	\$27,125.18
By Appropriation.....	802,862.82
	\$829,988.00
To payments.....	4,110.00

Balance.....	\$825,878.00
By Receipts for Customs in June '56.....	\$3,576,198.88
By Receipts for Customs in June 1855.....	2,376,637.66

Increase in June, 1856.....	\$1,199,561.22
By balance Cr., Bullion and Expense Acc't for Assay Office.....	\$1,308,840.01
By Coin received during the month.....	\$23,745.99
By Fine Bars, do., gold and silver.....	879,663.52
	903,409.51

Total.....	\$2,212,249.52
To payments in Coin.....	\$49,219.55
To do. Fine Bars, gold and silver.....	1,230,203.05
	1,279,422.66

Balance.....	\$932,826.92
Coin in hand in Ass't Treas. Office.....	\$8,262,444.09
By Coin in hand in Assay Office.....	774,381.53
Fine Bars in Assay Office, gold and silver.....	158,445.39
Unparted Bullion do., and fine silver.....	1,834,571.04
	1,493,016.89

Total.....	\$10,529,342.01
Statement of business at the U. S. Assay Office at New York, for the month ending June 30, 1856.	
Deposits of Gold.....	\$1,425,600
Foreign Coins.....	\$2,000
Foreign Bullion.....	24,000
U. S. Bullion (including California Branch Mint Bars, \$230,000).....	1,389,500
Deposits of Silver.....	32,500
Foreign Coins.....	7,900
Foreign Bullion.....	13,900
U. S. Bullion (contained in gold).....	10,454
U. S. Bullion, Lake Superior.....	246

Total Deposits, payable in bars.....	\$1,428,000
Total Deposits, payable in coins.....	30,000
Gold Bars stamped.....	\$864,810.99

Baltimore and Ohio Railroad—Coal Trade.

The Cumberland Coal Trade.—The intention of the Baltimore and Ohio railroad company to increase the freight on Cumberland coal transported to the city over that road, some time since, led to the appointment of a committee, by the City Council, to investigate the nature and progress of the Cumberland coal trade on that road. The committee appointed for that purpose last evening submitted a report, in which it is stated that the Cumberland coal trade, which had bld fair to become one of the largest branches of business in our city, has, within the last year, received a serious check, and nearly all the companies engaged in it, have been contracting at a loss in order to furnish employment to their miners, and thus prevent their leaving the mines until a better state of things could be brought about.

Large quantities of Liverpool and Nova Scotia coal have been imported into the eastern cities at rates which could not be competed with by our companies, and in frequent instances at a less price than that at which Cumberland coal could be delivered from the wharves at Baltimore. We have therefore to note the falling off in the total receipts of bituminous coal at our port of 61,329 tons during the year ending 31st Dec., 1855.

The Cumberland coal has another competitor in the anthracite coal when used for steam purposes, if the price is advanced by high rates of toll beyond the present limit. The coals of Pennsylvania are now selling in New York (the great market for Cumberland coal) at \$4.50 per ton on board vessels, and the Cumberland at \$5.75 per ton. This difference consumers are willing to pay, but when it exceeds \$1.25 per ton, they consider anthracite the cheapest and give it the preference. The committee are satisfied that the commercial interests of the city of Baltimore are deeply interested in this important subject, and think that the Directors on the part of the city should use all the power vested in them to prevent any further increase on tolls on that road on coal, and use every effort to concentrate the trade to this city, instead of allowing it to be diverted to Alexandria by the canal.

The committee also state that a railroad has been completed from the Cumberland coal field to Philadelphia; and are of opinion that an increase of tolls on the Baltimore and Ohio road will enable consumers to get their coal at Philadelphia at less prices than at Baltimore, thus depriving this city of the tonnage of 100,000 tons of coal per annum.

In order to show some of the advantages accruing to the city of Baltimore by this trade, the committee present a tabular statement, from which it appears that the total receipts of coal over the Baltimore and Ohio railroad during the past ten years is 2,018,951 tons. The amount paid the company for freight during that period is \$4,380,509.74; wharfage at Locust Point, \$120,837.06; cash disbursements by vessels, \$770,969; cash paid shipping charges, for labor, &c., \$251,616.63; cash commissions to brokers, \$92,841.35; cash paid for repairing vessels, \$230,140; cash paid by vessels for harbor dues and port charges, \$34,521; amount of capital invested by improving property at Locust Point, \$295,000. During the ten years 11,507 vessels have been employed in shipping the coal.

In the beginning of the coal trade, in 1844, the charge per ton from Cumberland to Baltimore was \$3.66; a special contract was made the same year at $1\frac{1}{2}$ cents per ton per mile. In 1846-47, the rates were \$2.60, \$2.61 and \$2.62 to different parties according to distance. In 1848 to all parties, \$2.60. In 1851-52 it was \$2.05; in June, 1852, it was fixed at \$2.06 to Baltimore proper, and at \$1.81 to Locust Point. In December, 1853, the present charge of \$2.56 to Locust Point, and \$2.81 to Baltimore was established.

An additional charge of 20 to 40 cents per ton over the present rates being contemplated, the committee recommend the adoption of a resolution instructing the Directors, on the part of the city, to use their efforts to prevent the freight on

Cumberland coal being increased; and declare that a strict adherence to such a course of policy would be vastly beneficial to the interests of the city as a stockholder, as well as in her corporate capacity.—*Balt. Patriot.*

North-Western (Va.) Railroad.

Our readers are aware that application was made some months ago to the City of Baltimore to grant this Company the temporary use of \$550,000 of the Five Million Loan made to the Baltimore and Ohio Railroad Company, for finishing their road and laying down a double track as far as Piedmont. The application after long delaying, was successful with both branches of the City Council; but on the 25th ult., Mayor Hines returned the bill to them without his signature, alleging as his reason that there was no authority for making such a diversion of this loan; that the company had, through their officers, pledged it to be applied to certain specified objects *exclusively*; that even if it were loaned the North-Western Company, it would be totally insufficient to finish the line, this work requiring at least *one million* to complete it, besides the item of rolling stock, which would bring the cost of the road to over \$6,000,000; that it would be more consistent for the stockholders to increase their subscriptions; that the completion of the Parkersburg road will render nearly useless that part of the Baltimore and Ohio line between Grafton and Wheeling; that the laying of the second track should be at once proceeded with; that the City of Baltimore is mortgaged in the Baltimore and Ohio Company to the amount of \$5,000,000, besides owning \$3,000,000 as stock; while the North-Western road is entirely beyond the limits of the State, and not a share of its stock held by the city.

The President and Directors have since published a reply to the objections of the Mayor, in which His Honor is handled pretty severely. The reply is followed by an Opinion from Hon. Reverdy Johnson and J. B. Latrobe Esq. in favor of the legality of the proposed loan, under the general law of 1836, by which the Baltimore and Ohio Railroad Company were authorized to subscribe towards the construction of any lateral, continuous, or connecting road, to the extent of not over two-fifths the estimated cost of the same. It is true the above act spoke of a subscription only, and that it is a loan which is solicited, payable too, not in money, but in bonds. It is not believed that this creates any material difference. These gentlemen observe—

The act authorizes the company to become a partner in a lateral road to the extent of its subscription, running all the risk of a partner—a *fortiori*, it authorizes it to run the lesser risk of a creditor in making a loan instead of a subscription, and if the North-Western Company agrees to receive from the Baltimore and Ohio Company the city bonds, as money, as the latter Company itself received them, there is nothing in the fact that bonds, and not money, are paid to invalidate the transaction. Nor do we see anything in the act of 1852, to make us hesitate in regard to these conclusions. It may well stand, without operating a repeal of the act of 1836. The authority it confers is cumulative. In terms it does not affect existing legislation; and no fair inference requires that it should be made to do so constructively.

It is not expected that a two-thirds vote can be obtained, so as to carry the measure over the Mayor's veto. The thing will therefore probably drop, and the company must supply themselves

with funds from some other sources. The *Patriot* states that the latter have lost \$100,000 solely from delays attending the passage of the measure

Taunton Branch Railroad.

The stockholders of this company held their annual meeting at the office of the Treasurer in this city yesterday morning. From the annual report it appears that the total amount of earnings for the year ending May 31, 1855, was \$155,299.40, of which \$93,271.31 was from passengers, and \$60,578.04 from freight. The total expenses (including \$44,154.66 paid the Boston and Providence railroad for passengers brought over their road, and \$25,679.51 for merchandise) was \$132,183.—An eight per cent. dividend has been paid during the year, leaving a balance of \$3,141. In 1855 the earnings were \$161,945.45; expenses, \$126,727.53. For a portion of the present year, a larger rate of compensation has been paid to the Boston and Providence railroad. The report was accepted, and the usual committees, on accounts, &c., were appointed. This railroad may well be termed a model road. The construction fund has not been increased since the road was completed.—For the last thirteen or fourteen years it has paid an annual dividend of eight per cent. The road is also out of debt, with the exception of the sum of \$5,000, which can be met at any moment.—The following Board of Directors was then unanimously elected: W. A. Croker, N. H. Emmons, W. Sturgis, S. Frothingham, and E. Baylies,—the old Board, with the exception of Mr. Baylies, in place of Mr. F. Homer, deceased.—*Boston Traveller.*

Railroad Dividends.

The following are all the dividends payable by railroad companies, on or about the 1st instant, which we have yet seen:—

Michigan Central R. R. Co.—Semi-annual dividend of five per cent. payable on the 1st instant, at the office of the Farmers' Loan and Trust Company.

Milwaukee and Mississippi R. R. Co.—Semi-annual dividend of five per cent. in cash, payable on the first Monday in July, at 37 Exchange Place in this city.

Wisconsin Lake Shore R. R. Co.—Semi-annual dividend of four per cent.

Little Miami R. R. Co.—Semi-annual dividend of five per cent. payable on the first inst., in bonds of 1853 at par.

Cleveland, Columbus, and Cincinnati R. R. Co.—Semi-annual dividend of five per cent. in cash, payable on the first inst., at the office of Winslow, Lanier & Co.

Cleveland, Painesville, and Ashtabula R. R. Co.—Semi-annual dividend of five per cent.

Delaware, Lackawanna, and Western R. R. Co.—Semi-annual interest dividend of three per cent., payable in the stock of the Western R. R., on the 15th inst.

Buffalo and State Line R. R. Co.—Semi-annual dividend of five per cent., payable on the first of August.

Michigan Southern R. R. Co.—Semi-annual dividend of five per cent. on the full stock of the company, payable on the 1st of August.

Fort Wayne and Chicago R. R. Co.—Semi-annual dividend of .. per cent., payable on the 1st inst., at the office of Winslow, Lanier & Co.

Worcester and Nashua R. R. Co.—Semi-annual dividend of \$2 per share, payable July 7th, at the office of Winslow, Lanier & Co.

Cleveland and Pittsburgh R. R. Co.—Semi-annual dividend of five per cent., payable in their

seven per cent. bonds, deliverable on the first of August.

Panama R. R. Co.—Semi-annual dividend of six per cent., payable on the 15th inst.

Paterson and Ramapo R. R. Co.—Semi-annual dividend of three and a-half per cent., payable on the 3d inst., at the office of Morris Ketchum in this city.

It is said that over four millions will be paid out during the present week in this city alone, for interest and dividends of various joint stock companies.

Great Commercial Change.

The Cincinnati *Railroad Record* predicts that Baltimore and Philadelphia are again to become the great Eastern outlets for the Western trade, as they were previous to the year 1820, before the completion of the Erie canal, and its connection with the Ohio canals, which diverted that trade to New York. This revolution, it declares, is to be effected by the recent extension of our Eastern railroads to the Mississippi, so that Western produce may now pass over the Pennsylvania Central and the Baltimore and Ohio railroads, direct to the nearest Atlantic ports, Philadelphia and Baltimore. It cites, in support of its opinion, the fact of the shipment of great quantities of lard, bacon, and other similar produce, from the West, by way of Wheeling and Pittsburgh, as soon as the railroad connection to the Mississippi was made; the additional fact, that, in 1855, the Western produce by the Erie canal *did not increase*; and the present obvious decrease in such shipment, caused, not by the loss of the lake trade to that canal, but of the trade of the Ohio valley, which now finds its way to Philadelphia and Baltimore. In confirmation of these statements and views, it adds: "To show that we make no mistake in the cause or direction of the change going on, we give the following returns of the Pennsylvania Central, and Baltimore and Ohio railroads, which are now before us, for the month of April. The same increase has taken place each month since the 1st February:

	1855.	1856.
Penn. Central....	\$355,349	\$610,969
Balt. and Ohio.....	336,711	612,250
Aggregates.....	\$692,060	\$1,223,219

"The receipts of the Pennsylvania Central road for 1856, will probably reach nearly *six millions*, which, considering its length and cost, will exceed anything in the way of railroad receipts heretofore exhibited in the United States. The Baltimore road, though it will not equal that of the Pennsylvania road, will show much larger results than we have yet seen."

The Pacific Railroad.

A better day seems to be dawning upon this road. Its usefulness and capacity begin to be demonstrated, and all that is wanted now is to give it fair play. Of late, the amount of freight passing over the road has greatly increased, and now that a steamboat line has been formed to run in connection with the road, we may soon expect a very large increase of passage travel. The President, Mr. M'Pherson, is devoting himself sedulously to his work, cutting down expenses wherever it can be done with propriety, and inviting traffic upon the road, and giving confidence in all its departments. He finds, we hear, encouragement and aid in the Board of Directors, and all are working in harmony and for the good of the road and of the State.

We understand that the company have resolved to issue bonds to the amount of \$600,000 upon the security of the lands belonging to the Kansas

branch of the road, amounting to 126,000 acres.—The security for this loan is ample; and we are gratified to learn that our own citizens are disposed to invest in these bonds. They know that they are safe, and they think it right that they should show their confidence by the purchase of the security. If a fair proportion of them be taken here, it will have a good effect in the money market of the east, by establishing the fact that we have reliance upon the excellence of the securities thus offered to others.—*Republican*.

Improvement of the Fox and Wisconsin Rivers.

This work is now completed, and a communication by water opened between Green Bay on Lake Michigan, and the Mississippi river. On the 16th ult., the steamer 'Aquila' made the first passage through the new works. Great rejoicings at Green Bay, with the usual amount of speechifying, congratulations, &c., followed. The improvements will prove highly important to all that section of the State.

Peoria.

The city of Peoria has taken \$85,000 stock in the Bureau Valley Railway, and \$225,000 in the Peoria and Oquawka Railway, which is as much as the city charter will allow. The Bureau Valley road pays interest on the city bonds. Peoria county has \$75,000 stock in the Rock Island and Peoria road, and \$75,000 in the Peoria and Hannibal road.

The Williamsport and Elmira Railroad.

This railroad is becoming one of great importance to this section, and indeed to the entire West. At noon yesterday a train of four cars went out completely filled with passengers, most of them having tickets through to Philadelphia. A large portion of the passengers were from the Western States, and included in their number many delegates and others going to the Republican National Convention. On Saturday we met with a number of gentlemen from Northwestern Pennsylvania and Eastern Ohio, who informed us that all the business men of their section of country were now taking this route to Philadelphia, and would continue to do so, as it was the cheapest and quickest route for them to the Quaker City. Philadelphia has heretofore had a heavy trade with Eastern Ohio and Northwestern Pennsylvania, but of latter years has been gradually losing it, on account of the difficulty of getting to that city cheaply and expeditiously.

But that obstacle is now nearly removed, and her old customers, in the section referred to, are returning to her in full force. A new railroad, running from Warren, Ohio, to Cleveland, will be opened in a few days; and another road, running from Newcastle, Pa., via Meadville, to Erie, is under contract, and a portion of it will be finished this season. When both of these roads are opened for travel, thousands of persons will annually seek this route in preference to the Pennsylvania Central, in making their trips to Philadelphia.—We notice, too, that many of the business men of this section of New York (who obstinately refused last season to trade with Philadelphia) have thought better of the matter this year, and are now ordering heavily from that city.

The fact is, the business men of Philadelphia are alive to their own interests, and are determined on having their share in the trade, not only from Southern and Western New York, but from the entire West. In many respects they can offer greater inducements to purchasers than New York, and with equal railroad facilities to reach their city, we cannot see why they will not succeed in dividing the trade of the West between them and the merchants of the Empire City. It was a lucky movement on their part when they took hold of the Williamsport and Elmira railroad, and we rejoice to know that it is prospering finely under

the able management of its present efficient President, Thomas Kimber, Jr., and its energetic Superintendent, J. A. Redfield.—*Elmira Advertiser of June 17.*

Terre Haute and Alton Railroad.

No road terminating at St. Louis, is more popular or more important than this. It is not only the most direct route to the East, but it runs through a most beautiful and fertile section of country, the immense future trade, travel and produce of which, must naturally tend to the St. Louis market.

We were somewhat surprised to learn that, at a meeting of the newly elected Directors of this company, which convened at Alton, for the purpose of organization, on Tuesday last, Mr. St. John, late President of the Company, peremptorily declined a re-election. Mr. St. John devoted his personal attention to the local operations of the road of which he was President. The last winter he made his head-quarters in St. Louis, passing frequently over the line of the road, inspecting and directing its affairs.

With much railroad experience and great fidelity to the immediate duties of his office, he was also a most agreeable and popular gentleman in his intercourse with our citizens, making hosts of friends for himself and the road. The advantages of such a road, possessing sufficient capital for all emergencies, and committed to faithful and experienced hands, are not to be overrated.

We had hoped that Mr. St. John's official connection with the Company and intercourse with our citizens would long continue. The good wishes of our people follow him wherever he goes.

Of Mr. Chas. Cruft, the newly elected President of the company, we know less, personally. He is a citizen of Terre Haute, Indiana, and has been for some time an active managing director in the company, in which capacity, we are told, he has exhibited great energy and judgment. Indeed, the fact of his election by such a company is of itself sufficient proof of his fitness for the office, and while we regret to part with Mr. St. John, we are gratified to find his place so ably filled.

The official duties of Mr. Cruft will bring him necessarily much in contact with our citizens; we heartily commend him and his road to their good will.—*St. Louis Republican*.

Michigan Southern Railroad.

The Michigan Southern and Northern Indiana Railroad Company have declared the usual semi-annual dividend of 5 per cent. on the full stock of the Company. It is made payable on the 1st of August, the dividend days, by a resolution of the Board passed last December, having been changed to the 1st of August and February. The dividend, however, is declared from the earnings of six months, leaving a fair surplus. The holders of Constructive Stock have the option to so receive the interest due on the 1st day of July, at the rate of 8 per cent. per annum, or to surrender the certificates therefor on or before the 19th day of July and receive a full-stock certificate instead; in which case they will receive the present dividend of 5 per cent. (in lieu of interest,) and full dividends hereafter. The option to make such exchange will cease on the 19th July, after which the exchange can only be made according to the terms of the stock.

Oswego and Syracuse Railroad.

The annual meeting of the Oswego and Syracuse railroad company was held at Oswego on the 22d inst., when the following named gentlemen were elected Directors:

F. T. Carrington, Joel Turrell, Sylvester Doolittle, J. B. Penfield and Luther Wright, of Oswego; Aden Monroe, E. B. Wicks, T. J. Davis and Austin Myers, of Syracuse; Rufus H. King and Henry H. Martin, of Albany, and Harvey Loomis, of New York. At a meeting of the Directors, held the same day, F. T. Carrington, Esq., was elected President, and it was resolved to declare a divi-

dend of four per cent., payable on the first day of August.

The following are among the principal railroad companies the interest on whose bonds is payable on the 1st inst.:

Peru and Indianapolis.
Indianapolis and Bellefontaine.
Bellefontaine and Indiana.
Dayton and Michigan.
Ft. Wayne and Chicago.
Buffalo and State Line.
Hartford, Providence and Fishkill.
Northern Cross.
Mobile and Ohio.
Chicago and Aurora.
Auburn and Rochester.
Central Military Tract.
Ohio and Pennsylvania.
Marietta and Cincinnati.
Ohio and Mississippi.
Lackawanna Railroad and Coal Co.
Boston, Concord and Montreal.
Cayuga and Susquehanna.

Coal Mines of the British Provinces.

A short time ago, we alluded to the comparison between these mines and our own. We have since carefully gathered up some facts as to the history of the gold mines of Nova Scotia, perfectly reliable; but which will be new to many of our readers. Several years ago, in the prodigal days of George IVth., while he was looking about for means to help himself and his brother, he found out that all the mines of coal, iron and the precious metals in the British North American Provinces were by law the property, not of the landholders, but of the crown. His brother, the Duke of York, an inveterate gambler, was heavily in debt to Messrs. Rundle & Bridge, the wealthiest jewelers in London, or indeed in the world. By some means, and for some consideration never exactly known, George IVth made a deed of this valuable right to the Duke of York, and he in turn to these jewelers. It might be doubtful if this transaction were valid, that is, whether the king had a right to sign away privately and forever the public property of the crown. However, he did it, and the coal mines at Pictou, Sidney, and Bridgeport were being discovered, and Messrs. Rundle & Bridge organized a joint stock company to work them.—Immensely wealthy, they sent out engineers, at an extravagant annual cost, who vested an immense fixed capital in working the mines, on the most costly English plans. The coal was easily accessible; but a high price had to be put upon it, to pay interest for all this immense outlay. The harbors were excellent, and easy of entrance. But every captain going into Sydney mines for a load of coal had to proceed twelve miles further to a little town, where the custom-house was located, to get his clearance and a "permit" to load his vessel with coal. For this last he had also to pay a slight annoying per centage. The coal was equal to the best Liverpool; but such was its price at Pictou and Sydney, that Liverpool coal could be sold at about the same price in New York, brought over as ballast by emigrant ships which had taken a cargo of cotton the other way.—*Phila. Ledger*.

Ohio and Pennsylvania Railroad.

At a meeting of the stockholders of the Ohio and Pennsylvania road, held on the 25th ult., at Delmonicos, no action was taken, but much information was elicited from various parties in regard to the working of consolidation. It is not probable there will be any serious opposition to the project among the stockholders.

Hempfield Railroad.

The Washington (Pa.) Examiner learns from one of the Directors of the Hempfield railroad, that a contract has been entered into with Mr.

McCartney, by which the latter undertakes the completion of the unlet portion of the road, and the finishing of the track between Washington and Wheeling. It is now confidently anticipated that the road will be finished and in running order by the 1st of September next.

A CIVIL ENGINEER,

WITH extensive experience in the preliminary surveys, location, and construction, of railroads, desires a situation as Resident or Assistant Engineer. Is able to refer to the Editor of the RAILROAD JOURNAL, and others with whom he has been associated. Address "Engineer, Box 533, New York Post Office. 4127

300 TONS 60 LBS. T RAIL.

FOR SALE AT

WASHINGTON MILL,
WHEELING, VA.

June 21st, 1856.

DRAKELEY & CO.

DIVIDEND DECLARED.

NOTICE.—The President and Directors of the RICHMOND AND PETERSBURG RAILROAD COMPANY have declared a dividend for the six months ending 30th June, 1856, of two dollars and fifty cents per share, payable on and after that day to all who shall be stockholders on the same.

JNO. WILLIAMS, Treasurer.

RICHMOND, June 24th, 1856.

4126

English Blister Steel.

20 TONS on hand, for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.

4124

RAILROAD TRACK, LOCOMOTIVE & CAR JACKS.

FOR sale by
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Railroad Iron.

900 TONS best quality Welsh Rails "Erie" pattern, weighing 60 lbs. per yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.

NEW YORK, June 14th, 1856.

1m24

Railroad Iron.

1,500 TONS New York and Erie pattern 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by

THEODORE DEHON,
10 Wall st., near Broadway.

NEW YORK.

4124

BALL'S PATENT JACK SCREW.



For sale by

No.	Stand.	Screw.	Net Wt.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

To Railroad Contractors.



ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C., May 16th, 1856.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock, M., on WEDNESDAY, July 16th, 1856, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad, commencing at Knoxville. There are several heavy jobs of masonry, among them the masonry for the bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 6th of July.

WALTER GWYNN,

May 29th, 1856. 6123 Chief Eng'r Blue Ridge R. R.

KASSON'S

RAILROAD IRON EXPRESS,

NEW YORK AGENTS,

DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

W. M. KASSON & SON.

N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay. INSURANCE at low rates of premium, will be effected when desired.

ELLIOTT & BOWLES,

(LATE ELLIOTT & CO.)

Railroad Commission Merchants, and Agents for the Sale of

FIRTH'S METAL,

The Cheapest and Best Metal for Rail Road Journal Boxes.

118 WILLIAM STREET, N. YORK.

DAVIS & KASSON, GENERAL RAILROAD AGENTS, & COMMISSION MERCHANTS,

Have for Sale

No. 24 BROADWAY, NEW YORK.

Locomotives,

PASSENGER and FREIGHT CARS, RAILROAD IRON, CHAIRS, SPIKES, and all other supplies in use by railroads. Also negotiate the Sale of Bonds, and the Exchange of Bonds for Rolling Stock, Iron, etc. Sole Agents in New York, for KASSON & SON'S Locomotive Express and Railroad Iron Express, enabling them to transport Locomotives, Cars, and Railroad Iron, on the most favorable terms.

THEY REFER TO—

PHELPS, DODGE & CO.

JAMES BISHOP & Co.

PIERSON & Co.

Geo. MERRIT Esq., Pres't N. E. Car Spring Co.

O. C. DENNIS Esq., Sup't Buffalo & Erie R.R., Buffalo, N. Y.

E. B. PHILLIPS Esq., Sup't Cleveland & Toledo R.R., Cleveland.

New York.

JOHN WILKINSON Esq., Pres't M. S. & N. I. R.R., Toledo, O.

WM. B. OGDEN Esq., Pres't Chicago & Fond du Lac R. R., Chicago, Ill.

JOHN CATLIN Esq., Pres't Milwaukee & Miss. R.R., Milwaukee.

S. RYDER Esq., V. Pres't Terre Haute & Alton Railroad, Alton, Ill.

Notice to Brick Makers.

THE undersigned wishes to contract for One Million Three Hundred Thousand of hard burnt brick, best quality, and of the ordinary dimensions, to be delivered as follows:

At Petersburg, Va. 600,000

At the Entrance Lock of the Dismal Swamp Canal near Norfolk, Va. 200,000

And at Suffolk, Va. 600,000

The brick to be inspected at the point of delivery.

Parties proposing may bid for the supply of either or all of the three lots, stating the time within which they will deliver the quantity proposed for.

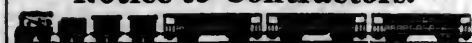
They will send the undersigned a sample of the brick they would agree to deliver and define in their bid its dimensions.

WILLIAM MAHONE,

Chief Eng'r Norfolk and P. R. R.

NORFOLK, Va., May 31st, 1856. 4123

Notice to Contractors.



OFFICE OF STATE ENGINEER BUREAUISTA,

Orange Mill Post Office.

St. Johns River, Fla., August 20th, 1855.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1856, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.

F. L. DANCY,

State Engineer, State of Florida.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8 1/2 inches.

Boiler, 46 inches in diameter.

Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.

Fire-box, 60 by 39 inches inside.

Cylinders, 16 inches diameter, 20 in. stroke.

Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.

Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order.

For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to

BRIDGES & BROTHER,

64 Courtlandt st., N. Y.

Lawrence Scientific School,

HARVARD UNIVERSITY,

CAMBRIDGE.

THE next term will open on the 28th day of August, 1856.

For CIRCULARS containing particulars address

6125 E. N. HORSFORD, Dean of the Faculty.

PATERSON, NEW JERSEY, June 16th, 1856.

NOTICE.—The Partnership of ROGERS, KETCHUM & GROSSEVENOR is dissolved by the decease of THOMAS ROGERS. Either of the undersigned will use the name of the firm in liquidation.

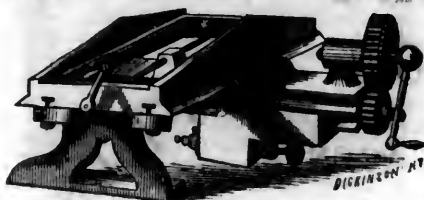
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READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, offered for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, ILL.

Hufty's Engineers, Architects and Draftsmen's STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Palettes, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books.

All goods packed with care, and forwarded to any part of the United States.

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Successor to H. L. Lipman,
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CONTRACTOR'S OFFICE MINERAL POINT RAILROAD,
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They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

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ROOM 16.

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CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED.

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ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

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5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all Highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

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The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.

CHARLES MONROE, Esq., { Baltimore, Md.

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L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.

HON. H. F. FRENCH, Associate Judge, Superior Court, Essex, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, July 12, 1856.

New York and New Haven Railroad.

DECISION OF THE COURT OF APPEALS IN THE CASE, MECHANICS' BANK VS. NEW YORK & NEW HAVEN R. R. CO., IN THE MATTER OF THE OVER-ISSUES OF STOCK.

(Continued from p. 420.)

It is conceded that Kyle, the first holder of the certificate in question, could assert no title to the stock it appears to represent, and that in his hands it was spurious and void for all the reasons which have been mentioned. Before its transfer to the plaintiffs can be admitted to confer any better title upon them, it must be shown to have not only all the negotiable qualities of a bill of lading, but others also which that instrument does not possess.

Testing this question therefore in any conceivable mode, whether by the express terms of these certificates, by their general nature and character, by the authority of adjudged cases, or by the most favorable analogies, I have no hesitation in saying that the doctrine contended for is entirely without foundation. It is mainly by assuming for these instruments the possession in a greater or less degree of the peculiar qualities of negotiable securities, that the plaintiffs claim to have acquired by transfer better rights than their assignor had; and as that assumption fails, this claim must fall to the ground.

It was also said on the argument that these certificates of stock are in the nature of general let-

ters of credit, on the faith of which any one might act; and upon this idea it was insisted that the defendants are in some way bound by the obligation in the hands of the plaintiff. I am unable to see the analogy suggested. By attending to the mere definition of a letter of credit it will be seen there is no resemblance. Thus, in McCulloch's Commercial Dictionary, it is defined to be "a letter written by one merchant or correspondent to another, requesting him to credit the bearer with a sum of money." Or to take the further definition of another writer, it is "an open or sealed letter from one merchant in one place, directed to another in another place, requiring him, that if the person therein named or the bearer of the letter shall have occasion to buy commodities or to want moneys, he will procure the same or pass his promise, bill, or other engagement for it, on the writer of the letter, undertaking that he will provide him the money for the goods, or repay him by exchange, or give him such satisfaction as he shall require, (3 Chitty, Com. Law, 336; Bouviers' Law Dictionary.)

Now, while it may be the effect of a stock certificate to give the holder a credit, its terms do not request, invite or guarantee it. So the possession of property of any description, or of the evidence and muniments of title thereto, in their effect give to the possessor a credit with other men. In this sense every chose in action invites a credit in favor of him who holds it, and so do the title deeds of his real estate. Innocent parties may deal with him and be deceived. They may lend their money and lose it. Nothing more than this can be said of a certificate of the ownership of stock in a corporation. Regarded as a promissory instrument, imposing obligations to be performed by the artificial person which makes it, it is like any other chose in action, except as greater restrictions may be placed upon its transfer and sale. Regarded as a muniment of title, merely, it is like any other instrument by which title is manifested. But to say that like a letter of credit, it contains a request, express or implied, addressed to any one in particular, or to the community in general, to deal with or advance money to the holder, or that it contains any assurance or guarantee addressed to the dealer of the safety of the transaction, is in my judgment to confound plain and long settled distinctions.

I will now briefly examine the validity of the plaintiffs' title in another aspect, still keeping out of view, however, the absolute want of power in the corporation to create the stock in question. It has been mentioned as one of the reasons why the certificate was void in the hands of Kyle, that Schuyler, the agent, was not acting within the scope of his powers when he issued it. The full effect of this particular objection upon the plaintiffs' rights as the transferees of Kyle, has not

been considered. And I observe now, in the first place, that if upon a vague theory of negotiability (already examined) they could overcome the difficulties arising out of the fraud of the agent toward the Company as his principal, and out of the want of consideration, this objection would still have to be removed. It is obvious, upon a moment's reflection, that negotiability can impart no vitality to an instrument executed under a power where the agent has exceeded his actual or presumptive authority. Whoever proposes to deal with a security of any kind appearing on its face to be given by one man for another, is bound to inquire whether it has been given by due authority, and if he omits that inquiry he deals at his peril.

It is not denied that the plaintiffs, in taking the certificates in question, were chargeable with notice of the extent and limit of the powers of Schuyler as transfer agent. All that is claimed in their behalf is, that his act in issuing it was apparently and presumptively, although not actually within his authority. Upon this ground it is urged, that according to the rules which govern the relation of principal and agent the defendants are bound in some way to make the obligation good. The extent of the authority, it is admitted, the plaintiffs knew, or were bound to know; but it was not known, they say, that the act done was not within such authority.

There are in the books many loose expressions concerning the distinction between a general and special agency. The distinction itself is highly unsatisfactory, and will be found quite insufficient to solve a great variety of cases. It is not profitable to dwell upon that distinction. Underlying the whole subject there is this fundamental proposition, that a principal is bound only by the authorized acts of his agent. This authority may be proved by the instrument which creates it; and beyond the terms of the instrument, or of the verbal commission, it may be shown that the principal has held the agent out to the world in other instances as having an authority which will embrace the particular act in question. I know of no other mode in which a controverted power can be established. But in whichever way this is done, it cannot be limited by secret instructions of the principal on the one hand, nor can it be enlarged by the unauthorized representation of the agent on the other. These principles, I think, are elementary.

But suppose an agent is authorized by the terms of his appointment to enter into an engagement or series of engagements on behalf of his principal, and while the appointment is in force, he fraudulently makes one in his own or a stranger's business, but in the form contemplated by the power, and which he asserts to be in the business of his employer, by using his name in the

contract, can the dealer rely upon that assertion and hold the principal, or is he bound to inquire and to ascertain at his peril, whether the transaction is not only in appearance, but in fact, within the authority? According to the decision of the Supreme Court of this State, in the case of *The North River Bank, vs. Aymer*, (3 Hill, 362,) he can. There the agent was authorized to draw and indorse notes in the name and for the benefit of his principal. He drew various notes, which in their appearance were within the power, but really had no connexion with the business, of his principal. The plaintiff's Bank, which had the letter of attorney in its custody, discounted them, and it was held they could be recovered against the principal. Justice Cowen and Chief Justice Nelson delivered opposing opinions, in which the question is very elaborately discussed. The decision was reversed in the Court of Errors, but the case is not reported in that Court. If the reversal proceeded, as I suppose it must, upon a doctrine directly opposite to that held by the Supreme Court, then the case certainly suggests a limit of great importance to the liability of principals, the recognition of which would be decisive of the present controversy. So in *Grant vs. Norway*, (10 Conn. Bench, 665,) it was held, after full discussion, that the master of a ship signing a bill of lading for goods not actually shipped, was not to be considered the agent of the owner of the vessel, so as to make him responsible to one who made advances upon faith of the bill. That is a strong case. The master is the general agent of the owner as to all matters within the scope of his duty and employment; and has unquestionable power to sign bills of lading for goods shipped; and every bill asserts, as it did in that case, that the goods are received on board. The act, therefore, judged by its appearance and the representation of the agent, was strictly within the power. But the principal was held not to be liable, because it was not so in fact. The doctrine of that case was affirmed by the English Court of Exchequer in *Hubertsey vs. Ward*, (8 Exchequer Report 330, S. C., 18 Eng. Law and Eq. Rep. 551;) and again with great deliberation by the Common Pleas in *Coleman vs. Riches* (29 Eng. Law and Eq. Rep. 323.)

The distinction is not always attended to between the apparent powers of an agent and his acts apparently but not really within the power.—An agent's apparent powers are those which are conferred by the terms of his appointment, notwithstanding secret instructions, or those with which he is clothed by the character in which he is held out to the world, although not strictly within his commission. Whatever is done under an authority thus manifested is actually within the authority, and the principal is bound for that reason. But it is obvious that an agent may clothe his act with all the *indicia* of authority, and yet the act itself may not be within the real or apparent power. The appearance of the power is one thing, and for that the principal is responsible. The appearance of the act is another, and for that, if false, I think the remedy is against the agent only. The fundamental proposition, I repeat, is, that one man can be bound only by the authorized acts of another. He cannot be charged because another holds a commission from him, and falsely asserts that his acts are within it.

Cases may often arise which to a casual observation might appear to be within the principles stated, but which really are not. Thus an agent may be authorized to give notes for his principal in order to raise money to be used in the business of the latter. A third person may inspect the power, advance the money in good faith, and the agent appropriate it to his own use. In such a case, I should hold the principal responsible, not because the act of the agent appeared to be within the authority, but because the authority actually included the transaction. A power given to an agent to borrow money upon notes or otherwise, implies that the money may be paid to him, and so the whole transaction is strictly and literally authorized. But suppose the power to give

the note is on its face conditional. It then has no existence until the condition has been fulfilled. To a confiding dealer who believes that the agent would not do an improper act, the note will certainly carry the appearance of due authority, but if it turns out that the conditions had not occurred, on which the exercise of the power depended, then he was trusting to the representation of the agent, and, I think, must look to him alone. As the principal never authorized the transaction at all, he is bound neither by the contract, nor by the representation. If not by the former, then it is extremely plain he is not by the latter.

Connected with the observations last made, it is proper, though perhaps scarcely necessary, to notice another doctrine which has been much urged, under some disguise, it is true, but in effect, that the very employment of an agent in situations of trust and confidence is a recommendation and certificate of his character, so that if he deceives others to their injury, the principal must make compensation. If by this it were only meant that where the agent is guilty of fraud or deceit in doing his employer's business, the latter is responsible, the doctrine is entirely true. (Story's Agency, §462 and cases cited.) But in all its other aspects and forms of statement the doctrine is unsound. If the agent in dealing for his principal and within the power commits a fraud, the principal is liable; not upon the ground that he holds the agent out to the world as an honest man, but because the fraud enters into and is a part of the authorized transaction. If the agent deals dishonestly for his principal, it is in a just sense a wrong done by the principal himself, although unknown and unauthorized. But the dealing itself must be authorized. If the transaction is not within the power, then as the dealing is imputed to the agent personally, so necessarily are all the circumstances attending it, and all the means and instrumentalities by which the fraud is consummated. The power of the agent to charge his principal by doing a wrong must be traced directly to his authority, and it cannot be referred to an increased facility for imposing on the credulity of others derived incidentally from his appointment to a situation of trust. If the fraud consists in an over-representation of his power to act by which others are drawn in to dealing with him, then it is a self-evident proposition, that a man can no more enlarge than he can create a power by such a representation.

Applying the principles which have been stated in this branch of the discussion, they are decisive against the plaintiff. If the Corporation had held stock, and Schnyler had been the agent to sell it and issue certificates therefor, a sale and a certificate issued by him would have been valid against his principals, although by a private fraud he applied the proceeds to his own use. The transaction with the purchaser, in all its branches, the sale, the certificate and the payments to him of the money, would have been not only apparently but actually within the powers. His misappropriation of the proceeds would have been a mere breach of trust relating to moneys in his hands, and upon the principles of trust his intention to misappropriate would not affect an innocent part.

But such were not the relations between Schnyler and the corporation, nor was he held out to the world as standing in such relations. He had no power to sell stock at all; and none to issue certificates, except as incidental to a sale between existing stockholders; and then, it depended on the conditions precedent of a transfer, on the books, and a surrender of a previous certificate for the same stock. The authority which he assumed to exercise, therefore, confessedly never had an actual existence, and within the principles which have been stated it never had an apparent existence. His appointment in its very terms, which all dealers are supposed to have been acquainted with, did not include his acts, and there is no pretence that the authority it conferred was ever enlarged by any holding out or recognition of such acts. All that can be said in behalf of

the plaintiffs is, that the certificate itself implied a representation or assurance that it was issued within the power; in other words, that the conditions on which the power depended had been fulfilled. Even this representation, when closely scanned, was no more than an inference of the dealer that as the agent had no authority to certify except under conditions, those had been in fact performed. But the conclusive answer is, that the defendants never authorized any such representations. To say that they had would be simply saying that they authorized the certificate, because the representation was contained in that and existed nowhere else, and this would be assuming the very point in dispute. The representation or assurance, therefore, if such we call it, was the unauthorized act of the agent. Upon this the plaintiffs naturally no doubt relied, and so, doubtless, the dealer did upon the bill of lading in *Norway vs. Grant*, (*supra*), which contained an express declaration that the goods were shipped. The precise difficulty is, that they relied upon the appearance which the agent gave to the act, and by that they were deceived. They were under no deception as to the power in its real or apparent scope. Testing the question by any rule of agency with which I am acquainted, the defendants were not bound by the transaction.

If any one of the main conclusions at which I have arrived in this discussion, is sound, there is no remaining ground on which the action can be sustained. Viewing the certificate in question as unaffected by the want of power in the corporation to create or recognize the stock it appears to represent, we have seen that it was void in its origin, because issued without consideration and in fraud of the defendant's rights. We have, also, seen that those objections were equally fatal to its validity in the hands of the plaintiffs, as the assignees of the first holder. It has been further shown that the instrument imposed no obligation or duty on the defendants, upon the more special ground that the act of Schnyler, in issuing it, was not within any authority which they ever, in fact or in pretence, conferred upon him as their agent; and, if this objection is sound, the further observation has been made and, I doubt not, assented to, that it cannot be overcome by allowing to the certificate the transferable quality and immunity which belong to negotiable paper. Unless these conclusions can be overthrown they are subversive of the entire ground of action.

The motion of estoppel which has been advanced in the argument, not as a distinct ground of liability, but blended with other principles, deserves by itself very little consideration. Every corporate as well as private obligation or instrument undoubtedly contains an express or implied representation of facts upon the faith of which innocent parties may deal. If it be a promissory note, value received, is a fact expressed or implied, and although the fact may not be so, the maker is bound to pay the obligation in the hands of an innocent third party, not upon any theory of estoppel, but upon principles peculiar to that species of security. Where the instrument is not negotiable, the maker may, as I have heretofore observed, be affected by an estoppel *in pais*, if it be transferred upon his representation of its validity and the dealer acts upon that representation.—But to say that he is estopped by the instrument itself simply because he made it, and a third party has dealt with it, is only asserting in another form that fraud, mistake, duress, illegality, want of consideration, or want of authority when the act is one of pretended agency is no defence. This would subvert the settled maxim that the assignee or purchaser takes subject to all equities between the original parties. It would also subvert another maxim which belongs to the doctrine of estoppel itself. That maxim is, that an admission or representation is no estoppel in favor of a stranger to whom it is not made, and whose conduct it was not expressly designed to influence (3 John's cases, 101; 6 Hill, 534; 8 Id., 215; 7 Barb. 644.) The result is, that before the principles of estoppel can be applied to this con-

trovery, it must be asserted and proved, that a certificate of stock, differing from all other modes and forms of obligation used in the transactions of men, contains within itself a representation or admission of facts which any dealer, however remote from the original parties, may accept as addressed to himself, and intended to influence his conduct. For such a doctrine no authority has been cited, and it has no foundation in any principle hitherto recognized.

As I have once mentioned, a theory of the action prominently urged upon the argument assumed that the Corporation had no power to create more than the original three millions of stock, or to issue certificates for a greater amount. That this is so, I think I have demonstrated. But assuming these premises, it was then insisted that the certificate in question was therefore false, and that the action would be on this ground. The essential principle of the case in this view would be, that as the defendants, for want of corporate power, cannot recognize the certificate as the true representation of stock, and so respond to the engagement which it implies, they must make compensation in damages for the injury sustained in consequence of the representation regarded as false.

Now by presenting the falsehood alleged in the certificate and the consequent injury as the ground of the action, a plausible appearance is given to this view of the case. But it is essentially illogical. The falsehood, viewed in this respect alone, really consists in a want of corporate power to enter into the engagement, and that instead of being a cause of the action is a serious difficulty to be removed. If an agent, irrespective of all questions arising out of the special limitations of his own authority as derived from the Board of Directors, cannot bind a corporation, or affect the rights of its genuine stockholders by the terms of an over-issued certificate, there is great difficulty in affirming that the result may be indirectly reached by thus changing the ground of liability. If a corporation has received the benefit of its agent's misrepresentation or fraud in a transaction unauthorized by its charter, I will not say there is no mode of redress. I am not an advocate of the doctrine that a corporation cannot be responsible for a wrong, or may not in some form be liable when its agents enter into engagements which its charter forbids, and the benefits of the transaction can be traced to its stockholders, or are held for their benefit. But such is not the case before us. The stockholders of this Corporation are in no wise connected with the misconduct of their Agent, nor have they been benefitted by it. It is true they trusted him, but it is not alleged that they had not ample reasons for so doing. Conceding that Schoyler's authority, derived from his appointment as Transfer Agent by the Board of Directors, might apparently include his fraudulent acts, the difficulty is only removed one step further back. The Directors themselves were not the Corporation, but its agents only. It may be granted that they wielded all the corporate powers, but among those powers the one in question is nowhere to be found. It did not even have apparent existence. The argument concedes this absolute want of power, and I have yet to discover the principle on which the genuine stockholders can be made liable in any form for an attempt to exercise it, by any of their agents, for their own individual benefit.

But such a point need not be determined. Before reaching this ultimate question, the action falls upon the special grounds which have been examined at large. Conceding to the defendants the power, if they so elect, to recognize and perform the obligation under which their agent attempted to place them, then, if they are not liable upon their refusal to do so for the reasons which have been stated, it is extremely plain they are not if the power to do so is wanting. To say that their agent's false representation of stock which did not and could not exist can render them liable to dealers in the spurious certificates, when they would not be bound to recognise the same dealers

if the stock in fact existed, and the representations were therefore true, involves a fallacy so evident that it needs only to be suggested. This is the error in the argument which places the defendants' liability on the simple ground that the certificate is a fraudulent representation of non-existing stock, the alleged fraud consisting in the statement of that falsehood alone. In this view of the controversy, the other fatal objections to the action are overlooked. If I have been successful in showing that the plaintiffs can have no title to the shares of stock mentioned in the certificate, for the particular reasons which have been given, then manifestly the non-existence of the shares, or the false assertion of their existence, is no ground of complaint.

In concluding, it is proper to say that the case of *The Bank of Kentucky vs. The Schuykill Bank*, (1 Parsons' Select Eq. Cases, 180,) has not been overlooked. That case has been much relied on as an authority in point upon the general question before us, and it is certainly true that in the opinion delivered on pronouncing the judgment some principles were stated scarcely reconcilable with the conclusion to which we have come. In that case, however, the suit was brought by the Corporation against its own fraudulent agent, after it had recognized the spurious issue under an Enabling act of the Legislature: and in many essential circumstances the controversy differed from the present one. After a careful consideration, we are unable to yield to that decision any controlling influence upon the question now to be determined. We are all of opinion, that the judgment should be reversed and a trial granted. Ordered accordingly.

F. KERNAN, State Reporter.

Railroads in Connecticut.

From the Third Annual Report of the General Railroad Commissioners in that State, we learn that of the 2,461,419 passengers carried on her railroads, not one received the slightest injury in that State. The following is a table of the accidents which occurred to employees and others, during the year.

Caused by—	Killed.	Wounded.
Trespassing on track.....	8	3
Trains thrown off track.....	3	1
Struck bridges.....	1	1
Working around cars.....	1	5
Axle breaking.....	1	1
Jumping on cars in motion.....	1	1
	13	12

Of the killed several were intoxicated at the time. Thirteen of the accidents happened to employees.

NEW YORK & NEW HAVEN R. R.

Nearly as many passengers are carried over this road as over all others in the State. It was thoroughly repaired last year, and is believed to be now in better condition than at any previous time. Double track bridge over Coscob creek has been completed, at a cost of over \$100,000. Eighteen stations, nearly all of which are commodious and neatly kept. At Bridgeport better accommodations are required; and additional buildings for housing engines and cars at New Haven. General management excellent.

Capital stock, \$3,000,000; funded debt, \$2,215,000; floating debt, \$78,010; total indebtedness, \$2,288,010.

Cost of road and equipment, \$5,070,979; length, 62¼ miles, of which 56.3 have double track; length of sidings, 5¾ miles; weight of rail per yard, 64 lbs.; maximum grade, 46.3 feet per mile, for ¾ of a mile; total rise and fall in main road, 1,648 feet; shortest radius of curvature, 573 feet for about 300 feet; total curvature, 2,485 degrees;

length of straight line 41½ miles; length of bridges, 5,013 feet.

Miles run by passenger trains last year, 387,793; by freight trains, 89,301; total miles run, 486,001; passengers carried, 1,052,872, who traveled an aggregate distance of 39,912,576 miles; tons of freight transported, 80,642, or 4,394,989 carried one mile; rate of speed for express trains, 34 miles an hour, including stops; and for freight trains, 12 miles per hour.

Passenger earnings—on main road.....	\$429,024
Do. to and from other roads.....	315,214
Freight earnings—on main road.....	85,751
Do. to and from other roads.....	81,503
U. S. mails.....	19,490
Express.....	27,292

Total.....\$958,274
Working expenses.....619,397

Net gains.....\$338,877
No dividends.

HARTFORD & NEW HAVEN R. R.

The line is provided with a double track throughout. Has been usually found in excellent order. A large portion of the rails originally laid between Hartford and Springfield, being of an inferior quality, have been gradually removed, and substituted by others of a more substantial quality. More than 30,000 new ties have been placed on the track the last season. Rolling stock is in good repair. Road gives employment to 430 men. Stations are large and commodious. That at Hartford is the best in the State. No serious accidents have happened on this road for several years.

Capital stock, \$2,350,000; funded debt, \$941,000; floating debt, \$5,000; making an entire indebtedness of \$946,000.

Cost of road and equipment, \$3,318,932; length of road, 61¾ miles, and of branches, 10¾ miles; length of double track, 55 miles; weight of rail per yard, 58 lbs. on main line, and 55 lbs. on branches; maximum grade, 38¼ feet, for 2,600 feet; total rise and fall, 7,211 feet; shortest radius of curvature, 444 feet, for 814 feet; degrees of curvature, 1.774; length of straight lines, nearly 37 miles.

Miles run last year by passenger trains, 312,510; and by other trains, 10,194; total mileage, 322,704. Rate of speed for express passenger trains, 32½ miles; for accommodation trains, 24; and for freight trains, 13 miles an hour. The income was—

Passengers.....	\$444,240
Freight.....	260,039
Mails, express, &c.....	85,733

Total.....\$780,012
Operating expenses.....483,167

Net gains.....\$296,845
Rate of dividends paid, 10 per cent.

NORWICH & WORCESTER R. R.

This is one of the oldest lines in the State, having commenced running in 1840. It has suffered much from the severity of last winter. The worst feature is the condition of the rails. A large quantity of new iron is needed to supply their place. The bridges are in good condition. The rolling stock suffered much last winter, but is now undergoing repair, as well as the superstructure.

Better conveniences are needed about the work-shops. Six daily passenger trains pass over the road, besides express passenger trains between Boston and Allyn's Point. There are fifteen stations. Number of men employed, 211.

Capital stock, \$2,825,000, of which \$2,122,300 have been paid in; funded and deferred debt, \$779,887; floating debt, \$93,002; total indebtedness, \$873,489; number of mortgages executed, five.

Cost of road and equipment, \$2,597,152; length of road, 59 miles, of which $1\frac{3}{4}$ miles have double track; length of branches, 7 miles; weight of rail, 56 and 60 lbs. per yard; maximum grade, 32 feet for 13,265 feet; total rise and fall, $815\frac{3}{4}$ feet; shortest radius of curvature, 1,910 feet for 3,638 feet in Massachusetts; total straight line, 121 miles; aggregate bridging, 1,575 feet.

Mileage of express freight trains last year, 40,862 miles; of passenger trains, 124,378; of freight and other trains, 100,514 miles; making a total of 265,744 miles; number of passengers carried, 178,727, or one mile, 3,663,983; tons of freight carried, 70,954, or one mile, 3,235,483; rate of speed for express trains, 30 miles, and for freight trains, including stops, $8\frac{1}{2}$ miles an hour. The earnings were—

Passengers.....	\$125,997
Freight.....	155,593
Mails, &c.....	22,646

\$304,236

Working expenses.....	\$215,778
Interest.....	42,546

\$45,912

Dividends paid, \$52,787.50. Surplus on 30th november, \$32,371.09.

HARTFORD, PROVIDENCE & FISHKILL R. R.

This road extends from Providence to Hartford, and thence to Waterbury in Connecticut. The new portion between Willimantic and Providence is one of the most thorough and substantially built roads in the State. That portion between Willimantic and Bristol has received extensive repairs since last report; and the new portion, from Bristol to Waterbury, is being fully completed.—New stations and various other improvements have been made. The rolling stock is in good order, and every part of the business is said to be faithfully conducted.

Capital stock, \$4,500,000, of which \$2,008,110 have been paid in; funded debt, \$1,484,730; floating debt, \$545,935; making the company's entire indebtedness \$2,030,665. Cost of road and equipment \$4,060,868; length, $122\frac{1}{4}$ miles, of which five miles (that part in connection with the New Haven and Hartford railroad) have double track; sidings, $10\frac{1}{2}$ miles; weight of rails 60 lbs. per yard; maximum grade, 60 feet for $3\frac{1}{2}$ miles; total rise and fall, 3,333 feet; shortest radius of curvature, 604 feet for 1735 feet; total curvature, 7,483 degrees; aggregate straight line, $66\frac{1}{2}$ miles; bridging, 11,663 feet. Mileage of passenger trains last year, 164,223; by freight trains, 49,248; total mileage, 216,471 miles; number of passengers carried, 282,956, or 6,109,636 for one mile; tons of merchandise carried, 147,532, or 2,349,264 for one mile; average rate of speed for express trains, including stops, $29\frac{1}{4}$ miles, and for freight trains, $8\frac{1}{2}$ miles per hour. The earnings for 1855 were—

Passengers.....	\$166,626
Freight.....	82,224
Mails, express, &c.....	9,835

Total.....	\$258,685
Working expenses.....	139,074

Net earnings.....	\$119,611
Dividends, ten per cent. on preferred stock, or \$18,141. Surplus undivided, \$140,077.	

NEW LONDON, WILLIMANTIC & PALMER R. R.

This road suffered pretty severely the past winter, but considerable repairs have since been made, and it is now in a fair condition for business. Preparations were being made, at date of report, to remove all defective timbers. A commodious depot has been erected at Norwich, and various other repairs made upon their buildings. The rolling stock is sufficient for business, and in good condition. The Company express the belief that the road has passed through its severest financial trials. The number of men employed is 117.

Capital stock, \$1,700,000, of which \$509,200 have been paid in; funded debt, \$1,052,000; floating debt, \$21,672; total funded and floating debt, \$1,073,672. Cost of road and equipment, \$1,694,382; length, 66 miles (nine miles in Mass.); sidings, about five miles; weight of rail per yard 57 lbs.; maximum grade, 66 feet for 4,750 feet; total rise and fall, 1,085. Mileage of passenger trains, 86,763; by freight trains, 30,756; total miles run, 121,119; number of passengers carried, 100,670; rate of speed for accommodation trains, 25 miles, and for freight trains, $12\frac{1}{2}$ miles. The business for 1855 was—

Passengers.....	\$58,099
Freight.....	59,785
Mails, rents, &c.....	6,159

Total.....	\$124,143
Working expenses.....	\$57,713
Interest.....	66,111

Balance.....	\$219
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NEW HAVEN & NEW LONDON R. R.

The road is said to have all the appearance of being safely and economically worked. Its rails, bridges, and switches are mostly in good order; and the engines and cars are in an efficient condition. The company are making an effort to extend the road from New London, through Groton, so as to connect with the New York, Providence and Boston road at Stonington. They express the belief that the outlay will result in an increase of business, sufficient to make the whole road a paying investment.

Capital stock paid in, \$738,538; funded debt, \$695,000; floating debt, \$66,462; making a total indebtedness of \$761,462. Cost of road and equipment, \$1,455,569; length, 50 miles; sidings, 13,390 feet; weight of rail per yard, 57 lbs.; maximum grade, 44 feet per mile, for 400 feet; shortest radius of curvature, 573 feet for 400 feet; aggregate straight line, 301 miles; total bridging, 12,634 feet.

Mileage run by passenger trains last year, 89,348; by freight trains, 2,977; total mileage, 117,276; rate of speed, including stops, on express trains, 20 miles; number of men employed, 80.—The income for last year was—

Passengers.....	\$70,208
Freight.....	11,061
Mails, &c.....	6,738
Total.....	\$88,007

Working expenses.....	\$57,889
Interest.....	3,008

Balance.....	\$27,310
No dividends.	

HOUSATONIC R. R.

The gross receipts of this road for the past year exceed those of any other. The machinery has been much improved, and it is now in good condition. Over 40,000 new ties, to meet immediate wants, are provided, and will be placed upon the track, during the season. The action of frost has slightly disturbed the rails in some places. The number of operatives employed is 320 men.

Capital stock, \$2,000,000; funded debt, \$300,000; floating debt, \$114,240; total amount of indebtedness, \$414,240. Cost of road and equipment, \$2,431,773; length, 74 miles; weight of rail per yard, 55 lbs.

Miles run by passenger trains last year, 91,751; by freight trains, 99,753; total mileage, 196,618; number of passengers carried, 137,783, or 4,378,315 for one mile; tons of freight carried, 104,461, or 4,980,795 for one mile; rate of speed for accommodation trains, 20 miles, and for freight trains, 10 miles per hour. Earnings for 1855—

Passengers.....	\$110,461
Freight.....	213,383
Mails, rents, &c.....	15,352

Total.....	\$339,196
Working expenses.....	\$267,769
Interest.....	28,399

Net profits.....	\$43,028
No dividends; surplus, \$103,233.	

NAUGATUCK R. R.

This road suffered severely in former years by freshets in the Naugatuck valley; but has since received thorough repairs, and is now in a better condition than at any previous period in its history. The rolling stock is also in good condition.

Capital stock paid in, \$1,031,800; funded debt, \$472,550; floating debt, \$51,694; total funded and floating debt, \$524,244. Cost of road and equipment, \$1,580,723; length, 57 miles; sidings, $2\frac{1}{4}$ miles; weight of rail per yard, 53 and 60 lbs.; maximum grade, 60 feet for $2\frac{1}{2}$ miles; total rise and fall, 900 feet; shortest radius of curvature, 600 feet; aggregate length of straight line, 14 miles.

Miles run by passenger trains last year, 75,674; by freight trains, 56,179; total mileage, 132,824; number of passengers carried, 169,536, or 2,787,032 for one mile; tons of merchandise carried, 69,751; speed of accommodation trains, 20 miles; of freight trains, 10 miles per hour. Earnings for 1855—

Passengers.....	\$83,680
Freight.....	131,443
Mails, rents, &c.....	5,386

Total.....	\$220,459
Working expenses and interest.....	164,851

Net earnings.....	\$55,608
No dividends; surplus undivided, \$71,781.	

DANBURY & NORWALK R. R.

At last examination this road was found in good condition. The damages to the bridges had been repaired, and the road generally improved. The rails weigh but 53 lbs. to the yard, and were originally laid without chairs. This deficiency has recently been supplied at the curves, and it is

intended to supply them to all the road. Number of men employed, 42.

Capital paid in, \$279,050; funded debt, \$77,000; floating debt, \$20,100; total indebtedness, \$97,100. Cost of road and equipment, \$373,460; length, 23¾ miles; sidings, nearly 2 miles; maximum grade per mile, 65 feet for 4,935 feet; total rise and fall, 659 feet; shortest radius of curvature, 574 feet for 435 feet; total curvature, 1,560°; total straight line, 13¼ miles; aggregate length of bridging, 1,023 feet.

Miles run by passenger trains, 22,276; by freight, 14,851; total mileage, 40,459; number of passengers carried, 77,227, or one mile, 865,024; tons of merchandise transported, 17,892, or 285,029 for one mile. The income was—

Passengers.....	\$28,816
Freight.....	25,270
Mails, &c.....	2,155
Total.....	\$56,241
Working expenses and interest.....	34,341

Net profits.....	\$21,900
Rate of dividends paid, five per cent. Surplus undivided, \$20,619.	

NEW YORK, PROVIDENCE & BOSTON R. R.

Only six miles of this road, in the town of Stonington, are located in this State. Some additions have recently been made to its rolling stock.—When last visited, a year ago, it was found in a very satisfactory condition. The present returns are incomplete.

Capital stock, \$1,508,000; funded debt, \$446,700; cost of road and equipment, \$2,158,000; length, 50 miles; sidings, 2 miles; weight of rail per yard, 56 lbs.; maximum grade, 38 feet for two miles; total rise and fall, 157 feet; shortest radius of curvature, 1,000 feet.

Miles run during the year by trains, 169,806. rate of speed for express trains, including stops, 30 miles, for accommodation, 25, and for freight trains, 15 miles an hour. The business of 1855 was—

Passengers.....	\$143,322
Freight.....	102,306
Mails, &c.....	5,000

Total.....	\$250,627
Working expenses.....	\$175,793
Interest.....	29,052
Total.....	204,845

Net earnings.....	\$45,782
Rate of dividend paid, 2½ per cent., or \$37,692.	
Extension bonds paid, \$3,000.	

NEW HAVEN & NORTHAMPTON R. R.

This road is leased to the New York and New Haven Railroad Company for twenty years, six of which have expired. The loss on operating it last year was \$32,221 46. The extension from Westfield being now completed, it is believed the above loss will henceforth be greatly diminished. At the last examination the road was found in good condition, except the want of new ties. Some of the pile bridges began to show symptoms of decay; but these are about to be replaced. The rolling stock is in good condition. Number of men employed, 65.

Capital stock, \$922,500; funded debt, \$500,000 at seven per cent; cost of road, &c., \$1,400,000; length, 55½ miles, of which 8¾ are branches; weight of rail, 56 to 58 lbs. per yard; miles run by trains last year, 89,769; passengers carried,

99,852; rate of speed on accommodation trains, 19 miles, or on freight trains, 11½ miles per hour.

The earnings were—

Passengers.....	\$58,514
Freight, mails, &c.....	86,621
Total.....	\$145,106

Working expenses, \$——.

Interest, \$35,000.

Rates of dividend paid, four per cent., or \$36,900; surplus undivided, \$30,417.

BOSTON & NEW YORK CENTRAL R. R.

Eight miles only of this road are located in Connecticut. The financial embarrassments of the company for the past six months have materially impeded their operations.

Capital paid in, \$2,240,300; funded debt, \$374,550; floating debt, \$1,144,121; aggregate funded and floating debt, \$1,518,671. Cost of road and equipment, \$3,463,818; length of road, 74¼ miles, and of single main track, 61½ miles; weight of rail, 58 to 71 lbs. per yard; maximum grade, 58 feet per mile for 8,300 feet; total rise and fall, 1,590 feet; shortest radius of curvature, 1,500 ft., except at Boston terminus, where it is 1,275 feet; total curvature, 1,376 degrees; aggregate straight line, about 45 miles; total bridging, 13,919 feet. Twenty miles of the road are fenced.

Miles run last year by passenger trains, 42,488; by freight trains, 14,952; total, 57,440; passengers carried, 96,857, or 2,808,853 for one mile; tons of merchandise carried, 20,715, or 381,585 carried one mile; speed of accommodation trains, 20 miles, and for freight trains, 12 miles an hour. The income of 1855 was—

Passengers.....	\$33,705
Freight.....	24,177
Mails, &c.....	2,035
Total.....	\$59,917
Working expenses.....	51,177

Net.....	\$8,740
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Cost of that section within the limits of Connecticut, \$307,713 89.

NEW YORK & BOSTON R. R.

But little progress has been made in construction since last report. In Rhode Island work is being done, and the grading of that part of the line between Woonsocket and the Massachusetts State line is nearly completed. Since last report a union has been made with the Charles River Railroad Company, in accordance with legislative provisions to that effect.

The distance from Boston to New Haven is 135 miles.

Number of miles graded, 32.

Do. do. and in operation, 8.

Capital collected in Massachusetts.....	\$233,308
" " Connecticut.....	209,057
" " Rhode Island.....	101,350

" uncollected..... 357,284

Am't of indebtedness in Connect't (float) 25,293

" " Rhode Island... 44,615

" " Mass. (funded). 62,100

" " " (float'g).. 116,327

Cost per mile opened 24,752

Weight of rail used, per yard, 50 lbs.

Arrangements are being made for the resumption of work in Connecticut, under a new contractor.

The following statement shows the names, lengths, costs, earnings, expenses, dividends, &c.,

&c. of the roads in Connecticut, as furnished by the above report:—

NAMES.	Total Lengths.	Lengths in Connecticut.	Capital paid in.	Debt, funded & unfunded.	Cost.	Gross Earnings.	Net Earnings.	Dividends.	No. of Engines.	No. of Passenger Cars.	No. of Freight Cars.	No. of Men Employed.
New York and New Haven.....	62¼	41¼	\$2,932,460	\$2,288,010	\$5,070,970	\$988,275	\$388,877	.....	26	73	329	633
New Haven and Hartford.....	72	60	2,350,000	946,000	3,318,952	780,012	352,799	.....	17	34	259	430
Norwich and Worcester.....	66	50	2,122,300	1,564,589	2,597,158	804,296	88,458	.....	15	16	145	211
Hartford, Providence, & Fishkill.....	122¼	96	2,008,110	2,030,665	4,060,868	258,685	119,611	.....	16	20	200	260
New London, Wilm., and Palmer.....	66	57	509,200	1,073,672	1,594,882	124,048	66,380	.....	5	6	157	117
New Haven and New London.....	50	50	738,538	761,462	1,456,669	88,007	30,818	.....	6	12	25	80
Housatonic.....	74	74	2,000,000	524,244	1,580,728	220,469	96,965	.....	10	18	210	320
Danbury and Norwalk.....	67	57	1,081,800	624,244	1,580,728	220,469	96,965	.....	8	11	177	95
New York, Providence, & Boston.....	23¾	23¾	279,050	97,100	373,460	66,241	21,900	.....	3	4	24	42
New Haven and Northampton.....	50	6	1,508,000	446,700	2,158,000	250,627	74,884	.....	9	14	54	.....
Boston and New York Central.....	65¼	65¼	922,500	600,000	1,400,000	145,135	74,054	.....	.....	.....	.....	.....
	74¼	8	2,240,300	1,518,671	3,463,818	69,917	8,739	.....	8	7	45	.....
Totals.....	772¾	590¼	\$18,702,248	\$12,165,566	\$29,506,662	\$3,534,889	\$1,448,412	\$304,491	118	208	1,615	2,088

Camden and Pemberton Railroad.

The stockholders of the Camden and Pemberton railroad company met at Camden, on Monday, 9th of June, and elected Robert F. Stockton, John L. McKnight, Edwin A. Stevens, George F. Fort, Job H. Gaskill, John S. Irick, Samuel Stockton, Wm. Braddock, Jr., and Robert F. Stockton, Jr., directors. It was reported that \$75,000 would be necessary to purchase the right of way as far as Freehold, and that conditional contracts had been made with most of the property owners.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par value of \$100.

[NAME OF COMPANY.]	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	[NAME OF COMPANY.]	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	190,605	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.	103,231	103,231	103	103
Androsog. & Kennebec	56	642,343	1,478,080	2,245,020	190,605	90,797	none	14	South Western	92	1,097,496	446,500	1,824,920	258,906	141,168	8	103	103
Kennebec & Portland	56	1,114,725	1,661,235	2,470,600	190,605	90,797	none	14	Tennessee and Alabama	30	248,486	679,906	176,740	In progr.	103,231	103,231	103	103
Portl., Saco, & Portm'th	51	1,267,000	119,237	1,486,237	270,214	112,491	6	90	Tennessee and Missis.	30	170,921	176,740	In progr.	103,231	103,231	103	103	
Boston, Concord & Montreal	93	1,808,093	1,069,512	2,777,605	234,234	120,834	6	90	Memphis and Charleston	217	2,179,440	2,127,002	4,028,798	311,631	159,572	103	103	
Chebbire	53	2,085,925	899,313	1,119,687	380,221	143,565	2	78	Mobile and Ohio	183	2,568,555	1,802,921	4,536,412	199,932	109,236	103	103	
Concord	35	1,500,000	8,242	1,112,476	335,919	136,454	6	78	Miss. Central	185	642,534	none	628,303	In progr.	103,231	103,231	103	103
Northern, N. H.	82	2,768,400	none	3,016,638	370,699	138,299	2 1/2	42 1/2	N.O. Opelousas & G.W.	165	2,930,425	671,645	2,657,565	In progr.	103,231	103,231	103	103
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,662	162,687	55,173	none	14	Vicksburg, Shreveport & Tex.	111	1,171,750	none	1,077,895	In progr.	103,231	103,231	103	103
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	394,971	121,473	none	14	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	103,231	103,231	103	103
Vermont Central	117	5,000,000	3,530,236	5,403,366	820,119	214,793	none	14	East Tennessee and Va.	111	625,425	988,593	1,033,781	In progr.	103,231	103,231	103	103
Boston and Lowell	27	1,880,000	326,635	2,185,595	499,754	140,377	6	70	Nash. and Chattanooga	181	2,319,350	1,487,081	3,843,694	316,090	112,177	103	103	
Boston and Maine	83	4,076,974	150,000	4,179,535	854,426	330,060	6	73 1/2	Ovington & Lexington	98	1,302,804	2,235,939	3,788,753	294,973	138,604	16	16	
Boston and N.Y. Central	74	2,240,800	1,518,671	3,465,181	69,917	8,740	none	5 1/2	Lexington and Frankfort	29	430,055	158,099	637,071	93,233	43,635	6	6	
Boston and Providence	55	3,160,000	359,182	3,677,154	1,008,004	404,461	6 1/2	82 1/2	Lexington and Danville	66	694,444	32,734	747,178	In progr.	103,231	103,231	103	103
Boston and Worcester	68	4,500,000	655,428	4,865,428	119,223	65,527	3	49 1/2	Louisville and Frankfort	65	696,236	669,061	1,589,596	244,014	99,902	6	6	
Cape Cod	47	651,690	280,595	997,252	286,653	108,787	5 1/2	48	Atlantic & Gt. Western	264	860,939	77,294	613,231	In progr.	103,231	103,231	103	103
Connecticut River	52	1,591,110	737,241	1,802,246	286,653	108,787	5 1/2	48	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,852,652	298,290	140,823	none	102	
Eastern, Mass.	60	2,683,400	2,947,737	4,621,216	647,281	305,998	4	40	Clev., Col., and Cin.	141	4,447,020	1,282,857	4,613,722	1,290,296	732,056	9	9	
Fitchburg	67	3,540,000	153,700	3,765,908	681,183	225,071	70	70	Cleveland and Toledo	200	2,676,425	2,699,901	5,124,629	736,272	396,986	10	78 1/2	
North-Eastern	31	800,242	226,859	968,521	In progr.	none	103	103	Clev. and Mahoning	103	103	103	103	103	103	103	103	
N. Bedford and Taunton	21	500,000	none	533,953	198,491	55,533	6 1/2	83 1/2	Clev. and Pittsburg	103	2,780,744	3,043,902	5,637,496	581,877	309,518	62 1/2	62 1/2	
Old Coff and Fall River	57	8,015,100	2,922,650	3,329,449	683,499	298,788	6	83 1/2	Cin., Hamilton & Dayton	60	2,153,900	1,321,213	2,987,757	608,271	278,012	70	70	
Vermont and Mass.	77	2,232,641	1,033,670	3,209,727	2,726,726	87,313	none	6	Cin., Wilm. & Zanesv.	151	1,120,450	1,121,255	2,326,459	In progr.	103,231	103,231	103	103
Western, Mass.	155	5,150,000	5,960,430	10,495,905	1,869,673	633,013	7 1/2	58 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,733	356,390	137,518	10	83	
Worcester and Nashua	45	1,141,000	266,505	1,351,271	294,750	75,760	2	46	Dayton, Xen. & Belpr.	63	437,853	422,658	1,860,499	In progr.	103,231	103,231	103	103
Providence and Worcester	43	1,510,000	335,401	1,806,696	311,450	138,057	73	73	Dayton and Michigan	140	1,076,692	853,011	1,185,826	In progr.	103,231	103,231	103	103
Hartford and N. Haven	72	2,350,000	939,000	3,313,632	730,012	352,799	10	21	Dayton and Western	35	310,000	500,000	733,769	In progr.	103,231	103,231	103	103
Hartford, Prov. and Fishkill	120	1,845,610	2,090,124	4,000,969	288,685	119,611	none	10	Katon and Hamilton	42	454,690	904,489	1,155,135	171,929	65,000	20	20	
Housatonic	110	2,000,000	474,177	2,428,066	330,792	18,351	none	10	Little Miami	65	2,003,921	1,171,785	3,648,172	681,562	336,708	15	15	
Naugatuck	57	1,031,900	573,959	1,577,187	238,266	none	4	24	Mad River and L. Erie	205	2,451,650	2,572,332	4,446,661	In progr.	103,231	103,231	103	103
N.Y. and N. Haven	62	3,000,000	2,376,963	5,376,963	884,306	338,877	none	10	Central Ohio	138	1,620,927	3,485,076	4,283,443	Recently opened.	103,231	103,231	103	103
N. Haven and N. London	50	738,258	738,168	1,476,426	88,007	30,318	none	10	Ohio and Penn.	187	2,453,700	3,219,000	5,672,700	1,111,626	662,117	9	9	
N. London, W. & Palmer	60	609,230	1,073,673	1,682,903	124,044	66,381	none	10	Pittsburg, Mayv. & Cin.	60	371,350	319,000	390,933	In progr.	103,231	103,231	103	103
Norwich and Worcester	56	2,122,300	873,498	1,840,696	117,710	9,904	2 1/2	32	Sand'y, Mansf. & Newk.	137	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Albany Northern	32	439,005	1,625,098	974,323	In progr.	none	103	103	Scioto & Hocking Valley	137	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Black River and Utica	35	483,370	317,559	2,319,099	172,476	66,383	none	10	Spring, Mt. Vernon & P.	137	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Buffalo, Corn. and N.Y.	100	1,487,871	1,614,183	2,319,099	172,476	66,383	none	10	Tol. Wabash & St. Louis	137	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Buffalo and N.Y. City	92	798,439	2,537,549	3,401,988	288,392	31,896	none	10	Cin., Log. & Chicago	255	4,196,679	1,000,125	2,080,433	In progr.	103,231	103,231	103	103
Buffalo and St. Line	69	1,800,000	1,040,000	2,494,364	679,750	35,763	10	10	Evansv. & Crawfordv.	109	706,945	1,177,596	1,844,541	127,400	64,552	7	60	
Canandaigua and Elmira	47	434,111	922,393	1,356,504	174,089	66,506	none	10	Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60	
Canandaigua & Niagara F.R.	95	1,516,000	2,279,854	3,795,854	135,433	49,649	none	10	Indiana Central	66	811,400	1,261,175	1,907,911	350,176	154,376	48	48	
Cayuga & Susquehanna	38	687,000	598,689	1,185,689	135,433	49,649	none	10	Ind., Clev. & Pittsburg	83	884,157	1,101,971	1,671,544	206,544	112,880	none	none	
Hudson River	144	3,785,496	9,250,362	12,737,899	1,812,087	608,946	none	24 1/2	Jeffersonville	66	1,014,222	694,000	1,205,000	258,146	112,880	none	none	
Long Island	38	1,875,148	601,948	2,555,986	301,793	116,462	none	8 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	2,005,000	645,827	371,462	none	none	
New York Central	534	24,164,890	14,462,742	38,627,632	6,663,581	1,022,128	8	93	New Albany and Salem	288	2,535,121	6,281,948	8,645,189	150,000	90,000	15	15	
New York and Erie	404	10,022,958	25,126,669	35,439,431	6,663,581	1,022,128	17 1/2	17 1/2	Terre Haute and Ind.	152	974,800	604,355	1,500,000	287,512	159,702	10	94 1/2	
New York and Harlem	134	5,717,100	4,069,769	8,786,208	1,336,577	234,126	none	10	Chicago and Rock Land	182	3,141,600	2,587,165	5,214,162	In progr.	103,231	103,231	103	103
Northern, N. Y.	118	1,635,022	4,401,874	6,243,683	126,540	59,982	3 1/2	3 1/2	Chicago and St. Louis	220	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Oswego and Syracuse	35	399,000	216,681	749,683	In progr.	none	103	103	Chicago, Burl. and Quincy	58	1,560,000	2,006,357	3,562,387	328,968	164,479	none	none	
Potomac and Watertown	29	467,200	294,159	749,683	In progr.	none	103	103	Central Military Tract	178	1,202,500	2,133,050	2,920,241	471,399	219,558	20	20	
Rensselaer & Saratoga	25	610,000	140,000	890,423	241,149	82,600	7	7	Chic. St. Paul & P'd du Lac	158	2,900,000	1,825,000	3,625,000	In progr.	103,231	103,231	103	103
Saratoga and Whitehall	48	600,000	895,600	1,495,600	171,000	66,964	none	10	Galesburg and Chicago	259	4,441,600	3,818,039	7,742,614	2,315,786	1,192,042	22	114	
Syracuse & Binghamton	48	768,368	1,575,804	2,272,777	159,484	22,508	none	10	Illinois Central	627	2,271,060	19,416,392	20,374,460	1,532,118	527,952	104 1/2	104 1/2	
Troy and Boston	27	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	3 1/2	Peoria and Opaquia	63	560,859	818,454	1,383,342	In progr.	103,231	103,231	103	103
Watertown and Rome	97	1,000,000	1,619,000	2,619,000	161,356	75,534	none	10	Ohio & Miss. (Wat. Dr.)	147	1,739,225	3,292,408	4,579,586	Recently opened.	103,231	103,231	103	103
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	161,356	75,534	none	10	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.	103,231	103,231	103	103
Camden and Amboy	94	869,320	1,522,181	2,129,642	124,447	50,080	12	125	Detroit and Milwaukee	183	838,000	1,293,964	1,966,909	In progr.	103,231	103,231	103	103
Camden and Atlantic	30	8,484,650	690,000	4,510,011	361,514	50,747	10	122 1/2	Mich. Central	282	6,092,444	5,096,013	10,688,155	2,215,288	870,656	10	92 1/2	
New Jersey	68	2,000,000	2,296,176	3,683,149	393,728	171,003	6	6	Mich. South & N. Ind.	475	6,292,900	6,319,254	11,645,208	2,410,000	875,000	10	98	

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	75	98
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1886	97 1/2	"
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1886	90	"
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1888	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1889	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	---
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	---	---
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	---
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	86	30
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1863	62 1/2	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	90
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	---
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	---
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	---
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	---
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	---
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	---
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	70	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	66	---
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90 1/2	---
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	---
Gaucha and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1875	84	86
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	88	88 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	81	---
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	65	---
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	---
Indiana Central	800,000	Do. convertible	7	May, Novemb.	"	1866	90	---
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	81
Indiana & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	---
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	82 1/2	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	75	---
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	100	101
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96 1/2	---
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	96 1/2	---
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	---	---
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	---	---
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	---
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	---
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-68	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77 1/2	---
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	92 1/2	95
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	85	---
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	---	---
Staubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1866	80	---
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	74	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83 1/2	88 1/2
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	88	---
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	98	99
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	106	106 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	98	99
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	97	98 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	95	96
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86 1/2	88 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	100 1/2	101 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	89	---
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	70 1/2	70 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	91 1/2	91 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	96	100
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	87
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1866-67	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92	94
Do. Goheen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	88 1/2	89 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	88 1/2	89
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100	100 1/2
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	100 1/2	102
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	100 1/2	102
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	---	---
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	---
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	84	84 1/2

CITY SECURITIES.	Int'at payable.	Off'd.	Ask'd.	CITY SECURITIES.	Int'at payable.	Off'd.	Ask'd.
New York, 7 per ct. 1857	(Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	86	88
Do. 5 do. 1858-60	May,	95 1/2	96 1/2	New Orleans, 6 per ct. cp. R.R. X	Do.	75	80
Do. 5 do. 1870-75	August, and	94	95	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	80	86
Do. 5 do. 1880	November,	94 1/2	98	Philadelphia, 6 per ct. 1876-90	Jan'y, July	91 1/2	92
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	97	100	Pittsburgh, 6 per ct. coup. X	Divers	73	75
Albany, 6 per ct. coup.	Jan'y, July	97	97 1/2	Quincy, 8 per ct. coup. 1868 X	10. Feb'y, Aug	---	---
Baltimore, 6 per ct. 1879-90	Quarterly	97	97 1/2	Racine, 7 per ct. coup. 1873 X	10. Feb'y, Aug	---	---
Boston, 5 per ct. coup.	April, October	97	99	Rochester, 6 per cent. coup. X	Divers	95	78
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101	101	St. Louis, 6 per ct. coup. Long X	Do.	78	79
Clev'rd, 7 per ct. cp. W.W. 1879	Do. do.	101	102	Do. do. Municipal X	Do.	79 1/2	80 1/2
Cincinnati, 6 per ct. coup.	Divers	89 1/2	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	75	---
Chicago, 6 per ct. coup. 1873-77	Jan'y, July	100	100 1/2	S. Francisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	80	---
Do. 7 per ct. coup. 1880	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871 X	Do. do.	96	---
Detroit, 7 per ct. cp. W.W. 1873-78	Feb'y, August	100	101	Do. 10 do. pay. N.Y. X	Jan'y, July	---	---
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	59	---
Jersey City, 6 p. ct. cp. W.W. 1871	Jan'y, July	---	---	Wheeling, 6 per ct. coup. X	Divers	87 1/2	---
Louisville, 6 per ct. cp. 1880-83	X	78 1/2	79 1/2	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	81	---
Memphis, 6 per ct. coup. 1882	Jan'y, July	---	70	Zanesville, 7 do.	April, October	97 1/2	---

Cincinnati Stock Sales.

By HEWSON & HOLMES.
For the week ending July 2nd, 1856.

BONDS.	Offered.	Asked.
\$3,000 Covington & Lex., 7 per ct. 2nd Mortgage	64	(& int.)
6,000 Cin. Winn. and Zaneav. 7 per ct. 2nd Mort.	45	"
4,000 Little Miami, 6 per ct. 1st Mortgage	80	"
2,500 Indiana Central, 10 per ct. Income	95	"
5,000 Hillsboro and Cin., 7 per ct. 1st Mortgage	47	"
1,000 Cin. Ham. and Dayt. 7 per ct. 2d Mortgage	51	"
2,000 Cov. and Lex., 10 per ct. Income	55	"
612 50 Little Miami, Dividend Scrip, new	80	"
STOCKS.	Offered.	Asked.
100 Shares Ohio & Mississippi	7	"
212 " Peru and Indianapolis	15	"
10 " Cin. Ham. and Dayton	60	"
54 " Covington and Lexington	16	"
30 " Little Miami	80	"
12 " "	90	"
50 " Indiana Central	48	"
400 " Cin. & Chicago, at 60 days	4	"
20 " Indianapolis and Cincinnati, at 30 days	40	"

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 9th Inst.

New York, Tuesday, July, 8th, 1856.

Business in the stock market, during the past fortnight, has been active, and the tendency of prices upward; but, with few exceptions, the advance has not been material. The tenor of the advices from Great Britain being such as to remove all apprehension of an interruption of diplomatic intercourse with this Government, the market has been relieved from the incubus which has so long weighed upon it, and, to a great extent, counteracted the natural effect of the existing abundance of money. There is an increased demand for first class securities of nearly all descriptions for investment, and purchases for an advance are also on a larger scale, although the disposition to embark in speculative operations continues rather restricted.

For State Stocks our quotations, except for Pennsylvania 6s and California 7s, are ex interest. The only changes from those given in our last report are an advance of one per cent. in Tennessee and 2 in Missouri 6s, and a decline of 3 per cent. in California 7s. The last is attributable to the non-payment of the interest due 1st inst. The funds for this purpose have not, as yet, been received, although it is stated they were duly placed by the Treasurer in the hands of the State Agent in San Francisco, for remittance to this city. A similar default occurred some time since. Of the newly issued bonds, due in 1875, some speculative sales have been made as low as 65. At the close of 70 is bid. The interest due from 1st July, 1853, to 1st January, 1856, seven coupons in all, on the Illinois Canal registered bonds, was paid on the 7th inst. by the trustees of the Illinois and Michigan Canal.

City Stocks continue in limited demand, and without important change in prices. The interest, due 1st inst., on the 6 per cent. bonds of San Francisco, has not, as yet, been paid. The cause of the default is reported to be the same as in the case of the State. The principal of the Sacramento 12 per cent. bonds is also in default, but the interest, due 1st inst., was regularly paid. Notice is given that new bonds, bearing 10 per ct. interest and payable in 20 years, will be issued at par, in payment of the principal.

Railroad bonds are in fair demand and generally firm. Those of the Erie Railroad have all advanced. 3rd mortgage are held at 99, and 97 is bid, an improvement of 1 1/2 per cent. Sinking funds and 1871 convertibles are each 2 1/2 per cent. higher. Illinois Central construction bonds have advanced 3 per cent., and are in demand at the close of 91 1/4. For Free Land Bonds 96 is bid with, and 90 without privilege. New York Central 6s and 7s are steady. The company give notice of their intention to issue, as may be required, 7 per cent. bonds, payable in 20 years, to the amount of \$1,947,815, for the purpose of funding the principal of the debts of the old companies existing at the time of consolidation. A sinking fund of 8 per cent. per annum on the amount of such bonds issued is to be applied, out of the income of the company, to their extinguishment. Proposals are invited for \$500,000, to be received

until 17th inst. The holders of 7 per cent. bonds of the old companies have the privilege, until further notice, of exchanging them for the new issue. There were no important defaults in the payment of railroad coupons due 1st inst. Those of the Ohio Central railroad, which laid over on 1st May last, are now paid on presentation, also those of the Peru and Indianapolis railroad, due 1st Jan'y last and 1st inst. CAMMAN & CO.

Circular of Robt. Benson & Co., per Canada.

LONDON, June 20th, 1856.

The determination of our Government to continue, notwithstanding the dismissal of Mr. Cramp-ton, diplomatic intercourse with Mr. Dallas, and the removal of all fear of collision between American and British ships of war, have had considerable effect upon our market, and, coupled with other favorable circumstances, produced a buoyant state of feeling.

In our last circular we quoted Consols at 93 $\frac{7}{8}$ 94, for the 10th of July, and they gradually advanced until they touched yesterday 94 $\frac{5}{8}$ 94 $\frac{3}{4}$. To day they are rather lower, 94 $\frac{1}{2}$ 94 $\frac{3}{8}$.

The money market continues easy without however any further reduction in the current rates of discount.

Transactions in American Securities have not been extensive, but the market is firm and prices advancing. United States Bonds of 1868 have been sold at 103. The only transactions in State Stocks we have heard of are sales of Pennsylvania 5 per cent. stock at 72 $\frac{1}{2}$ and 73 $\frac{1}{2}$. Railroad Bonds have been more generally inquired for. Illinois Central 7 per cent. Construction Bonds have changed hands at 79; the 6 per cent. Bonds at 75 $\frac{1}{2}$; and the Shares of this Company at a price equal to $\frac{1}{4}$ discount. Erie 3rd Mortgage have been sold at 84 $\frac{1}{2}$ and are now rather dearer; Sinking Fund Bonds at 88; Pennsylvania 1st Mortgage Bonds at 89 $\frac{1}{2}$ ex Coupon, and the 2nd Mortgage Sterling Bonds at 92.

The Cotton market in Liverpool, after considerable activity at the commencement of the week, closes very quietly. The sales will amount to about 66,000 bales. The Manchester market has sympathized with the movements in Liverpool. At the close of the week the business has been on a very limited scale, and the rates for both goods and yarns current during the early part of the week are not now obtainable.

There has been a good demand in our Corn markets and full prices are obtainable.

Prices of Railroad Iron are rather lower.

Yours truly,

ROBT. BENSON.

Marie & Kanz' Money Circular for the European Steamer of the 9th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday July 7th, 1856.

Though the business of the past week comprises only four days, the meetings of the Board of Brokers having been suspended on the anniversary day of the Declaration of Independence, and on the following Saturday, the amount of business done has been large. Erie has again been the most active stock at a further advance of 2 per cent., but other stocks and the leading railroad bonds have also more or less participated in the improvement. The last arrival from England confirming fully the favorable news in regard to our relations with Great Britain, reports at the same time an improved demand for our stocks, and has brought out an increased amount of orders for Illinois Central, Erie, and Michigan Central bonds, also for Illinois Central, Erie, Reading and some of the Western railroad stocks, but part of these orders have been limited below our market. The large payments of interest which fell due on the 1st inst., have with very few exceptions punctually been met, the latter included the State of California and the City of San Francisco, the details of which we give below. State Stocks—The demand has been limited and prices have been irregular; Virginia declined $\frac{3}{4}$; Tennessee $\frac{1}{2}$;

Missouri advanced 1 per cent.; the new California loan due 1875 sold as low as 70. City and County Bonds—Transactions still remain of an entire retail character without any important change in prices. Railroad Bonds—Increasing demand for home and foreign account; Illinois Central bonds show an advance of 2 $\frac{1}{2}$; do. Freeland bonds, 1; Erie 1875 bonds, 1; Erie 1871 bonds, 1 $\frac{1}{2}$; New-York Central 6 per cent, 1 $\frac{1}{4}$; Hudson River 3d mort. 2 $\frac{1}{4}$; there have also been some sales of Galena and Chicago 1st and 2d mort. and La Crosse and Milwaukee bonds at about former prices. Railroad Stocks—We notice an almost general rise with activity in Erie, Reading and N. Y. Central, the closing prices show an improvement as follows: Erie, 2; Reading, $\frac{1}{4}$; N. Y. Central, $\frac{1}{8}$; Panama, 2 $\frac{1}{4}$; Chicago and Rock Island, 1; Galena and Chicago, $\frac{1}{2}$; Cleveland, Columbus and Cincinoti, $\frac{3}{4}$; Cleveland and Pittsburg, 1 $\frac{3}{4}$, (attaining the price of the Dividend Bonds at about 70;) Cleveland and Toledo, 1 $\frac{1}{4}$; Illinois Central, 4 $\frac{1}{2}$; Harlem, 1 $\frac{1}{2}$; Michigan and Lake Shore, $\frac{1}{2}$; Michigan Central and Michigan Southern declined $\frac{1}{2}$ each; Panama, Cleveland and Pittsb'g and Wisconsin and Lake Shore are quoted ex-dividend. Money continues easy without change in rates. MARIE & KANZ.

American Railroad Journal.

Saturday, July 12, 1856.

Richmond and Petersburg Railroad.

The twenty-first annual meeting of this corporation was held in Richmond, on the 27th of May last. From the report presented we learn that the company's business for the year ending 30th April, 1856, was—

Local passenger earnings.....	\$44,626
Through do.....	31,392
Freight earnings.....	25,220
Extra baggage and express.....	2,466
Freight of Clover Hill coal.....	34,818
Clover Hill travel and freight.....	2,776
Mails, &c., &c.....	10,649
Total.....	\$151,947
Transportation expenses.....	78,713

Net profits.....\$73,234

The following appropriations have been paid during the year:

For new stock and other extraordinary expenses.....	\$13,682
Interest on debt.....	15,025
Two semi-annual dividends of 2 $\frac{1}{2}$ per ct. each.....	42,830
Bills payable.....	19,475
Total.....	\$91,012

Part of the first semi-annual dividend was paid out of the net income of the four months preceding the 30th of April, 1855; but it is stated that a still larger amount has been contributed by the net income of the last four months of the last fiscal year to the dividends next to be declared. The item of cash on hand has been reduced \$7,297 below what it was at the commencement of the fiscal year. The amount of bills payable is now only \$8,478 68.

As compared with the preceding year, the business shows an increase of \$6,245 64 in the receipts; and a decrease of \$6,049 51 in the working expenses. The severity of last winter with the continued scarcity of money operated to some extent against the interests of the company. In the item of coal transported over the Clover Hill road, there were 183,350 bushels less carried than in 1854-5. Since winter, however, it has continued steadily to increase; and the prospect is favorable

to a steady, permanent, and considerable annual increase. The extent of the coal fields is believed to exceed what is even yet known of it. New shafts have been sunk, and are now approaching completion; while the road has been re-laid with a new and permanent superstructure, for more than half its length. The remainder will shortly be completed. The demand for this quality of coal is also stated to be steadily on the increase.

Several valuable improvements have been made in the company's buildings in Richmond.

From the Superintendent's report we learn that the trains have been run with great regularity and safety, only two fatal casualties having occurred during the year, and these owing in no degree to the company's fault. The property of every description is said to be in excellent condition. The rolling stock consists of 7 eight wheel engines, 4 six wheel, and 1 four wheel engine; 115 four wheel coal cars; 45 freight; and 14 passenger and baggage cars.

The number of passengers carried was 88,920, of whom 39,655 were through. Mileage of passengers, 1,962,519. Freight transported, 58,671 tons, of which 41,281 were coal. The receipts per mile for freight trains were \$1.75 $\frac{1}{2}$, and for passenger trains, \$1.34 $\frac{1}{2}$.

GENERAL ACCOUNT.

Cost of road and property—Richmond to Petersburg.....\$910,634
Cost of Port Walthall branch.....45,539

Reconstruction.....	\$956,173
Land purchase.....	191,881
Bills and accounts receivable.....	18,947
Cash on hand.....	34,734
	8,295

Individual stock.....	\$1,205,030
Converted loan stock.....	\$300,000
Subscribed by State—old stock.....	100,500
Do. do. new do.....	200,000
	185,600

Dividend bonds, to State.....	\$786,100
Coupon do. due July, 1875.....	33,408
Do. do. June do.....	74,500
Certificates of debt for dividends.....	112,000
Amount to credit of individual stockholders.....	23,657
Unclaimed interest.....	509
Bills and accounts payable.....	143
Profit and loss.....	11,831
	162,881

\$1,205,080

Peter V. Daniel jr. is President for the ensuing year; John Williams, Secretary and Treasurer; and Thos. Dodamead, Superintendent. The Directors are—Richard Barton Haxall, Holden Rhodes, and Charles Ellis—on behalf of the stockholders; and Francis E. Rives and Roscoe B. Heath—on behalf of the State.

Savannah, Albany, and Gulf Railroad.

The Savannah Republican observes that already the first nine miles of the above road are so far completed as to be passable by the locomotive. A trip was made over this section a few days ago. Over the Little Ogeechee river, where the road terminates for the present, a substantial bridge is being constructed, with a suitable draw for the passage of vessels. It is the intention of the Directory to make the road thorough as they go. Beyond the Little Ogeechee the work of construction is going rapidly forward, and before many months it is expected to have it opened to the Al-

tamaha. Except on the first mile from Savannah, it is said the track does not deviate from a straight line for upwards of fifty miles.

Great Central Railroad Depot at Chicago.

In the early days of railway traffic, the buildings used for the accommodation of passengers and freight were very insignificant concerns, when compared with some of more recent date. Then, the absolute wants of the day were only considered; but now, this is not enough; and attention is paid to the constantly increasing travel and trade. The consequence has been that some of the recently constructed railway buildings—such as freight and passenger depots, have assumed quite colossal dimensions.

The new Passenger Depot of the Illinois Central railroad at Chicago, is perhaps the largest building used for a similar purpose in the world. It is certainly the largest in the United States, and, unless we are greatly mistaken, no other people excel our own in the particular class of buildings to which we are referring.

The great Central Depot was commenced on the 15th of June, 1855, and completed on the 1st of June, 1856. It fronts on South Water-st. 169x504 feet in depth, the ground area being very nearly two acres. It is constructed of rock-dressed stone, the walls being two feet in thickness throughout, and is in the castellated style of architecture.—The towers,—one at the north-west corner, 100 ft. in height, and the other at the south-west corner, 56 ft. in height, give to the whole a very imposing appearance. The roof is surmounted by a number of turrets, all built of stone.

The main building has three stories besides an attic, the first 20 feet, the second 17, and the third 15 feet in the clear. The first story is designed especially for the comfort and convenience of passengers, and has large and airy dressing-rooms, sitting-rooms, etc., furnished in the best possible taste. The second and third stories are occupied by the various departments of the company: in the second story, the Land Department, three rooms; the Superintendent's office, two rooms; the Chief Engineer's office; Treasurer's office; Auditor's office; rooms for the President and Solicitor of the company; besides several private rooms. The Telegraph office is also on this floor, and communicates with every station throughout the entire line of road, a distance of upwards of 700 miles. A portion of the third story is also appropriated to the Land Department, besides furnishing ample accommodation for the General Freight and Ticket Departments. One room is occupied by the draftsmen in the service of the company, and two others are rented to the Chicago and Burlington railroad company. Every part of the building is finished in the most thorough manner, and furnished with every possible convenience. Gas and pure water are introduced into every room in the building; an abundant supply of the latter article being obtained from Lake Michigan.

The second story contains an iron vault, made of heavy boiler iron, and enclosed by brick walls, with an air chamber between the iron and brick—thus rendering it thoroughly fire and burglar proof. This vault contains all the valuable papers and books of the company.

The Car-shed receives eight parallel tracks, and is covered by a segment roof, the span being 169

feet. This roof (which is upon the principle of Howe's patent truss) was built by Messrs. Stone, Boomer & Benton of Chicago. The distance from the top of the track to the centre of the arch is 62 feet. A skylight, about 200 feet in length, in the centre of the roof, gives ample light below, even when all the tracks are occupied by cars. At the south end, where the trains enter, are three openings, two of them 43 feet in width, and another of 33 feet. Throughout the whole building there are no pillars or other supports, save those given by the walls.

We are unable to state precisely the cost of this building, but understand that it does not vary materially from \$170,000. This sum is, of course, exclusive of the land. Mr. Otto H. Matz, of Chicago, is the architect.

The cost of erecting this magnificent Depot, was shared jointly by the Illinois Central and Michigan Central railroad companies; and ample accommodations are furnished, not only for the trains of these roads, but also for those of the Galena and Chicago Union railroad, running over the Northern Division of the Illinois Central, to Galena and Dunleith, and for those of the Chicago, Burlington and Quincy railroad.—The trains of each road depart from a track appropriated to its sole use, thereby avoiding every appearance of confusion. It will be seen that trains from the East, the West, the North and the South, arrive at and depart from the same building; and those who are aware of the immense tide of travel constantly flowing through Chicago, can have some idea of the vast number of passengers exchanged daily in the Great Central Depot.

Sheboygan and Mississippi Railroad.

This road commences at the harbor of Sheboygan, on Lake Michigan, about 50 miles north of Milwaukee, and is intended to extend in a direction as nearly due west as possible to the Mississippi river, making a total length of nearly 200 miles. The first division extends from Sheboygan to Fond du Lac, a distance of 40 miles. Here it connects with the Chicago, St. Paul's, and Fond du Lac Railroad. Twenty miles farther west, at Ripon, it will connect with the Milwaukee and Horicon Railroad. Sheboygan possesses an excellent harbor, having a depth of eleven feet of water, with piers to protect the entrance. The business of this place already entitles it to rank in importance only next to Chicago and Milwaukee. The charter of the railroad company and amendments thereto fix their capital at \$3,000,000, in shares of \$100 each; and authorize the city of Sheboygan and the county of Sheboygan, when empowered by the legal voters, to subscribe each \$100,000 to the stock, for which they may issue their bonds at not over 20 years, bearing any rate of interest not exceeding ten per cent. per annum. (The county bonds bear not over seven per cent.) The stock and dividends are pledged for payment of the principal and interest, all deficiencies being made up from taxation in the usual manner.

From some of the late census returns, we find that the counties through which this road is to run have already a population of over 106,000, against 45,877 in 1850, showing an increase of over 125 per cent. in five years! The assessed valuation of Sheboygan county alone is \$2,248,224 in 1855, against \$937,677 in 1850. The im-

ports and exports at Sheboygan, in 1855, were estimated at 35,474 and 44,885 tons respectively, and their respective values \$6,717,261 and \$1,098,136. The number of passengers arriving at the same place was 65,381. This city has every prospect of an extensive and rapid growth for many years to come. Population of the county in 1855, 20,391, against 8,379 in 1850.

The above issues of bonds by the city and county having been duly authorized by large majorities of legal voters, the Directors of the Sheboygan and Mississippi railroad, we understand, are now prepared to offer them for sale.

New Railroad Projects in Canada.

We notice that a bill granting four million acres of land, to aid in constructing a railroad from Arnprior to Georgian Bay, recently passed the Legislative Council by the casting vote of the Speaker. Arnprior is situated near the 46th parallel of latitude on the Ottawa river, and about 100 miles above Ottawa City. The road is to be 160 miles long, and will involve the construction of another from Arnprior to Quebec, making a total distance of over 400 miles.

Alternate sections of land will be granted, somewhat similarly to the practice in our new States. The district through which this great line will run is as yet uninhabited. Twenty-five thousand acres to the mile would appear to be a pretty liberal donation to such works.

The scheme of granting further Governmental assistance to the Grand Trunk project, which has passed both Houses by considerable majorities, obliges the Company, if they raise the eight millions of preferential bonds which they are empowered to raise (displacing the Government mortgage to a like extent), to continue their line eastward to Trois Pistoles, whence it is expected to be ultimately extended to Halifax in Nova Scotia; as without the latter the Trois Pistoles extension would prove unremunerative. Such was the terminus at first proposed for the road by the friends of this great undertaking.

Androscooggin and Kennebec Railroad.

At the annual meeting of the stockholders of the Androscooggin and Kennebec Railroad, held at Waterville, Me., John Ware, J. Merrill, Wm. Connor, S. H. Chandler, Wm. Willis, Wm. Goodenow, and Ira Crocker were elected directors for the ensuing year.

Lexington and Big Sandy Railroad.

From the annual report read at the meeting of the stockholders, on the 28th inst., we learn that the cost of graduation, up to the 1st of June last, was \$582,000; of right of way and depot grounds, \$54,000; and of preliminary and locating surveys, about \$50,000 in all. The company have paid \$11,000 for cross-ties, and others have been purchased. They have nearly 1,000 tons of rails (60 lbs. per yard) at Cincinnati, ready to be removed to Ashland, to be laid at the eastern end of the line. A fine locomotive, weighing 24 tons, has also been purchased at the Taunton works, and is now on the way to its destination.

It is expected that in about five months seven miles additional will be ready for the rails at the eastern end, and 33 miles at the western, which will make a total of 50 miles. The sum necessary to complete the above 33 miles is estimated at \$140,000. No further danger from the embank-

ments settling is anticipated. The cost of graduation so far is stated to have been exceedingly moderate.

The following gentlemen now compose the Board, Joseph Bondurant of Montgomery, Ben B. Groom of Clarke, D. K. Weis of Greenup, J. M. Nesbitt of Bath, General A. Blackwell of Clarke, and W. A. Dudley of Fayette.

At a meeting of the Board after the adjournment of the stockholders, R. Apperson Esq. was re-elected President of the Company.

Iowa Southern Tier Railroad.

This is another name for the Fort Madison, Keosauqua, and Bloomfield railroad, which is to cross the State of Iowa from East to West, through the southern tier of counties. The recently published report of the company contains an account of the preliminary surveys, with location and estimates for construction as far as Bloomfield. We learn that the work of construction was put under contract in April, 1855; and operations commenced in the month following; the design being to concentrate their forces on the first ten miles west of Fort Madison. At date of report (in April last), about four miles were ready for the track. This has required an amount of labor sufficient to grade *twice* the distance on the open prairie. The work is executed in a substantial manner. The right of way, except for about seven miles, has been obtained for the entire distance, and on most liberal terms. Little progress has been made, during the year, in obtaining additional subscriptions, it being the design of the Board first to give the public a certain proof that the road *would* be built; and then to ask for additional material aid. At the present organization of the Board, it was determined to put fifteen miles more under contract, so as to have 25 miles ready for the track this ensuing Fall. With this distance completed it is believed the subscription of Lee county can be obtained, which will more than suffice to equip the road and put it in active operation. The Warsaw and Rockford railroad, which is the proper eastern outlet to this undertaking, is now in active progress to its point of junction with the Chicago and Burlington line. The importance of the Southern tier road is beginning to be felt by all on the line. Decatur county is pledged to a corporate individual subscription of \$300,000.

The General Account shows a total stock subscription of \$439,335, of which \$105,625 are from private sources. Of the latter, forty-five per cent., or \$47,531, have been called for, & \$25,946 paid in. The company's indebtedness consists of \$7,000 on bond acc't, and \$25,145 payable in cash. The estimated value of work done last year is \$22,121; and the excess of assets beyond indebtedness is now \$25,520.

Scioto and Hocking Valley Railroad.

A meeting of the stockholders of this road was held at Portsmouth on the 14th ult., and a Board of Directors was chosen. The following officers were elected for the ensuing year: E. A. Spencer, President; George Johnson, Vice President; J. H. Collins, Secretary, and Thomas Dugan, Treasurer. It is believed the changes in the management of this road will insure its speedy completion; as by it, a sufficient amount of first mortgage bonds is provided to construct the entire line. The Zanesville *Courier* describes the new Board of Directors, as composed of energetic, efficient men; and the President will devote his entire time and attention to the prosecution of the enterprise.

The Directory is as follows: E. A. Spencer, Geo. Johnson, Jas. Riggs, C. A. M. Damarin, J. W. Laird, J. K. Will, L. Case, J. Wooster, J. W. Riccart. Thos. Kendall was elected Superintendent.

Cleveland and Mahoning Railroad.

Fifty-three miles of this road, from Cleveland to Warren, have been completed and recently opened. The construction of this road has proceeded steadily from the beginning through obstacles which would have been insuperable if the management had not been under men of no ordinary character.

That this is one of the most important roads to Cleveland, no one acquainted with the resources of the country along the route can doubt. It passes through a portion of the best farming and dairy lands of the State, with a dense and prosperous population. It intersects the best coal region of North-Eastern Ohio, and will be able to bring to port large quantities of the best bituminous coal for steamers, for manufacturing works and shipment, to all parts of the lakes. Cleveland will be the outlet of the agricultural products of the route for some time and the commerce of that city will receive forthwith a healthy accession to its stocks for exchange and export. We anticipate for the road a handsome passenger and freight business, and believe that when its connections are completed with New York, making it the shortest route thither by seventy miles, it will be one of the favorite routes to the seaboard.

The Cleveland *Herald* adds the following with regard to this work:

The Cleveland and Mahoning road has been constructed with special reference to speed and a heavy freight business. The maximum grade coming West is twenty-one feet per mile—the maximum grade going East, with one exception at the point of leaving the Lake shore, is twenty-six feet per mile. There is a large per centage of straight line and the minimum radius of curvature is nineteen hundred feet. It will be opened to Youngstown, seventy miles from Cleveland, this fall, and to New Castle, eighty-five miles from Cleveland, another season. At New Castle, it will connect with the North Western railroad, now in successful progress to Blairsville, on the Pennsylvania Central railroad. When the links constructed and in progress are completed, this route will present an unbroken chain of continuous four feet eight and a half inch gauge from Council Bluffs to New York, thirteen hundred and fifty-two miles!

Manufacture of Steel by Electricity.

The London *Mining Journal* mentions an experiment which has lately been made at Sheffield, England, for the above purpose. In this case, two boxes were filled—one with Swedish bar, and the other with scrap and bar iron, imbedded in charcoal, and placed in a furnace. An electrical current was then directed on both for about thirty hours. At this time one of the bars was found to be sufficiently carbonized; but it was judged expedient to continue the process on one of the boxes for seventy-two hours longer. The steel then taken out was found to be of the hardest quality, such as is considered fit for the manufacture of files. On the result of the experiments that publication says:

"In the manufacture of iron the agency of electricity can be applied with immense advantage, since there is every reason to conclude that iron can now be made through this process, even from ores, equal in purity to the finest iron at present imported. On the other hand, in the operation of the conversion of iron into steel, it will give a greater power of governance to the operators, in-

asmuch as the application of the battery for a certain time will insure a certain amount of carbon to be taken up, or concentrated and amalgamated with the iron, and thereby increasing or diminishing the action of the battery, different qualities of steel will be produced with a certainty, regularity, and efficiency which hitherto under the ordinary process of manufacture has been the object wanting."

Buffalo and State Line Railroad.

The stockholders of the Buffalo and State Line railroad company convened at Buffalo on the 25th ult., at the office of the Secretary, and elected the following officers and directors for the ensuing year: Geo. Palmer, Dean Richmond, Geo. W. Patterson, Charles H. Lee, James S. Wadsworth, Henry L. Lansing, Joseph Field, Constant Cook, Hamilton White, Homer Ramsdell, Alanson Robinson, William Williams, John Wilkeson.

INSPECTORS OF ELECTION.—John S. Ganson, Joseph Stringham, Wm. H. Abell.

George Palmer was unanimously re-elected President of the Board, and Dean Richmond Vice President.

The usual semi-annual dividend of five per cent. was declared, payable on the first of August next.

Interesting Report.—The Public Debt of the United States.

Through the politeness of the Sec'y of the Treasury we have been permitted to examine the report, with the accompanying documents, just made by Mr. Bigger, the Register of the Treasury, in regard to the condition of the public debt of the United States. The report bears date July 8, 1856, and exhibits a condition of affairs which reflects the highest credit upon the skill, prudence, sagacity, and far-sightedness of Secretary Guthrie, whose financial ability, unbending integrity, watchful fidelity, and untiring devotion to the great trust confided to him, are known to and appreciated by all classes of our citizens in every section of the Union. On the 1st of June, 1856, the total debt of the United States amounted to \$40,049,309.75. Since that time this amount has been reduced to \$32,968,892.98; thus, paid on Texas debt, \$6,820,016.77, and the United States stock redeemed during the month of June to the amount of \$265,300. We obtain these figures from the first statement accompanying Mr. Bigger's report. From his second statement we make the following table:

Amount of United States stock originally issued, of the loans of 1842, 1843, 1846, 1847, 1848, including Texas debt and indemnity, and the debt of corporate cities.....	\$78,797,816.88
Amount redeemed up to March 4, 1854.....	7,142,359.74
Redeemed from March 4, 1853, to July 1, 1856.....	81,917,894.29
Total amt redeemed.....	46,060,254.03
Am't now outstanding.....	32,737,562.80

Statement third shows that the interest to maturity on this \$38,917,894.29 of loans redeemed by the Secretary amounts to \$19,399,730.97. From this must be deducted \$5,354,811.65, being the total amount of premium and interest paid, which would leave as a net saving to the country, by this system of redemption, the sum of *fourteen millions forty-four thousand nine hundred and nineteen dollars and thirty-two cents*. Mr. Bigger concludes his report as follows:

"There has been no change in the amount of old funded and unfunded debt since the 8th of May, 1854, the date of a former statement; and the amount of Treasury notes has been reduced but \$1,700. Of the present amount of Treasury notes outstanding, only \$9,300 are of the acts of 22d July, 1846, and 28th of January, 1847.

"Upon a careful examination we arrive with a good deal of certainty at the fact that *fifteen millions* of the United States stock is held by foreigners. The amount of transferable stock thus held is known to be \$11,500,000, and the amount of

coupon bonds estimated at \$3,500,000. At least half the aggregate amount is held in France."—*Wash. Union.*

Railways in Russia.

Amongst other subjects that will, it is understood, be seriously considered by the Czar and his advisers during the imperial visit to Warsaw, is the very important question of Russian railways. As yet Russia has but two railways; one of 190 miles in length, that connects Warsaw with the Prussian frontier at Szezakowa and with Berlin, and so brings the capital of Poland almost within three days' distance of London. By means of this line Russia has the power to move masses of troops on the frontiers of both Austria and Prussia, and to place their capitals in jeopardy; for these governments have left their frontiers to a great extent exposed and unprotected, whilst Russia, on the contrary, has raised up great fortresses for the defence of the arbitrary line which separates its part of Poland from those of the other plunderers of that unhappy country—considerations which were not, it is obvious, without important influence on the policy of the Cabinets of Berlin and Vienna during the late war. The value of this line, which already brings Dresden and Berlin into close connection with Warsaw—likely, it seems, to be a favorite residence of the new Czar—will moreover be considerably augmented as soon as the existing hiatus between Breslau and Posen is filled up; for then there will be complete railway communication from Warsaw to Stettin, Dantzic, and Königsberg, and Poland will thereby have regained a facile access to the Baltic. Or, should a line ever be run from an existing spur at Lowiez, on the Warsaw and Szezakowa line, direct to Posen, Warsaw would then have a direct and short route to the North Sea; and the great hope for Poland is to release it, by means of railways, from its present isolation and solitude. The other Russian railway is that which connects St. Petersburg with the old capital of Muscovy, Moscow, where, and in the surrounding districts, known as Old Russia, lies the real strength and force, the ambition and the spirit of the Russian empire; and whence if ever or anywhere, will one day arise a Russian nation. The line is about 400 miles in length, and bears on its very face the impress of the peculiar policy of the late Czar. His object was simply to connect the two capitals; the intermediate country was out of the Czar's thoughts in projecting the line. The consequence is, that it is almost as straight and direct as an old Roman road, without the Roman reason, and has on its whole length only nineteen stations. There are not, it is true, very many large towns between St. Petersburg and Moscow, but it passes by, and at a great distance, all that do exist, with the most perfect nonchalance and contempt; it pays not the smallest attention to the wants, requirements or capabilities of the intervening and surrounding districts; and being made simply in order that troops may pass and repass to and from the termini, it spurns all considerations of traffic. Nevertheless, the St. Petersburg and Moscow line is, although running over a dead level, and without a single engineering difficulty of any magnitude, one of the most expensively constructed railways in the world, and must, consequently, be the least remunerative. It is wholly and entirely a government affair. It was laid out by military engineers, was superintended by military engineers, was executed chiefly by military labor, and is worked by military officers. No wonder, then, that in spite of worthless land, cheap labor, and the absence of all that supererogatory but heavy burden known in England as preliminary and parliamentary expenses, so frightful is the corruption of the Russian governmental system, so enormous its waste and extravagance, that this railway cost the imperial treasury no less than £35,000 sterling per mile—a rate that defies all possible profit when it is considered that the traffic only justifies, or the policy of the State only permits, two trains a day. One good effect, however, the enormous expensiveness

this line has had on the present Czar. He has the sense to see that going on to construct other lines at that rate of expenditure, or at any rate approaching it, would be ruinous to Russia; and as he knows how ineradicable corruption in all classes of his servants is, the Czar Alexander has, it appears, resolved that the State in Russia shall no longer construct or work its railways. Henceforward the Russian policy in this respect will accord with that of other rational countries, and the government will confide its railway enterprises to the care of public companies. The lines will of course be prescribed by the government; a privilege for a certain number of years to make them will be granted to particular individuals; a fixed rate of interest will be guaranteed on a certain mileage amount of cost; a small sinking fund will be provided; the rate of profit beyond the guarantee will be subject to division between the company and the State; and all the necessary powers to take land, to import machinery and stock, will of course be given. Such, we hear, is the general scheme which Count Orloff made known in Paris to the railway projectors of England and France, who approached him, and the extent to which Russia will seek foreign capital for the gradual construction of its railways will be for some 2,000 miles.

But beside the St. Petersburg and Moscow railway, another line from St. Petersburg towards Warsaw has been commenced. At the breaking out of the war the works in this direction had spread over twenty miles, and the problem of their early resumption will no doubt receive an immediate solution during the imperial visit to Warsaw. The distance this line will have to run can hardly be less, and will probably be more, than 700 miles; but if ever completed, it will greatly strengthen the hold of the Czar over Poland, by connecting Moscow with Warsaw, and so bringing the weight of Old Russia to bear on Poland. In connection with the projected railway line, a scheme of a smaller railway from Riga to Dunaburg, a point about midway between St. Petersburg and Warsaw, which will be intersected by the greater line, has already been launched on the English market. When these two projects are finished, there will be a communication from the main line through Courland to the Gulf of Riga—an object of great material interest to the commerce of Northern Russia and Poland. But the really important political policy of Russia, so far as railways are concerned, lies rather in other directions; it is rather towards the south and the east than towards the north and the west that the Czar will seek railway outlets for Russia. We have no pretensions to be in the secrets of the Russian Cabinet, but from all we can learn, the Czar appears to aim at three things. First, to connect Moscow, and of course St. Petersburg, through Moscow, with the Volga at the important point of Saratow, proceeding thither through the far-famed scene of Lord Derby's corn-law escapade, Tamboff. In this way an immense and fertile territory, now lying almost waste, and singularly devoid of natural means of transport, would be placed in communication with a great navigable river. The Volga, it is true, ultimately pours itself into the Caspian; but before doing so, it runs in almost a direct line for a great distance towards the head of the Sea of Azoff, and Russia had at one time a wooden tramway from the nearest point of departure on the Volga towards the river Don. By this means Moscow would be put into railway and river communication with the Sea of Azoff and the Euxine on the south-west.

A second scheme is a railway that shall ultimately find its way from Warsaw through the various southern provinces, which are all more or less Polish, to Odessa, which was once an outlet for Polish trade in the Black Sea, and where a Polish element still prevails in society.

And, lastly, there is on foot what may be called a central project. It takes its departure from Pultawa, where the fortunes of Charles XII. waned, and proceeding towards the Dnieper, there bifurcates on either side of that river, one branch

terminating on the shores of the Black Sea, and the other in some good port in the Sea of Azoff. This, without speaking authoritatively, is the railway policy which we are given to understand will be considered at Warsaw. On an ordinary map the scheme looks comprehensive, statesmanlike, let us add, somewhat dangerous. But, even if adopted, it will require half a century and at a hundred millions sterling for its completion. We can therefore well afford to regard it with equanimity, so far as political consequences are concerned; for the Russia of fifty years hence will be very different from the Russia of to-day. There are elements at work in Russian society which will astonish the world before the half of fifty years have passed away. But there is, it must be confessed, a largeness of conception in the scheme worthy of an empire which only needs a succession of wise, prudent and temperate princes to become a blessing instead of a curse to mankind.—*London Times.*

Great Iron Works—The Largest Wheel in the World.

The largest water wheel in the world is that of H. Burden, at the Albany Nail Works, of Wyanskil Creek, near Troy. The fall is 75 feet, and the power of the wheel equal to 1,000 horses. It drives machinery which works annually 10,000 tons of iron into horse-shoes, spikes, nails, rivets, &c., into which the power is distributed, viz., iron foundry, horse shoe factory, rolling mill and puddling forge, cut-nail factory, machine shop, cooper shop, &c., leaving a power equal to that of 400 horses to be applied for additional purposes. 15,000 tons of coal are used annually, and 3,000,000 tons of ore. The business amounts to from \$950,000 to \$1,000,000 a year.

On the stream are the Iron Works of Corning, Winslow & Co., which has a fall of 75 feet distributed between three dams. A portion of the works—viz., a rolling mill, a wagon, carriage, and car axle factory, and spike and nail factory are run by water. This establishment employs on an average 500 hands, works up annually about 11,000 tons of iron, and uses from 16,000 to 17,000 tons of coal; also 1,500 tons of ore brought down from Port Henry to Lake Champlain. It does a business of a million a year, and pays out probably \$180,000 for labor performed on the premises—or nearly \$3,500 a week.

Wood Bearings to Shaftings of Steamers.

The British steamer *Himalaya* having had the old brass bearings removed, substituted lignum vitae bearings to her screw shafting, which have operated much better. A correspondent of the *London Artizan* thus describes the result of their application:

"Since the application of this material the vessel has run about 30,000 miles, during which time the engines have made about 8,000,000 revolutions. The total wear down in the stern-post does not exceed $\frac{1}{8}$ inch, which is, of course, very trifling for the work done. The screw shaft is lined with brass at the part bearing on the wood, and this bearing is 18 inches in diameter by 4 feet long. The lignum vitae is inserted into the cast-iron stern pipe in segments, each piece being the whole length of bearing, and about 3 inches wide by $\frac{3}{4}$ inch thick, so that the segments combine into the form of the pipe, in a somewhat similar way as the staves of a cask. The abutting edges of these segments are rounded off to form waterways, and their surfaces are also scored in several places to allow a free circulation of water on every part of them. These segments are prevented from running round with the shaft through its friction by a strip of metal, which is pinned on to the upper side of the stern pipe, and against the edges of which the lignum vitae segments abut. They are kept in at the inner end by a shoulder in the stern pipe, and at the outer end by a ring, which is screwed on to the stern post.

"We are indebted to the courtesy of Mr. Gray, the engineer of the *Himalaya*, for a description of a very ingenious application of lignum vitae which

he has adopted in his collar or thrust bearing.—He found this bearing wore considerably, and when in the Mediterranean last year, the brass rings had thus become so reduced that there was a space of about $\frac{3}{4}$ of an inch on the slack side of the collars. He determined to try the experiment of interposing lignum vitae segments between the thrusting collars on the shaft and the brass rings on the bearing, and fitted them in four segments of a circle to each collar, so that they can be slipped in their place without removing the bottom brass. They are prevented from running round with the shaft by a brass plate screwed on to the lower brass, and are so easily removed and re-fitted that two hours only are necessary for applying new segments to the block. A set of lignum vitae segments, thus applied, will last for from 7,000 to 10,000 miles, and the expense of fresh segments is comparatively trifling."

This steamer, next to the *Persia*, is the largest afloat in active service. It recently made a very rapid passage to Halifax from the Crimea with 2,000 troops.

Railroad Earnings.

LA CROSSE & MILWAUKEE R. R.

The earnings of this road in June were \$49,050, against \$41,476 in May. There are only 61 miles of road in operation, and no Western terminus as yet. The earnings for 1856, thus far, have been:

January.....	\$10,550
February.....	20,128
March.....	27,226
April.....	32,130
May.....	41,476
June.....	49,059

COVINGTON & LEXINGTON R. R.

Receipts for June, 1856—

Freight.....	\$15,810
Passengers.....	12,752
Export freight.....	375
Mail.....	814

Total.....	\$29,751
June, 1854.....	16,158

Increase.....\$13,593

BOSTON & PROVIDENCE R. R.

The receipts of this road for the six months ending June 1,

Were.....	\$283,754
Same time, 1855.....	251,556

Increase.....	\$31,898
Expenses 1856.....	\$174,931
Expenses 1855.....	189,021

Decrease.....	\$14,090
Net profits for six months, 1856.....	\$108,822
Same time, 1855.....	62,834

Increase.....\$45,988

LITTLE MIAMI R. R.

The receipts of the Little Miami and Columbus and Xenia railroad company were:

From freight and passengers from 1st to 30th June, 1856.....	\$90,063
Receipts for same time in 1855.....	75,579

Gain.....\$14,583

N. Y. & NEW HAVEN R. R.

The receipts of the New York and New Haven railroad company for June were as follows:

For passengers.....	\$61,898
For freight.....	11,100

Total.....	\$72,998
Less paid Harlem Co.....	3,962

Total.....	\$69,035
For June, 1855.....	68,809

Gain over last year.....\$3,225

MILWAUKEE & MISSISSIPPI R. R.

The earnings of this road for the month of June, 1856, were.....	\$66,521
June, 1855.....	65,127

Increase.....\$1,394

The road is now open to Mazomanie, 122 miles from Milwaukee. A semi-annual dividend of five per cent. has recently been declared; leaving a surplus, beside sinking fund, of some \$40,000.

HUDSON RIVER R. R.

The June receipts of the Hudson River railroad were.....	\$126,875
June, 1855.....	120,411

Increase.....\$6,464

CHICAGO & ROCK ISLAND R. R.

The earnings of this road for the month of June, 1856, were:

For June, 1856.....	\$142,063
Against June, 1855.....	123,315

Increase 15 per cent.....\$18,746

MORRIS CANAL & BANKING CO.

The receipts of the Morris canal have been as follows:

Total to June 23, 1855.....	\$89,846
Week ending June 28, 1855.....	10,358

Total to June 21, 1856.....	\$88,780
Week ending June 28, 1856.....	10,388

Decrease in 1856.....\$1,536

Illinois Central Railroad.

The land sales of the Illinois Central railroad company in June were:

11,272 acres Construction lands.....	\$170,655
2,851 acres Free lands.....	48,616
1,405 acres Interest lands.....	19,866

15,529.....	\$239,138
Town lots.....	2,153

Averaging \$15.53 per acre.....\$241,291
Total to date this year, 89,792 acres, sold for.....\$1,320,712

The total since the sales commenced has reached \$6,919,299. The company have still on hand 1,976,346 acres.

Hamilton and Port Dover Railroad.

The annual general meeting of the shareholders of this railroad was held lately at the company's office in Hamilton, (C. W.) when the following gentlemen were elected Directors of the company for the ensuing year:

Hon. Sir A. N. MacNab, E. Jackson, H. C. Baken, Walker Powell, Wm. P. McLaren, J. T. Gilkison, James Little, M. W. Browne, John Browne, Esquires.

Atlantic and Great Western Railroad.

The work has been resumed on this very important line of road between Urbana and Marion. The question whether the road should pass through Cresline or Mansfield, was definitely settled by the Board of Directors a few days since, in favor of the latter place. The citizens of Mansfield have subscribed one hundred and fifteen thousand dollars to the capital stock of the company, and on last Tuesday, the work was commenced under the most favorable auspices. The oldest citizens of Mansfield opened the ground amid the roar of cannon, the strains of martial music, and the shouts of over two thousand persons, who were called together by the interesting occasion.

We are glad to announce that new life has been given to the Atlantic and Great Western railroad. Between ninety and one hundred miles of the road are graded, and most of the masonry completed, the company is out of debt, and the work progressing rapidly to completion. The New York

and Erie railroad company have become interested in the speedy completion of the road, and their President, Homer Ramsdell, Esq., has consented to act as director. The election takes place at Franklin Mills next week.—*Dayton Empire*, 5th.

Notice to Contractors.



OFFICE OF STATE ENGINEER BURNABISTA,
Orango Mill Post Office.
St. Johns River, Fla., August 20th, 1855.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1856, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet, authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each. Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orango Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANCY,
1855 State Engineer, State of Florida.

To Railroad Contractors.



ENGINEER'S OFFICE BLUE RIDGE RAILROAD,
Anderson, S. C., May 16th, 1856.

SEALED PROPOSALS will be received at Knoxville, Tennessee, until 12 o'clock M., on WEDNESDAY, July 16th, 1856, for the GRADATION and MASONRY of thirty miles of the Blue Ridge Railroad, commencing at Knoxville. There are several heavy jobs of Masonry, among them the Masonry for the Bridge over the Holston river, near Knoxville, consisting of seven piers and the abutments.

The Company reserve the right to reject any proposals, and to require the bidders to give satisfactory security for the faithful execution according to contract of the work they may undertake.

Plans and specifications may be seen, and the time for completing the work, and all other information obtained at the office of the Engineer, on and after the 5th of July.

WALTER GWYNN,
MAY 29th, 1856. 6123 Chief Engr Blue Ridge R. R.

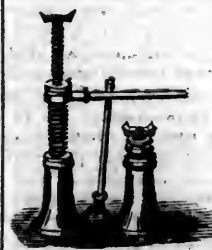
PATERSON, NEW JERSEY, June 16th, 1856.

NOTICE.—The Copartnership of ROGERS, KETCHUM & GROSVENOR is dissolved by the decease of THOMAS ROGERS. Either of the undersigned will use the name of the firm in liquidation.

The business of manufacturing Locomotive Engines and other machinery will be continued by "The Rogers Locomotive and Machine Works," under a charter granted by the Legislature of New Jersey.

MORRIS KETCHUM.
J. GROSVENOR.

BALL'S PATENT JACK SCREW.



No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1	8 in.	12 in.	9 in.	17 in.	\$8
2	12 in.	20 in.	17 in.	30 in.	11
3	16 in.	28 in.	24 in.	40 in.	14
4	20 in.	36 in.	33 in.	56 in.	16
5	24 in.	42 in.	39 in.	62 in.	20

For sale by
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8 $\frac{1}{2}$ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.
We can sell them on terms that would make them a bargain to the purchaser.

Apply to
BRIDGES & BROTHER,
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Freight Cars for Sale--4 ft. 8½ in. Gauge.

EIGHT PLATFORM CARS, thoroughly and well made of seasoned timber, with oak sills, and truck frames of 4½ inch axles, Washburn & Co. Branden wheels and warranted in every respect. These Cars are now ready for delivery and will be sold low for cash or approved paper.

Inquire of **WILLIAMS & PAGE**,
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44 WATER ST., BOSTON, Mass.

4128

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FOR JULY.**

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HAVE NOW READY THE FIRST NUMBER OF THEIR

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FOR THE UNITED STATES AND CANADAS.**

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RAILWAYS AND THEIR PROGRESS from the first commencement to the present time.

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SIXTY MAPS delineating a few of the principal railways.

The Guide contains 252 pages. Price 15 cents.

IT ALSO CONTAINS:

The Time Tables, Fares, Connections, and Distances on all the Railways of the United States and the Canadas; also, the connecting lines of Railways, Steamboats, and Stages. Each Principal Road is fully delineated and illustrated by a separate Map, placed opposite the description of that road, which Map exhibits the Stations, Distances between Stations, Connecting roads, and other topographical matter of use to the traveller.

ALSO

A General Steamboat Directory,

Alphabetically arranged, giving the Daily Sailings of all the Steamboats during the month, to and from every port throughout the United States. The whole accompanied by a

COMPLETE GUIDE TO THE PRINCIPAL HOTELS,
Giving every necessary information respecting them—their locations, proprietors, terms, &c. With a large variety of local and valuable information, collected, compiled, and arranged exclusively for this Publication

Together with a General Map.

The constantly increasing facilities for travel, and the commercial and social relations existing throughout the United States and Canadas, have created a demand for a Railway Guide, which will not only enable the traveller to perceive at a glance the time of departure of the trains from their various stations, their connections upon the route of travel, distances, termini, &c., but one which will make him familiar with the different portions of the country through which he passes.

Journeys, which some twenty years ago were measured by days, are now accomplished in as many hours. Commercial operations which formerly required months to complete, are now accomplished in as many days.

Change has demanded change. The guide books which years, months since, were considered indispensable, are now thrown aside as worthless, the progress of the age demanding something more comprehensive and of greater practical utility.

The compiler would remark, in presenting this work to the public, that he has devoted much time, and travelled many thousand miles in order to perfect it. The most important feature of this guide is, its convenience as a book of reference; each principal road being fully and correctly delineated by a separate map (engraved expressly for the road), representing the distances, stations, connections, and chorography.

It has been the aim not only to combine completeness of information with the greatest possible facility of reference, so far as Railways and Steamboats are concerned, but also to direct travellers what hotel they may stop at upon their arrival in a city or village. Travellers who make use of this work, and find any inaccuracies therein, are particularly requested to communicate personally or by letter, with the publishers, who will be pleased to receive any suggestions which they may consider beneficial to the travelling community.—Extract from Preface.

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300 TONS 60 LBS. T RAIL.

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DRAKELEY & CO.

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CONICAL VOLUTE CAR SPRING!**

Fig. 1

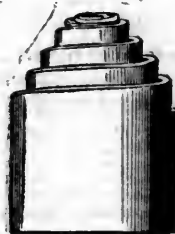
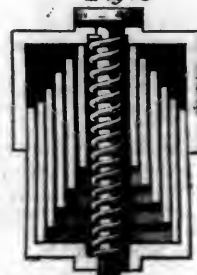


Fig. 2



Fig. 3

**THE NEW YORK METALLIC CAR SPRING COMPANY**

ARE NOW PREPARED TO NEGOTIATE WITH
RAILROAD COMPANIES, CAR BUILDERS AND OTHERS,
For supplying the above Spring.

THE railroad community have long felt the necessity of a good and reliable Car Spring, one with less objectionable features than either the Rubber or Elastic Springs, for with these exceptions there are none that are in any way equal to the immense work they have to perform.

In view of obviating this evil, the above Company have been for nearly a year past engaged in testing Gardiner's Compound Volute Car Spring, erecting buildings, and constructing machinery preparatory to manufacturing them on an extensive scale; and they are now prepared to say that they can offer to the railroad interest a Car Spring that is in every respect superior to any in use. It is not liable to breakage—is of very simple construction. The motion is much greater, more steady and elastic than the Rubber Spring. It occupies the same or less space, is not as expensive, and is so graded as to accommodate itself to any load. There is no friction, which object is now for the first time accomplished. All Springs Warranted.

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INSURANCE at low rates of premium, will be effected when desired.

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850 TONS of Railroad Iron, Erie pattern by
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2128 70 Beaver st., New York.

DIVIDEND DECLARED.

NOTICE.—The President and Directors of the RICHMOND AND PETERSBURG RAILROAD COMPANY have declared a dividend for the six months ending 30th June, 1856, of two dollars and fifty cents per share, payable on and after that day to all who shall be stockholders on the same.

RICHMOND, June 24th, 1856.

JNO. WILLIAMS, Treasurer. 4126

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A CARD.

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I feel confident that individuals and Railroad Companies will save money by employing Mr. BOWLES to make their purchases.

CHAS. W. ELLIOTT, Late ELLIOTT & BOWLES.
New York, July 1, 1856. 1123

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LOCOMOTIVE EXPRESS**
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OF ANY GAUGE**
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This is the only fountain pen we know of, that will not leak in the pocket, or feed too fast in writing. The feed of this is perfectly under the control of the writer, who may use it without danger from blot or discoloration of the clothes. Price \$3. They are adapted to all styles of pens. They will be sent by mail to any address upon the receipt of the price.

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The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.

CHARLES MONROE, Esq., { Baltimore, Md.

DAVID BURBANK, Esq., {

JOHN J. SPEED, Esq., { Detroit, Mich.

HON. J. V. O. SMITH, Mayor of Boston, Mass.

L. L. SADLER, Esq., Treasurer of Union Telegraph

Company, Boston, Mass.

HON. H. F. FRENCH, Associate Judge, Superior Court,

Essex, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Port-

land, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

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SATURDAY, JULY 19, 1856.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

[New York, Saturday, July 19, 1856.

Railroads in Virginia.

We are under obligations to the Virginia Board of Public Works for a copy of their Twenty-ninth Annual Report to the General Assembly, from which we condense the following, with regard to the business of such railroad companies as have not forwarded us copies of their last reports. We commence with the

ROANOKE VALLEY R. R.

Since last report, the entire superstructure of the road has been completed, and the road operated since March, 1855. Owing to the want of funds to furnish equipment, the company were obliged to enter into an arrangement with the Raleigh and Gaston railroad company, for operating the road, for which the latter are to receive fifty per cent. of the receipts. Contract can be annulled in six months, and notice to that effect has been already given by the R. and G. Co. Though a small sum is owing to contractors, the road is not encumbered with any deed or mortgage whatever. It is believed \$60,000 would discharge all obligations, and provide the rolling stock necessary.

Capital stock, \$430,000, of which \$30,000 have

been subscribed by individuals, \$20,000 by corporation of Clarksville, \$70,000 by city of Norfolk, and \$310,000 by Board of Public Works. Of the subscription all but \$5,944 has been received. Cost of road, buildings, &c., at 30th September last, \$444,132. Business of the year not given.

Jas. Williamson, President, and E. A. Williams, Secretary and Treasurer. The company's office is in Clarksville, Va.

FREDERICKSBURG & GORDONSVILLE R. R.

Authorized capital, \$460,000, subscribed by individuals and the corporation of Fredericksb'g, \$96,700, and by Board of Public Works, \$138,000. Company's debts, \$8,390.19. Expended to 30th September last, \$158,440.

Walker P. Conway is President; John S. Caldwell, Secretary and Treasurer; and Wm. Sniedan, Chief Engineer. Office at Fredericksburg, Virginia.

WINCHESTER & POTOMAC R. R.

Capital stock, \$300,000, of which was subscribed by State, \$120,000; debts, funded and unfunded, \$138,118, besides a loan of \$150,000 from the Commonwealth. This loan, together with the above stock subscription has been commuted for an annuity of \$5,000 per annum to the State.—The revenue from all sources to date has been \$1,544,628. Among the items of outlay we have the following:

Original cost of construction.....	\$441,309
" " depots, shops, &c.....	18,248
Land damages.....	43,081
Motive power.....	47,000
Cars, and repairs to do.....	349,937
Repairs and reconstruction of road.....	431,237
Interest.....	195,833
Dividends.....	92,410

The business for last fiscal year was—

Passengers, freight and mail.....	\$78,112
Sale of old materials, rents, &c.....	7,684
Balance for previous year.....	766

Total.....\$86,552

From which were paid ordinary expenses, \$5,000 for State annuity, \$2,500 for bank debts, and \$10,318 for dividends, leaving as balance on hand, \$1,640.52.

Wm. L. Clarke is President, and J. G. Heist, Principal Agent and Treasurer. Length of road, 32 miles. Company's office at Winchester, Va.

MANASSA GAP R. R.

The capital stock of this corporation was increased, in January, 1854, by the addition of \$400,000, the State taking three-fifths. Last year operations were seriously retarded by the money pressure and drought. Operations have been confined to that section of the road between Strasburg and Woodstock, and the road nearly completed to the latter point. The business for last fiscal year was—

Passengers.....	\$24,166
Freight.....	76,031
Mails.....	2,479

Total.....\$102,675
Working expenses.....48,402

\$54,273

Less, charges paid Orange and Alexandria railroad company for uses of road and station.....23,685

Net profits.....\$30,568

The last three months show a large per centage of increase over the year preceding. On the completion of the road to Woodstock, it is believed the net revenue will reach \$60,000 per annum.—Between Strasburg and Harrisonburg, the road is under contract, and men are at work upon the whole line. A purchase of 1,400 tons of iron has been made at favorable rates. Estimated cost of the extension, \$500,000. The means for construction are—

Company's bonds.....	\$150,000
Rockingham county bonds.....	100,000
Individual subscriptions.....	50,000
Drafts on Board of Public Works.....	75,000
Contractors' subscription.....	50,000
Drafts on Board of Public Works.....	75,000

Total.....\$500,000

Should there be due promptness in meeting subscriptions, the road to Harrisonburg will be ready for use in the spring of 1857.

The necessity of an independent line to Alexandria has long been felt. A subscription of \$80,000 for that purpose has already been authorized by that city. Estimated cost, exclusive of superstructure, \$400,000. Means now available, \$296,000, requiring only \$42,000 from individuals to furnish the requisite amount. The sum of \$65,000 has already been spent on construction. Es-

timated cost of superstructure, \$350,000, which can readily be provided for out of revenue. The branch to Purcellville, Loudoun county, is also under way. Estimated cost, \$450,000.

Cost of the whole work, as estimated by the Chief Engineer:

Road to Strasburg	\$1,450,000
" Harrisonburg	1,150,000
" Alexandria	750,000
" Purcellville	450,000

\$3,800,000

Capital stock	\$2,800,000
Loan	1,000,000
	3,800,000

The value of work done for the past year was:

On the Valley line	\$185,034
Eastern extension	81,784
" Loudoun branch	66,615

Total

GENERAL ACCOUNT.

Individual subscriptions	\$386,050
Corporation of Alexandria	350,000
Counties and towns	200,000
Commonwealth	1,404,050
Earnings to date	182,126
Bills and acc'ts payable	286,433

\$2,807,659

Construction, equipment, &c., &c.	\$1,980,206
Individual subscriptions unpaid	163,855
Commonwealth	265,050
Bills receivable	1,269
Transportation expenses, interest, dis-	
count, &c.	208,218
Means on hand	189,061

\$2,807,659

E. C. Marshall is President; Ed. Green, Sec'y and Treasurer; and J. McD. Goldsborough, Chief Engineer. Office in Alexandria, Va.

RICHMOND & YORK RIVER R. R.

The object of this road is to open a communication from Richmond, the commercial capital of the State, to the waters of the Chesapeake Bay having a sufficient depth for large sea going vessels. The route is direct, over a comparatively level country, favorable for construction. The total distance will be 38.3 miles. The total cost of the road with a moderate equipment is as follows—

Graduation and bridging	\$464,128
Right of way	110,000
Engineering and contingent expenses ..	34,000
Superstructure for 39 5.6th miles at	
\$8,000 per mile	318,400
Equipment	50,000
Depot and other buildings	50,000
Other expenses	30,000

Total estimated cost

The amount of capital stock at present authorized is \$500,000. Of this sum, the State is to subscribe three-fifths, individuals two-fifths. The amount subscribed at the date of the Report of the Board of Public Works was as follows—

Capital stock per charter	\$500,000
Do. subscribed by individuals ..	\$197,200
Do. do. State	297,800

Total amount subscribed

— on which have been received—	
From private subscriptions	\$45,648
From State	70,072
Miscellaneous receipts	1,514

Total receipts

There had been expended on construction, at

the date of the above report, \$87,861. Of this sum, \$23,032 had been paid out for real estate; \$30,596 for land damages; and \$18,642 for graduation.

From the estimated cost of the road, it will be seen that insufficient means for construction have been provided. The Legislature at its recent session omitted to make any further provisions than those above stated. As this body will not probably meet again till 1857, we presume the process of construction will progress only slowly.

The President of the road is Alexander Dudley, of Richmond. Chief Engineer—F. S. Claxton. Secretary—A. W. Morton, who is also Treasurer.

Warsaw and Rockford Railroad.

At a meeting of the Directors of the Warsaw and Rockford railroad, at Oquawka, on the 18th inst., S. S. Phelps was elected President, and Jno. E. Johnson, Vice President. The best feeling pervaded; the work on the first division is progressing finely. The contractors on the second division from Appanoose to the junction of the Burlington agent, informs us that 15 per cent. of the private stock will be called for on the 1st of July. It is necessary for stockholders to be prompt in their payments, that the work may go on. Negotiations will soon be open for iron, rolling stock, etc.—Ft. Madison Plaindealer.

Michigan Central Railroad.

The annual report of this company for the year ending June 1st, 1856, shows the receipts for the year to have increased \$616,384 over those of 1854-5. After paying the usual 10 per cent. dividend, the income account shows an increase of about \$230,000.

Some of the most important items in the operation of the road for the last three years, compare as follows:

	1854.	1855.	1856.
Number of passengers	245,028	345,138	389,510
Do. through do.	112,908	158,686	161,270
Total passengers	357,936	503,714	550,780
Number of tons of freight moved ..	216,588	241,825	281,293
Number of miles run by engines ..	1,150,000	1,292,739	1,576,871
Earnings per mile	\$1.38	\$1.71	\$1.78
Gross earnings	\$1,570,412 64	\$2,215,288 78	\$2,800,442 81
Operating disbursements, including taxes	908,944 38	1,336,627 48	1,571,817 99
Net earnings	\$661,468 26	\$878,661 30	\$1,228,624 82
Operating disbursements	\$679,666 26	\$879,666 26	\$1,228,624 82

The disbursements on account of operating the road the past year have been something more than was anticipated. The expenses properly chargeable against that time have been less than disbursements by the larger amount in value of fuel and ties on hand now than a year ago.

The cost of fuel purchased for the last four years has been as follows—

Year ending May 31, 1853	\$76,857 60
Do. 1854	78,740 06
Do. 1855	142,670 57
Do. 1856	274,072 32

The receipts for the year have been \$2,878,321 06

Surplus Income, June 1, 1856

Total

Operating disbursements for same time

Net receipts

This amount has been disposed of in the following manner:

Interest and Coupon Account

Dividends, one of 4, and one of 6 per cent.

Surplus on hand May 31, 1856

If to this was added the £120,000 of operating disbursements in excess of actual expenses, the surplus would be

To meet the requirements of the increased business, the Construction Account has been increased during the year \$806,326 39.

The want of motive power and cars last year prevented the fair development of the Joliet and Northern Indiana Railroad, and it but little more than paid expenses.

The Bonded Debt shows a decrease of \$186,000, the amount of Bonds paid and cancelled during the past year.

The balance of bills payable and receivable accounts, shows an increase over last year of \$462,956 77, and the Company has received from the Illinois Central Railroad Company the sum of \$600,000 in payment for an equal amount of Bonds surrendered. The receipts from these two last mentioned items have been appropriated to defray the increase of Construction, Joliet and Northern Indiana Railroad Stock, and a considerable balance remains in the hands of the agents of the Company.

1856. GENERAL ACCOUNT. Dr.

June 1—To Capital Stock

To Bond Account—six per cent.

Sterling Bonds, nonconvertible

8 per cent. Sterl'g Bonds, convertible

8 per cent. Bonds, nonconvertible ..

8 per cent. Bonds, convertible

Income Account, balance of this account

Unpaid dividends

Bills payable

Total

By Construction No. 1, purchase of road

Construction No. 2, expenditures since purchase

Cash in hand

Assets in hands of U. T. Howe, Local Treasurer

Assets in hands of R. N. Rice, Superintendent

New Albany and Salem R.R.Co. Stocks and Bonds

Illinois Central Railroad Bonds ..

Steamboats

Assets in hands of C. B. Swain, Steamboat Agent

Joliet and Northern Indiana Railroad Bonds

Bills receivable

Total

INCOME ACCOUNT—RECEIPTS OF ROAD. DR.	
To balance of this account, per Treasurer's Report of June 1, '55	\$236,737 55
To receipts of road from June 1, '55, to June 1, '56	2,878,321 06
Total	\$3,115,068 61
To balance of Income Account this day	466,761 28
	Cr.
By dividend declared June 15, 1855, 4 per cent	\$240,980 00
By dividend declared Dec. 19, 1855, 6 per cent	361,860 00
By Operating and Interest Account from June 1, 1855, to June 1, 1856	2,045,457 33
By balance to new account	466,761 28
	\$3,115,068 61

On the Steep Gradients of Railways, and the Locomotives Employed.

By CHAS. R. DRYSDALE, Assoc. Inst., C. E.

Read before the Institution of Civil Engineers,
April 8th, 1856.

The object of the paper was to compare the results of some of the performances of locomotives of various construction, and of stationary steam engines working ropes, and also the atmospheric system; to examine these results, and from them to determine the most economical and best manner of effecting the passage of mountain chains by railway lines.

A history of the construction of the Semmering and Giovi passes was first given, with the nature of the curves, gradients, &c. The locomotives of the Semmering and Giovi were then described.—Some English steep inclines were then referred to, and the duties of the Semmering and Giovi engines were compared with the English engines for evaporating power, for horse power per cubic foot of water evaporated, and for weight drawn in proportion to the weight of locomotive.

After this the duty of the stationary engine on the Edinburgh and Glasgow line was analyzed, and the atmospheric incline on the St. Germain's railway.

The Semmering Railway.—A description was given of some of the most remarkable viaducts and tunnels of the line.

1. The viaduct of Kalte Rinne, which was composed of two stages, with a gradient of 1 in 80, and a radius of 10 chains 600 feet long, with an extreme height of 150 feet.

2. The Wagner Graben viaduct had a gradient of 1 in 47; its length was 470 feet, and the greatest height was 127 feet.

3. The Semmering tunnel was 72 chains long; its greatest depth was 374 feet, lined with masonry. The length from Payerbach to Murzzuschleg was 21.52 miles, thus composed:—

	Miles.	Grad.
Payerbach to Eichberg	3.84	1.46
Eichberg to Klamm	2.63	1.40
Klamm to Breitenstein	3.26	1.47
Breitenstein to Semmering	3.68	1.54
Semmering to Spital	4.44	1.50
Spital to Murzzuschleg	3.84	1.50

The average gradient of Payerbach to the summit was 1.47 for 13.21 miles. The curvature was very great from Payerbach to Klamm; about 700 feet radius. The rails used weighed 88 lbs. to the yard. The engines employed had 76 square feet of fire box surface; 189 tubes 2 inches diameter and 15 feet 7 inches long=1,585 square feet heating surface, and 12.6 square feet of grate surface.

The weight of the engine filled and loaded, was 55½ tons—13½ tons on the leading wheels, 12½ tons on the middle, and 13 tons on the driving wheels. Toothed wheels were afterwards added, and thus all the weight was brought to bear for adhesion. The diameter of the cylinders was 18 7/8 inches, the stroke 25 inches, and the diameter of wheels 3 ft. 7 1/2 inches. Before the toothed wheels were added to connect the tender to the locomotive, the duty of the engine required by government, was

to draw 110 tons up 1 in 40, at ten miles an hour, consuming less than 144 cubic feet of dry wood per hour; to perform this, the load on the driving wheels must be at least eight times the tractive force available. Or $8 \times 11,040 = 88,320$ lbs., nearly 40 tons on the driving wheels was required.—The resistance of 11,040 lbs. was calculated from the gradient 1 in 40, giving 56 lbs. per ton, due to the gravity, and the remaining 13 lbs. was due to speed and traction on the level.

The performance of the engine before adding the toothed wheels was, on a gradient 1 in 40, dead weight=110 tons, engine and tender=55½ tons. The water evaporated per hour (stoppages not included)=255 cubic feet. The wood consumed to evaporate this=3,820 lbs. The speed=11.4 miles per hour.

1°. This gave 4.15 lbs. of water evaporated per hour, by each pound of wood, or 9.6 lbs. water evaporated per square foot of heating surface.

2°. As to the horse power usually represented by the evaporation of 1 cubic foot of water per hour, 165 tons (engine and tender included) at 11.4 miles per hour, drawn up 1 in 40, gave 347 h. p., and 255 cubic feet of water evaporated;—consequently .73 cubic foot evaporated was equivalent to one horse power.

The "Mammoth," Great Western railway,=0.76 cubic foot per h. p. per hour.

The Goods engine, No 227, North Western railway,=676 cubic foot per h. p. per hour.

3°. The proportion that the dead weight bore to the weight of the engine and tender, gave the following results:—

The Semmering engine,=4.2 h. p. per ton of engine and tender.

The "Mammoth,"=3.2 h. p. per ton of engine and tender.

The North Western, No. 227,=3.55 h. p. per ton of engine and tender.

These experiments were brought forward to show that no engine in England would alone work the Semmering traffic. When the hinder wheels were connected with the others in the Semmering locomotive, the performance rose to 220 tons up 1 in 40, at 9½ miles per hour, giving with the engine and tender included a duty of 380 horse power; and 165 tons dead weight, carried up by 55½ tons

of engine, gave $\frac{285}{55.25} = 5.2$ h. p. exerted per ton of engine and tender.

The mean pressure of steam was 80 lbs.

Lastly, the economical effect stood thus:—44 lbs. of water were evaporated, and 11 lbs. of wood were consumed per horse power per hour, including the engine and tender. Without these:—14.6 lbs. of wood were consumed per horse power per hour, giving 14.6 lbs. to raise 33,000×60 lbs., or 1 lb. of wood to raise 13,600 lbs. a foot high; or again, 82,208 lbs. irrespective of speed.

The Giovi Incline.—On the Giovi incline passing the Apennines, near Genoa, on the Turin and Genoa railway, the engineer who introduced the working of this line by locomotives, had to contend against a strong party who were in favor of stationary engines.

The Giovi incline commenced at 7¼ miles from Genoa, 295 feet over the sea, and ascended for six miles to an elevation of 1,184 feet. Average gradient 1 in 36; the length of tunnel=2.55 miles; the depth of shaft=600 feet; the cost per yard=£118.

Two engines of the same size (built by Messrs. R. Stephenson & Co.) coupled together and managed by one driver, were used to work the incline. Each carried its own coke and water. The diameter of wheels=3 feet 6 inches. The cylinders=14 inches, with a stroke=22 inches. The locomotives were bolted together with the fire boxes facing each other, and the driver stood on a common platform. Filled and loaded the two engines weighed 50 tons.

In fine weather the locomotives took up about 100 tons of load, and in the worst weather never less than 70 tons, at a speed of fifteen miles per hour. The consumption of coke per ton per mile,

amounted to, not including engine, 1.94 lbs.; including engine 1.16 lbs. The consumption of coke to draw the engine from the bottom to the top, 6 miles, of 1 in 36, was 8.27 cwt.

1°. The water evaporated per pound of coke, was 8.5 lbs.

2°. 150 tons drawn up 1 in 36, at 15 miles per hour, gave a result, with the engine of 444 horse power; and without the engine 295 horse power.

3°. This gave 5.9 tons raised per ton of engine.

4°. 9.7 lbs. coke raised 1,980,000 lbs.
Or 1 lb. coke, 204,000 lbs. 1 ft. high.

Or, irrespective of speed, 169,600 lbs. The Accrington Incline was 1 in 41.6 for two miles. 1.6 tons were raised at 6.31 miles per hour up the incline. The engine had cylinders 18 inches diameter, 24 inches stroke, 6 coupled wheels of 5 feet diameter.

The weight of the engine=26.25 tons; tender=16.75 tons;—total=43 tons. The work done=74 horse power, which gave 1.7 horse power raised per ton of the engine and tender.

The Lickey Incline had a gradient of 1 in 37, worked by goods engines with cylinders 16 inches diameter, and 24 inches stroke, and driving wheels 5 feet diameter, and weighed 32 tons, with an assisting engine whose cylinders=16 inches, and stroke of 24 inches, and driving wheels of 4 feet diameter, weighing 35 tons; together=67 tons. The results were that 240 tons were drawn up 1 in 37, at a speed of 6½ miles per hour, giving 293 horse power, or 4.4 horse power exerted per ton of motor.

The Edinburgh and Glasgow Incline.—This incline was stated to be 1¼ mile long, with a gradient of one in 42. During a trial of twenty-three months, the miles run lifting trains were 21,250½, and the number of ascents=14,167.

The number of carriages drawn up=205,181.

The average gross weight per train=86 tons.

The prime cost of the rope=£1,094.

The coal consumed per mile to lift this weight of 86 tons=627 lbs.

Cost of coal per mile=11.195d.

The friction of the rope=1.20th of its weight.

The cost of working the line, including the rope=50 299d.

The performance was 86 tons drawn up 1 in 42, at 30 miles per hour, giving 452 h. p. To this was to be added 211 h. p. to move the rope; and 35 lbs. of coal were expended per horse power.

Secondly, without consideration of speed, 1 lb. of coal raised 45,700 lbs. 1 foot high.

The incline was worked by a wire rope of 4½ inches, and on several occasions there had been 30 loaded carriages on each train, and goods trains of 120 tons, carried up without detention.

The total cost of working the incline for one year was £734 18s. against £3,204 16s. for locomotives, giving a difference in favor of the stationary engine of £2,460 18s. 9d.

The engines used on the line were probably not well adapted for the traffic, and indeed, for such short inclines, the benefit of the stationary engines was very doubtful; there seemed, however, to be some propriety in using them for the passage of long Alpine gradients, as a rope could be made to work a length of 6 miles, and thus steeper gradients might be adopted—even 1 in 25, avoiding thereby great expense in constructing viaducts, etc.

St. Germain's Atmospheric Railway.—The gradient at the St. Germain's incline was 1 in 38 for the distance of fifty chains, and the total length of the inclination was 1.46 miles with an average gradient of 1 in 43.

From June 2d, to August 18th, 1855, the number of ascents=1,413; the weight of carriages lifted=73,241 tons. The total cost of working, including tallow, engine men, coal, water, etc.=£612 10s. The cost per mile of ascent=5s. 9½d. The average weight raised per train=51.8 tons. The cost of coal=20s. per ton. Economically, leaving speed out of consideration, 1 lb. of coal raised 81,186 lbs. 1 foot high.

The following summary of results was given:

Semmering Locomotives.—Total horse power exerted = 380 h. p.; to lift the train = 285 tons; h. p. per ton of motor = 5.2 tons. Economically (irrespective of speed), one lb. of wood raised 82,208 lbs. 1 foot high.

Giovi Locomotives.—Total h. p. exerted = 444 h. p. per ton of motor = 5.9 h. p. economically (irrespective of speed), 1 lb. of coke raised 169,600 lbs. 1 foot high.

Glasgow Stationary Engine.—Total horse power to raise the train = 452 h. p. without the h. p. to lift the rope, economically, one lb. of slack raised 45,700 lbs. one foot high, irrespective of speed.

St. Germain's Atmospheric System.—One lb. of coal raised 22,063 lbs. one foot high, irrespective of speed.

These results, as compared with the alleged duty of the Cornish boiler, one million pounds, one foot high, were still far below laboratory duties.

April 15th.—The discussion being renewed on Mr. Drysdale's paper, was continued throughout the evening. It was stated that on the Oldham incline, 1½ mile in length, with a gradient of 1 in 27, a tank engine weighing about 27 tons, drew at the rate of 15 miles per hour, a train of nine loaded carriages weighing 50 tons. The dimensions of the engine were—leading wheels, 3 ft. 6 in. diameter; driving wheel (four coupled), 5 ft. diameter; cylinders, 1 ft. 3 in. diameter; length of stroke, 2 feet.

It was argued that it was extremely difficult, to establish any useful comparison between the working of various inclines, in consequence of the dissimilarity of conditions, of local circumstances, and of the different modes of keeping account of the expenses. That instead of affixing the limit of adhesion, as on the Semmering, at eight times the weight on the wheels, as compared with the force of the pull of the engine, it would be practicable to ascend much greater inclines with only five times the weight to the drag of the engine. That the Semmering engines could not be received as any improvement upon the construction of the engines employed ten years ago at the Lickey incline, where two small engines had been in the habit of drawing up a gradient of 1 in 37, trains of 50 loaded wagons, weighing at least 250 tons, at a speed of 6½ miles per hour; therefore that one of these comparatively small light engines, would be quite able to haul 165 tons over the Semmering incline, at a speed of 11 miles per hour.

Though it could not be denied that English railway engineers were formerly prejudiced against any steeper incline than 1 in 100, and had believed that gradients of 1 in 50 could only be worked by means of ropes, yet it must be remembered that fifteen years ago, Halifax was approached by a gradient of 1 in 44, and that twenty-two passenger trains per day, besides goods trains, were, without difficulty, conveyed over that incline by locomotives. There was, therefore, nothing new in these steep inclines, nor in the manner of working them. It should also be mentioned, that the result of the later experience went to prove, that it was more advantageous to rely on the locomotive than on any system of ropes. Not only had the latter system been abandoned on the Euston incline (London), and at Miles Platting incline (Manchester), but even at Oldham, where there was a gradient of 1 in 27 for 1½ miles, the rope was taken away two years ago, and the traffic was now entirely dependent on locomotives.

It was urged, that as early as 1839-40, the Lickey incline had been freely ascended by locomotives conveying trains, without any brake in the course; the conditions of the Lickey and of the Dainton inclines, situated on the course of the lines, were very different from those of terminal inclines, such as the Oldham, Halifax, Manchester, &c.

The sharp curves, of not more than 10 chains radius, on the Semmering, must be taken into consideration, as on a gradient of 1 in 42, they would materially influence the working of the engines, at even a moderate speed. The question

was, whether it was necessary to have such heavy engines as those of the Engerth construction, or whether it was not more convenient and economical to work inclines by means of two coupled engines, as at the Giovi incline. The latter opinion was strongly contended for, as also that generally the inclines in England were worked better, cheaper, and more regularly than that of the Semmering. In the year 1833, locomotive engines frequently ascended the St. Helen's incline of 1 in 30, although the traffic was worked by means of ropes.

Particulars were given of some experiments made with an engine intended for the Santander and Alar railway, in Spain; from which it appeared that upon an inclined plane, at Sheffield, about 300 yards in length, and rising 1 in 27, the engine drew up 23½ tons, (exclusive of the tender,) at a velocity of about 2½ per hour. The same engine, when tried on the Lickey incline, on a foggy day, with drizzling rain falling, took up in the first experiment a load of nearly 46 tons in six wagons at an average rate of about 10 miles per hour, and in the second experiment 29½ tons, in four wagons, at a mean velocity of 18½ miles per hour.

It was again insisted, that circumstances varied so much as to render comparison of working the inclines almost impossible. It was necessary either to have special experiments under special circumstances, or to have such a large number of experiments as to arrive at the truth, by taking the average of the results. It was evident that the load that could be hauled by an engine, was in proportion to the weight that could be put upon the driving-wheels; but that was limited by circumstances.

In order to arrive at some idea of the relative advantage of employing one very powerful, or two less powerful engines, two engines of equal power were taken, their speed and pressure compared, and a similar load of 280 tons, was placed behind each. It was thus found that the two engines, when coupled together, took both loads up the same incline in the same time that each had taken up the half load separately.

At Edge-Hill, Liverpool, there were three inclines, of 1 in 48, 1 in 90, and 1 in 56, respectively. These were still worked by ropes, and stationary engines, because, being situated in tunnels, it was found that the condensation of the steam on the rails when locomotives were tried, so lessened the adhesion, that in these particular cases it almost amounted to an impossibility of carrying out that system.

An important point to consider was the amount of adhesion to be obtained; one-eighth the weight was contended to be a fair average, as under certain circumstances of weather, &c., it fell to one-tenth, or one-fifteenth. That point being determined, the rest was a question of the advantageous employment of steam and the construction of the engines themselves.

It was stated that the Paper should be received as a record of facts, brought by the author under the notice of the Institution, rather than with a view to establishing any particular ideas as to modes of working inclines.

It must be evident that the system of working the Giovi incline by two of Messrs. R. Stephenson & Co's coupled engines was decidedly better and more economical, than the system of using such enormously heavy engines, as those constructed from the Engerth design for working the Semmering incline. It was decidedly more economical, as well as more convenient, to be able to work an incline by merely coupling together the ordinary engines of the line, than to have engines constructed expressly for the duty of ascending steep gradients, and unfit for the other portions of the line. Besides, the injury to the permanent way by such enormously heavy engines must be considered, when comparing their duty with that of two engines, whose weight was so much better distributed.

Circumstances of climate would always affect adhesion;—in the fine dry cold climate of Norway,

inclines could be advantageously worked; whereas in London fog, or even with the ordinary moisture of a dewy night, the adhesion would be materially impaired.

Ropes had been generally superseded by locomotives, but it should not be rashly decided to abandon them entirely, as there were situations where steep terminal gradients might still be advantageously worked by them; whereas it would be preferable, or even almost indispensable, to work the inclines in the course of a line by locomotive power. The difference between current and terminal inclines must always be considered. The facts observed and collected by the author would be found valuable as data, from whence every engineer would draw his own conclusions, and apply them so as to meet the peculiarity of his own case.

In conclusion it was urged that, with regard to adhesion, no *a priori* arguments should be relied on, but facts alone should be had recourse to, and these, it was asserted, would be found to give the power of adhesion as being from one-eighth to one-tenth of the weight on the wheels. It was thought to be of great importance that the question of the comparative economy of working inclines by locomotives or by ropes, should be clearly investigated. In hilly districts, if gradients of 1 in 20 could be worked with facility, the construction of many costly viaducts and other structures might be avoided; and, of course, the less expense necessary to be incurred in the formation of any railway the greater chance was there of its being satisfactorily executed.—*C. E. & A. Journal, May, 1856.*

La Crosse and Milwaukee Railroad.

Total gross receipts in January, 1856.	\$10,650.29
In February, 1856.....	20,128.71
In March, 1856.....	27,226.10
In April, 1856.....	32,138.72
In May, 1856.....	41,476.00
In June, 1856.....	49,059.24

Total \$180,579.06

The increase from month to month is most extraordinary, as it is over the same length of road. The road is operated only sixty-one miles, upon a cost for construction of about one million six hundred thousand dollars. The receipts for the remaining six months of the year will, beyond a doubt, average more than fifty thousand dollars per month, which would give an aggregate of over \$600,000. Those who know the road, and the country through which it passes, best, say the gross earnings for the year will exceed \$600,000, or more than one-third of the construction cost. The gross income would be equal to 30 per cent. net on the present capital stock.

Baltimore and Ohio Railroad.

The Board of Directors of the Baltimore and Ohio railroad held their monthly meeting on Wednesday last. The official report of the business of the road for the month of June, which was read to the Board, shows the revenue to have been as follows:

	Main Stem.	Wash'n Branch.	Total for both roads.
For passengers.....	\$56,269	\$27,324	\$83,594
For freight.....	346,616	8,578	355,194
	\$402,884	\$35,903	\$438,788

In view of the fact that June is generally a dull month, this is an encouraging exhibit. The figures show a gain during the past month over June of last year of \$61,416.68 on the main stem, and \$5,082.92 on the Washington branch—making a total gain of \$66,502.60. This is a very handsome increase. The road continues to do a heavy transportation business, and among the articles carried over it last month there were upwards of 81,000-barrels of flour, and 47,147 tons of coal.

The Board had a long session Wednesday, there being two important projects under consideration—one in relation to finishing the Northwestern (Va.) railroad, and the other in regard to an ad.

vance in the tolls on coal. Protracted discussions were held pro and con, on both measures, and finally it was determined by a decisive vote that steps should be taken to give the required aid of \$500,000 for completing the Northwestern road. On the subject of coal it has been recommended by the transportation committee that an advance of 25 cents per ton should be charged thereon for transportation, from the 1st of August next, and another additional 25 cents after the 1st of Nov. After the failure of a proposition by a close vote, to refer the matter to a special committee, it was finally decided to let the subject go back to the committee on transportation with instructions to confer with any committees of the City Council that may be appointed to consider the question.

The committee are to report at the next monthly meeting.

Buffalo and Bradford Railroad.

A meeting of the stockholders of this road was held at Bradford on the 3d inst., for the purpose of organization. Daniel Kingsbury, Esq., was elected President of the company; Saml. D. Casey, Frank Williams, Jos. F. Clark, Abraham K. Johnson, Sylvanus Holmes, of Bradford, Sobieski Ross, of Connersport, Pa., and Watson A. Fox, E. J. Baldwin, Wells D. Walbridge, C. Hitchcock, E. K. Bruch, of Buffalo, N. Y., were elected Directors for the ensuing year.

At a meeting of the Directors of the company, held on the same day, Watson A. Fox was elected Vice President, Abraham K. Johnson, Secretary, John R. Lee, Treasurer, and Frank Williams, Chief Engineer of the company. The President reported that a sufficient amount had been subscribed to the capital stock of the company, to justify the board in putting the work under contract.

The engineer also made a report in regard to surveys. The President and others of the Buffalo and Pittsburgh Railroad Co. were present. The work on their road is to be commenced simultaneously with the other, and completed at the same time. Large bodies of men are employed at various points, opening coal beds, in order to be ready to supply coal as soon as the roads are completed, which will be some time during the coming fall.—*Buff. Com. Adv.*

Iron consumed in the United States.

The American Iron Master Statistical Review has the following statement in reference to the amount of railroad iron used in this country for several years past and the comparative make and importation for the same period.

	Miles.
Total number of miles in use, December 31, 1855	21,440
Total increase for eight years	15,655
Do. for last five years	11,963
Average annual increase last five years..	2,363
Average number of miles in use for five years ending December 31, 1854.....	13,600
Iron required in laying 13,600 miles, at 90 tons per mile, 1,224,000 tons, which, at 8 per cent. average annual wear, gives iron required for renewal of track	97,920
Iron required for last five years for renewal of track	489,600
Iron required for last five years for new track, 11,963 miles, at 97 tons per mile	1,154,929
Total consumption of railroad iron for five years	1,643,629
Iron rails imported for five years ending June 30, 1855.....	1,143,629
Estimated production of rails made in the United States, last five years.....	500,000
Average quantity of rails imported per annum for five years	228,726
Average domestic production for five years.....	100,000
Total average annual consumption for five years.....	328,729

About 30 per cent. of the consumption of rails is required for renewals, and 70 per cent. for new track.

Thus far the iron imported has represented the number of miles of new track made, at the rate of one mile for every 97 tons of rails; and the American mills have supplied iron for the renewal of track. From this time forward, however, the American mills will furnish, not only rails for the repair account, but also for a considerable portion of new track.

	Tons. cwt.
Importation of rails for year ending June 30th, 1855.....	127,516 14
Production of American mills for year ending December 31, 1855.....	185,300 00
Decrease of importations from average of five years.....	101,210 00
Increase of domestic production on average of five years.....	35,300 00
Net decrease from annual average in 1855.....	65,910 00

The following table will show the rate of increase of the mileage of railroads for 9 years past.

	Number of Miles.	Annual Increase.	Average.
1847.....	5,265		
1848.....	6,197	932	
1849.....	7,350	1,254	3,692 1,231
1850.....	8,856	1,506	
1851.....	10,878	2,022	
1852.....	13,315	2,437	
1853.....	15,611	2,196	11,963 2,393
1854.....	19,438	3,297	
1855.....	21,440	2,011	
Total.....	15,565		

Opening of the Cleveland and Mahoning Railroad.

The Western Division of this important road was opened to trade and travel June 30th. At 2 P. M. a train of beautiful new cars from the manufactory of Wasson, left the depot near the Columbus Street bridge, and made the run to Warren, the rich and flourishing old county seat of Trumbull, 53 miles, returning this morning. The first passenger train excited considerable interest along the route and at Garrettsville, one of the most important towns on the line, the steam horse was welcomed with a salute and the cheers of the people. The stations are Newburgh, Plank Road, Solon, Aurora, Mantua, Garrettsville, Windham, Braceville, Leavittsburgh and Warren. The road is permanently and well built, and for a new one is remarkably smooth. It is a domestic as well as a great institution—owing its existence to the enterprise and means of the President, Jacob Perkins, Esq., and other well known reserve citizens; and is officered by such sterling home men as Vice President Hitchcock; Directors Perkins, Tod, Kinsman, Baldwin, Smith, Magee and Cunningham; Secretary and Treasurer Rhodes; Chief Engineer Robinson; Superintendent Cleland; Conductor Crawford; Master Machinist Young, etc., etc. It is also mainly ribbed with American rails.

The Cleveland and Mahoning road has been constructed with special reference to speed and a heavy freight business. The maximum grade coming West is twenty-one feet per mile—the maximum grade going East, with one exception at the point of leaving the Lake shore is twenty-six feet per mile. There is a large percentage of straight line and the minimum radius of curvature is nineteen hundred feet. It will be opened to Youngstown, seventy miles from Cleveland, this fall, and to New Castle, eighty-five miles from Cleveland, another season. At New Castle, it will connect with the North Western, now in successful progress to Blairsville, on the Pennsylvania Central Railroad. When the links constructed and in pro-

gress are completed, this route will present an unbroken chain of continuous four feet eight and a half inch gauge from Council Bluffs to New York, thirteen hundred and fifty-two miles!

The Mahoning road runs through a well settled and cultivated country, and will bring a very large local traffic both in passengers and freight, to Cleveland. It will be open in a few weeks to the heart of the Mahoning coal fields, from which come the Briar Hill quality of coals so well known and highly valued in the Lake marts.—These sources of business will make this road one of the most profitable tributaries to the home trade of this city, and a short time will suffice to show the great value both to town and country of the connection now first established between them.

The Mahoning road, and its extension by the North Western road of Pennsylvania to the Pennsylvania Central, will open an entirely new and most important route from Cleveland and the Lake ports west of Cleveland to New York and Philadelphia, which will restore to the south shore of Lake Erie the advantage in time between the Great West and the Atlantic which the construction of the Canada road has now given to the North Shore. The distance from Cleveland to New York will be shortened seventy-six miles, as compared with the Lake Shore and New York and Erie. The distance to Philadelphia will be shortened twenty-four miles, as compared with the route by Alliance, and the distance to Baltimore will be shortened sixty-six miles, as compared with the route through Wheeling and the Baltimore railroad. It will furnish a continuous gauge to all those cities, so that the merchandise of the East will need no transshipment till the cars which contain it stand on the shores of Lake Erie. With the completion of this line Cleveland will become a distributing point of the Lake trade hardly second to Buffalo, and will be by rail almost as near the waters of the ocean as Duquik.

The opening, therefore, of the Western Division of the Mahoning road to Warren and the coal fields, important as it is in its immediate results to this city, is still more important as a link, and the last link but one in a chain shortly to be completed, which will make this city—in connection with her lines of steamers and the Lake Shore road—the common gateway to the commerce of the three great Atlantic cities in their intercourse with the Basin of the Lake.—*Cleveland Herald.*

Iowa Central and Air-Line Railroad.

At a meeting of the shareholders of this company held at Maquoketa on the 4th of June, the following officers were elected for the ensuing year:

Stevens S. Jones, President; Norman W. Isbell, Vice President; Geo. W. Betterworth, Secretary; Jonas Clark, Treasurer; A. R. Cotton, Attorney and Agent, and George W. Waite, Chief Engineer.

The road from Lyons City to Jones county line, a distance of 42 miles, is now under contract, and a force of near 120 hands and teams is now, and has been employed for the last month. Some five or six miles of the grading is now done, and work is being vigorously prosecuted. The main line will be located soon from Sabuls to Maquoketa; and a corps of engineers will immediately run a preliminary line to the Missouri river, as near as practicable to the 42 parallel of north latitude, preparatory to locating the same. The financial affairs of the company, are in a most healthy and promising condition. More than half a million dollars to the capital stock has been subscribed and subscriptions are daily increasing. From the statement posted in the office of the Secretary, we are enabled to ascertain that the total Resources and Liabilities of the company are as follows:

Total subscription to capital stock.....	\$634,100.00
Total receipts.....	30,096.88
Total disbursements.....	84,907.00
Total resources.....	604,003.12
Deduct total liabilities.....	4,801.93
Assets over liabilities.....	\$599,192.19

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,704	6,019,929	470,047	110,247	6	65	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscog. & Kennebec.	55	588,042	1,622,905	2,210,947	209,478	110,247	14	5	South Western.	92	1,097,496	465,500	1,624,920	253,500	141,168	8	
Kennebec & Portland.	56	1,114,725	1,601,231	2,715,956	270,214	112,491	8	90	Tennessee and Alabama.	30	248,486	679,906	1,033,781	In progr.			
Portl., Saco, & Portland.	51	1,367,000	119,237	1,486,237	270,214	112,491	8	90	Tennessee and Mississ.	30	170,931	175,340	In progr.				
Boston, Concord, & Montreal.	93	1,808,093	1,069,512	2,877,605	380,221	143,561	2		Memphis and Charleston.	217	2,179,440	2,127,002	4,028,796	311,631	169,572		
Cheshire.	53	2,085,925	890,313	2,976,238	336,914	136,454	6	78	Mobile and Ohio.	153	2,668,555	1,802,921	4,536,412	199,982	109,236		
Concord.	35	1,500,000	8,242	1,508,242	370,523	138,299	2 1/2	42 1/2	Miss. Central.	188	642,534	none	628,303	In progr.			
Northern, N. H.	82	2,765,400	none	2,765,400	162,677	55,173	none		N.O., Opelousa & G.W.	55	2,920,425	671,645	2,657,565	In progr.			
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,835,753	384,971	110,247	none		Vickab. Shreveport & Tex.	111	1,000,000	1,500,000	2,500,000	In progr.			
Rutland & Burlington.	120	2,325,376	2,662,359	5,000,000	394,971	110,247	none		East Tennessee and Ga.	166	625,425	1,033,781	1,659,266	In progr.			
Vermont Central.	117	5,000,000	3,650,239	8,650,239	890,111	214,796	none		Nash. and Chattanooga.	151	2,319,330	1,497,081	3,816,410	316,090	112,177	none	
Boston and Lowell.	27	1,833,000	325,634	2,158,634	489,764	140,377	6	70	Covington & Lexington.	98	1,302,804	2,235,939	3,738,753	264,973	138,694	18	
Boston and Maine.	73	4,078,974	150,000	4,228,974	489,764	140,377	6	70	Lexington and Frankfort.	29	430,055	158,099	588,154	93,263	43,655	6	
Roseland N.Y. Central.	74	2,240,300	1,618,071	3,858,371	558,671	219,689	none	64	Lexington and Danville.	60	644,444	622,734	1,267,178	In progr.			
Boston and Providence.	58	3,160,000	359,133	3,519,133	1,008,000	404,461	5 1/2	82 1/2	Louisville and Frankfort.	65	698,239	669,061	1,367,300	244,014	96,902	6	
Boston and Worcester.	66	4,000,000	655,128	4,655,128	119,221	305,908	48	40	Atlantic & Gt. Western.	254	866,939	77,294	944,233	In progr.			
Cape Cod.	47	681,690	280,500	962,190	280,500	103,787	5 1/2	48	Bellevue and Ind.	118	1,881,655	2,925,925	2,852,662	298,295	140,823	none	30
Connecticut River.	52	1,691,110	273,241	1,964,351	647,251	305,908	48	40	Clev., Col., and Cin.	141	4,547,029	4,613,722	2,990,295	732,056	9	102	
Eastern, Mass.	60	2,683,430	2,947,737	5,631,167	851,168	225,071	70	70	Cleveland and Toledo.	205	2,675,425	2,689,301	6,124,629	736,272	396,986	10	78 1/2
Fitchburg.	107	3,640,000	151,704	3,791,704	In progr.				Clev. and Mahoning.	103	1,000,000	900,000	1,900,000	In progr.			
North Eastern.	31	600,242	225,581	825,823	198,499	66,538	8 1/2	58 1/2	Clev. and Pittsburg.	138	2,780,744	3,043,992	5,537,466	581,877	309,518	62	
N. Bedford and Taunton.	21	600,000	none	600,000	563,496	205,783	6	53 1/2	Cin., Hamilton & Dayton.	60	2,153,900	1,321,213	2,987,757	508,271	278,012	65	
Old Colony and Fall River.	87	3,015,100	292,656	3,307,756	268,726	87,318	none	68 1/2	Cin., Wilm. & Zanesville.	131	1,129,450	1,181,266	2,320,456	In progr.			12
Vermont and Mass.	77	2,232,541	1,633,671	3,866,212	1,869,673	623,011	7	58 1/2	Columbus and Xenia.	65	1,454,550	149,000	1,603,550	356,366	187,510	82	
Western, Mass.	156	5,100,000	5,990,424	11,090,424	294,784	75,764	2	45	Dayton, Xen. & Belpre.	65	437,538	422,658	860,196	In progr.			82
Worcester and Nashua.	46	1,141,000	209,555	1,350,555	311,420	138,051	73	73	Dayton and Michigan.	140	1,076,922	393,011	1,470,933	In progr.			17
Providence and Worcester.	43	1,610,000	535,461	2,145,461	730,011	352,791	10 1/2	121	Dayton and Western.	135	310,000	500,000	810,000	171,929	65,000	20	
Hartford and N. Haven.	72	2,350,000	399,000	2,749,000	258,688	119,611	none		London and Hamilton.	42	454,690	404,489	1,155,135	171,929	65,000	20	
Hartford, Prov. and Fishkill.	122	2,005,110	2,000,000	4,005,110	339,194	71,427	none		Little Miami.	65	2,983,921	1,177,782	3,648,172	681,562	336,708	89	
Housatonic.	110	2,000,000	414,246	2,414,246	229,449	93,768	none		Mad River and L. Erie.	205	2,451,550	2,572,932	4,446,661	Recently opened.			15
Naugatuck.	57	1,031,800	624,241	1,656,041	884,500	338,877	24	24	Central Ohio.	138	2,451,550	2,572,932	4,446,661	Recently opened.			15
N. York and N. Haven.	62	3,000,000	2,379,845	5,379,845	88,000	30,318	none		Ohio and Penn.	138	2,451,550	2,572,932	4,446,661	Recently opened.			15
N. Haven and N. London.	50	73,258	739,167	812,425	159,435	124,044	66,436	none	Pittsburg, Mayv. & Cin.	157	2,451,550	2,572,932	4,446,661	Recently opened.			15
N. London, W. & Palmer.	66	509,200	1,073,671	1,582,871	304,236	88,458	2 1/2	32	Sandy, Mans. & Newk.	127	1,350,000	2,296,357	3,552,357	328,958	164,479	none	
Norwich and Worcester.	66	2,122,306	873,438	2,995,744	1,840,695	117,710	9,904		Scioto & Hocking Valley.	133	403,975	500,000	903,975	In progr.			
Albany Northern.	32	439,000	1,625,099	2,064,099	974,323	In progr.			Spring, Mt. Vernon & P.	113	1,000,000	900,000	1,900,000	In progr.			
Black River and Utica.	35	643,800	311,551	955,351	172,476	66,338	none		Tot, Wabash & St. Louis.	242	2,500,000	4,530,000	7,030,000	In progr.			
Barnard, Conn. and N. Y.	100	1,487,871	1,011,181	2,498,052	388,392	31,896	none		Cin., Log. and Chicago.	255	1,186,679	1,006,125	2,080,433	In progr.			
Buffalo and N. Y. City.	92	798,439	2,587,844	3,386,283	2,494,364	679,750	3 1/2	76 1/2	Evansville & Crawfordsv.	109	706,045	1,177,590	1,844,541	127,400	64,552		
Buffalo and St. Line.	69	1,300,000	1,040,000	2,340,000	174,085	69,500	none		Ind. and Cincinnati.	88	1,213,723	1,442,869	2,178,401	356,012	193,142	7	60
Canandaigua and Elmira.	47	434,111	922,991	1,357,102	349,532	135,433	none		Indiana Central.	69	611,400	331,179	1,007,911	350,170	134,375	50	
Canandaigua & Niagara F.R.	38	1,315,000	2,279,564	3,594,564	1,187,562	485,649	none		Ind., Clev. & Pittsburg.	63	820,423	1,090,400	1,910,823	226,058	93,010	none	
Cayuga & Susquehanna.	95	687,000	506,636	1,193,636	1,812,067	603,946	none	24 1/2	Jeffersonville.	67	1,014,252	694,000	1,708,252	206,544	94,318	none	
Hudson River.	144	3,765,466	9,250,367	13,015,833	501,796	116,462	none	36	Madison and Indianapolis.	86	1,647,700	1,836,818	3,484,518	286,146	112,880	none	
Long Island.	95	1,874,148	14,462,742	16,336,890	5,603,581	3,102,126	8	93	New Albany and Salem.	258	2,636,121	6,281,446	8,917,567	648,827	371,402	none	
New York Central.	534	24,154,506	20,126,669	44,281,175	1,488,999	2,627,118	none	64	Peru and Indianapolis.	73	658,314	558,314	1,216,628	150,000	90,000	none	16 1/2
New York and Erie.	464	10,025,908	4,099,769	14,125,677	1,806,777	234,126	none	17 1/2	Terre Haute and Ind.	73	974,800	664,355	1,639,155	287,512	189,702	10	
New York and Harlem.	134	5,717,100	4,407,871	10,124,971	1,200,155	135,754	none		Chicago and Rock Is'd.	182	3,141,500	2,387,155	5,528,655	1,077,312	527,952	107 1/2	
Northern, N. Y.	118	3,033,022	216,681	3,249,703	126,540	59,985	3 1/2		Chicago and St. Louis.	58	1,739,700	1,846,622	3,586,322	722,580	379,821	20	
Oswego and Syracuse.	65	399,000	216,181	615,181	749,683	In progr.			Central Military Tract.	85	1,202,500	2,135,050	2,920,241	471,399	219,588		
Pottsdam and Watertown.	29	407,200	140,000	547,200	241,149	82,600	7		Chic. St. Paul & F'd du Lac.	178	2,300,000	1,325,039	3,625,039	In progr.			
Rensselaer & Saratoga.	23	610,000	306,604	916,604	71,906	21,059	none		Galena and Chicago.	259	5,411,000	3,318,039	7,729,039	2,315,786	1,192,042	22	114
Saratoga and Whitehall.	48	700,000	306,604	1,006,604	241,149	82,600	7		Illinois Central.	627	2,271,050	19,416,392	29,374,446	1,532,118	527,952		
Syracuse & Binghamton.	85	768,369	1,578,504	2,346,873	159,484	22,508	none		Peoria and Oquawka.	627	2,271,050	19,416,392	29,374,446	1,532,118	527,952		
Troy and Boston.	27	457,378	737,077	1,194,455	159,484	22,508	none		Ohio & Miss. (Wst. Div.).	147	1,780,295	3,292,405	4,872,424	Recently opened.			
Watertown and Rome.	97	1,370,378	700,071	2,070,449	161,355	75,534	3 1/2		Terre Haute and Alton.	173	2,281,420	1,256,000	3,537,424	In progr.			
Belvidere Delaware.	64	1,000,000	1,619,000	2,619,000	122,447	60,580	none	125	Detroit and Milwaukee.	186	838,000	1,128,944	1,966,944	In progr.			
Camden and Amboy.	94	3,000,000	11,407,304	14,407,304	122,447	60,580	none		Mich. Central.	282	6,032,444	6,909,015	16,609,155	2,215,285	879,650	10	93
Camden and Atlantic.	60	369,324	1,522,151	1,891,475	368,149	229,341	66,267	122 1/2	Mich. South'n & N. Ind.	475	6,928,000	6,319,224	14,445,224	2,410,000	876,000	10	98
New Jersey.	30	3,482,850	690,000	4,172,850	1,983,377	229,341	66,267		Green Bay, Mil. & Ch.	155	764,074	442,726	1,206,800	357,757	691,843	17	80
New Jersey Central.	63	3,000,000	2,206,176	5,206,176	191,253	62,450	none		Milwaukee and Miss.	109	1,826,428	2,467,893	4,294,321	654,109	317,443		
Morris and Essex.	53	1,157,805	375,005	1,532,810	1,191,835	146,384	66,994		Milwaukee and Water'n.	72	554,561	1,302,000	1,856,561	In progr.			
Albany Valley.	44	1,637,861	342,564	1,980,425	1,191,835	146,384	66,994		Milwaukee and Horicon.	15	554,561	1,302,000	1,856,561	In progr.			
Cataw. Wil. & Eri.	63	1,700,000	1,940,000	3,640,000	191,253	62,450	none		Milwaukee & La Crosse.	61	1,351,532	532,131	1,883,663	In progr.			
Cumberland Valley.	109	3,064,022	3,584,702	6,648,724	628,911	269,263											

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	75	90
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	97	90
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	90	90
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	90	90
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	90	90
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	79	90
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	91	90
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	86	90
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	86	90
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	62 1/2	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	90
Cleveland, Painesville, and Ashtabula	507,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	90
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	90
Cleveland and Toledo	625,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	90
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	80	90
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	90
Covington and Lexington	400,000	Do. do.	6	April, October	"	1862	70	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	65	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	90
Gaucha and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	88	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	91	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	96	96
Jedersville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	90
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	81
Indianapolis & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	90
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	82 1/2	85
Lake Erie, Walash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	75	90
Little Miami	1,500,000	Do. inconvertible	6 1/2	2 May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Boat.	1860	100	101
Do. do.	600,000	Do. do.	6	March, Sept.	"	1869	101	102
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	9	Jan'y, July	N.Y.	1862	96 1/2	96
Do. do.	650,000	Do. 2d do. 1858	6	April, October	"	1863	96 1/2	96
Do. do.	1,250,000	Do. 3d do. 1860	6	June, Decemb.	"	1877	88 1/2	89 1/2
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	75	90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	6	May, Novemb.	"	1864-75	80	90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77 1/2	90
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1870	97 1/2	98
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1856	85	90
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	90
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	90
Terra Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terra Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	74	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	84 1/2	84 1/2
Do. do.	1,125,000	Do. do.	6	Jan'y, July	Balt.	1875	86 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	96	96 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	98	100 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	98	100
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	96	98 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	97 1/2	98
Do. do.	4,851,000	Convertible, Inscription	7	Feb'y, August	"	1871	90 1/2	90 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	80	90
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	101 1/2	101 1/2
Do. do.	2,000,000	2d do. do.	7	10 June, 10 Dec.	"	1860	88	89 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	79 1/2	79 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	93 1/2	93 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	97 1/2	100
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	97
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	84	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	92	94
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	88 1/2	89 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89	89 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101 1/2	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	102	104
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	102	104
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	92 1/2	92 1/2
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	92 1/2	92 1/2
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	85	85 1/2

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	Divers	86
Do. 5 do. 1858-60	May,	95	96 1/2	New Orleans, 6 per ct. cp. R.R. X	X	Do.	75
Do. 5 do. 1870-76	August, and	93 1/2	96	N. Orleans, 6 per ct. cp. municip. X	X	Jan'y, July	80
Do. 5 do. 1880	November,	94 1/2	96	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	80
Albany, 6 per ct. comp. 1871-81 X	Feb'y, August	97	100	Pittsburgh, 6 per ct. coup.	X	Divers	73
Allegheny, 6 per ct. coup.	Jan'y, July	97	99	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	73
Baltimore, 6 per ct. 1879-90	Quarterly	97 1/2	98	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 6 per ct. coup.	X	April October	97	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101	102	St. Louis, 6 per ct. coup. Long X	X	Do.	78 1/2
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.	101	102	Do. do. Municipal	X	Do.	79 1/2
Cincinnati, 6 per ct. coup.	X	Divers	89 1/2	Sacramento, 10 per ct. cp. 1862-74 X	X	Do.	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89 1/2	90	S.F. Frisco, 7 per ct. cp. 1865, pay. N.Y. X	X	May, Novemb.	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 do. pay. N.Y. X	X	Jan'y, July	80
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	100	101	Do. 6 per ct. pay. N.Y. 1875 X	X	Do. do.	59
Dubuque, 8 per ct. cp. Long X	March, Sept.	101	105	Wheeling, 6 per ct. coupon	X	Divers	67 1/2
Jersey City, 6 per ct. cp. W.W. 1877 X	Jan'y, July	96	96	Do. 6 per ct. cp. Mun. 1874 X	X	March, Sept.	81
Louisville, 6 per ct. cp. 1880-83 X	Divers	78 1/2	79	Zanesville, 7 do.	X	April, October	97 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70	70				

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending July 9th, 1866.

BONDS.

\$5,000 Town of Perryburg, Wood county, Ohio, 7 per cent.	53 1/2
2,000 Township of Pleasant, Putnam c'ty, 7 p.c.	53 1/2
4,000 Township of Ottawa, Putnam c'ty, 7 p.c.	53 1/2
2,000 Little Miami, 6 per ct., 2d Mort.	81
1,000 Ohio and Miss., 7 per ct., 1st Mort.	68
3,000 Cin. Wilm. and Zanesv. 7 per ct. 2d Mort.	46
2,000 City of Covington, 6 per cent. due in 1858	88
6,000 Clark County, Ky., 6 per cent.	70
1,000 Cin. Ham. and Dayton 7 per ct. 2d Mort.	82
15,000 Cincinnati, New Castle & Michigan, Real Estate, 10 p.c., Corwin & Sample, Trustees	38 (int.)
3,750 Coupons, part due, of some Bonds	36
600 Columbus & Xenia, 7 per ct. Div'd, June 1st, 88	98

STOCKS.

20 Shares Ohio & Mississippi	7 1/2
200 " Cin. & Chicago	3 1/2
40 " Covington and Lexington	16
25 " Little Miami	90
36 " Columbus and Xenia	82
162 " Peru and Indianapolis	15
100 " Cin. Harrison and Indianapolis	9
17 " Cin. Ham. and Dayton	60
20 " Marietta and Cincinnati	15
100 " Indianapolis and Cincinnati	60
48 " " "	60
50 " Eaton & Hamilton	25

By KIRK & CHEEVER.

For the week ending July 8th, 1866.

BONDS.

Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	62 1/2
Ohio & Mississippi, 2d Mort. 7 per ct.	48
Indianapolis & Cin., 2d Mort. 7 per ct.	79
Cin. Ham. and Dayton, 2d Mort. 7 per ct.	82
Hillsboro' and Cin., 7 per ct. 1st Mort.	50
Covington & Lexington, 10 per ct. Income	57
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend	90
Cincinnati and Chicago, 10 per cent. Real Estate, Corwin and Sample, Trustees	50
Cin. Hamilton and Dayton, Divid. Scrip. due 1867, Bat. 103	103
Little Miami, Dividend Scrip. issued June, 1866	79

STOCKS.

Bellefontaine and Indiana, 30.-Cin. Ham. and Dayton, 60.-Col. and Xenia, 81.-Cincinnati & Chic., 3 1/2.-Covington & Lexington, 16.-Dayton & Western, 17.-Eaton and Hamilton, 20.-Indiana Central, 50.-Indianapolis and Cincinnati, 58.-Little Miami, 89.-Mad River & Lake Erie, 15.-Marietta & Cincinnati, 16 1/2.-Ohio and Mississippi, 6 1/2.-Hillsboro' and Cincinnati, 17.-Peru and Indianapolis, 16 1/2.-Cincinnati, Wilm. and Zanesville, 10.	
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Marie & Kanz' Money Circular for the European Steamer of the 16th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday July 14th, 1866.

Since our circular of the 8th inst. Lord Clarendon's reply to the documents relative to the dismissal of the British Ambassador has been received here, and, together with the announced reduction of the Bank of England's rate of discount, and the continued ease in our money matters on this side, has influenced the stock market favorably. The business has been active, mostly at improving prices, the greatest rise being in Illinois Central stock and bonds. The European orders for these securities have been lately very important, but there has been also a better foreign demand for different kinds of Erie Bonds, New York Central and Michigan Bonds, all of which are quoted higher. State Stocks have been more active than of late. The largest transactions have been in Missouri at steady prices. Indianas have likewise been sold without change of prices. Virginias and Tennessee 6s are up 1/2 per cent. City and County Bonds unchanged; sales remain unimportant, but the demand appears slightly to improve.

Railroad Bonds.—The demand for the leading Railroad Bonds has been active. Illinois Central Bonds have been sold to a very large extent, closing at an improvement of 2 1/2. Erie 1875 Bonds have advanced 2 1/2; Erie 1883 Bonds, 2; Erie 1871 convertible, 2 1/2; New York Central 6s, 1/2; New York Central 7s, 1; Hudson river 3rd mortgage, 1 1/2; Michigan Central 1869 Bonds, 1/2.

Railroad Shares.—There has been much activity in Erie, Reading, Cleveland and Toledo, and Illinois Central; Chicago and Rock Island has also been much inquired for, but the supply is limited. Erie has fluctuated between 62 1/2 and 65 1/2, closing at 64, which is an advance of 1/2 on our last quotation. Reading declined to 51 1/2; New York Central has advanced 1/4; Panama, 1;

Illinois Central, 3; Cleveland and Toledo, $\frac{3}{4}$; Chicago and Rock Island, $\frac{3}{4}$; Cleveland, Columbus, and Cincinnati, $\frac{3}{4}$; Cleveland and Pittsburg and Wisconsin Lake Shore, declined 1 per cent.

Money—Continues easy on call; 6a7 per cent. paper is more offering at 6a8 for prime, 8a10 for names less known.

Exchanges—Remain firm at a slight advance, but the demand is limited. London 109 $\frac{3}{4}$ a110 $\frac{1}{2}$; Paris 5.17 $\frac{1}{2}$ a5.15. MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 16th inst.

[TRANSLATED.]

NEW YORK, Monday, July 14, 1856.

The aspect of our stock market has not sensibly changed since our last advices of 8th inst. The activity then noticed has fully sustained itself, as well for State Stocks as for the Bonds and Shares of many of the leading railroads. Orders of some importance, received by the Liverpool steamer of 28th June, principally for the bonds of most of our great railroad lines, have increased the impulsion already given to these securities, of which the transactions have been large and at a decided rise. The news of the reduction of the rate of interest by the Bank of England, has also produced a good effect in the market; the considerable expansion of our Banks, however, in presence of steady specie shipments, tends to slacken somewhat the general impetus given. State Stocks—Fluctuations have been trifling, and transactions very active in Missouri 6s, and Virginia 6s. Some Indiana 5s and Ohio 6s, have changed hands. City and County Bonds—The general demand continues very limited. New York 6s, 1859, have been done in amounts of some importance at 97. ex interest 1st August. Some small transactions have taken place in Detroit 7s, in Wheeling 6s, (Railroad issues,) and in Bonds of various counties in Iowa and Kentucky. Railroad Bonds—There has been a large demand for Bonds of our leading lines, principally for Illinois Central Construction, at a rise of 2, and for Erie 7s, 1871, of 1 $\frac{1}{4}$. Erie 7s of 1875 are not abundant, and have advanced 2 per cent. There was also activity in New York Central 6s and 7s, at an advance of $\frac{1}{4}$ 1 $\frac{1}{4}$; in Northern Indiana Goshen Branch, which rose 1, and in Terre Haute and Alton 2d Mortgage, which rose 2 per cent. At private sale, Michigan Central 8s of 1860-69 have been dealt in considerable amounts at a trifling advance. Some small Transactions of Milwaukee and Mississippi Third Section, &c., of Alabama and Tennessee First Mortgage have also taken place. Railroad Shares—The movement of prices has been upward. There has been a good deal of animation in the following and at a rise of 1 on Erie, of $\frac{1}{2}$ on Cleveland and Toledo, of $\frac{1}{2}$ on New York Central, and at a decline of $\frac{3}{8}$ on Reading. Illinois Central, upon foreign demand, advanced 2 $\frac{1}{2}$ per cent. Money in somewhat better demand, from 5a7 for call loans. Paper not abundant from 7a8 per ct. No material alteration in exchanges. Principal sales on London, 109 $\frac{3}{4}$ a110; on Paris, 5.15a5.17 $\frac{1}{2}$. DE COPPET & CO.

Cleveland and Toledo Railroad.

The annual meeting of the Cleveland and Toledo road was held at Cleveland, July 2, at which the following Board of Directors was elected: E. C. Litchfield, New York; Charles Butler, New York; Wm. Jarvis, Middletown; E. B. Litchfield, New York; Joseph Lyman, Cleveland; J. B. Waring, Cleveland; D. P. Rhodes, Cleveland; J. Gardner, Norwalk, Ohio; F. T. Barney, Sandusky.—Mr. J. B. Waring was elected President, and Mr. E. B. Litchfield, Treasurer. An arrangement has been made with the line of boats running from Buffalo to Cleveland to run in connection with this road, by which the passengers leaving Buffalo at night have a short ride upon the Lake and arrive in Chicago early the next evening, and several hours earlier than by the boats running to Detroit or Toledo. This will, no doubt, add to the business of Cleveland and Toledo road

during the summer months. The officers of the Wabash Valley road expect that the freight business of their road alone will give the Cleveland and Toledo road at least two daily trains of freight during the fall and winter. The earnings of June on the Cleveland and Toledo road are \$71,080—against same month in 1855, \$58,700—an increase of \$12,300, being nearly 25 per cent. increase. The increase if continued will make the receipts of the year about \$1,200,000—equal to 10 per cent. dividend on the stock.

American Railroad Journal.

Saturday, July 19, 1856.

NEW YORK, July 10th, 1856.

TO THE EDITOR OF THE AM. R. R. JOURNAL:

SIR—Your number of July 5th contains some remarks elicited by the late decision of the Supreme Court of this State in the case of the Mechanic's Bank vs. The New York and New Haven Railroad Company.

That the question was disposed of, as decided by the Court, upon merely technical legal ground may be perfectly correct, if the question of equity is precluded from being entertained as considerations which must weigh in the judge's decision.—It is not improbable, however, that a higher court may pronounce adversely as far as principle is concerned to the late decision, rendered more with a view to a particular case than to the settling of a principle that may serve as a guide for the future.

Viewing the decision in its practical working and effect, we cannot easily understand by what argument you are brought to the conclusion that the effect of this decision "will not be injurious upon the value of railroad securities," and that "there need be no difficulty in ascertaining whether shares be properly or improperly issued. A purchaser, if he will take the trouble, can ascertain this fact."

As a practical enquirer, we are entirely at a loss to know by what process a buyer of the shares of any company can at all satisfy himself upon this point. Beyond ascertaining from the transfer agent or officers appointed by the company for this purpose, that the stock for which he holds a certificate is really transferred to his name on the books of the company, and requiring ocular demonstration of this fact. What can be done by a purchaser to guard against receiving spurious stock.

Every one will recollect the difficulties which arose with the Directors of the New York and New Haven Railroad Company, upon the discovery of the frauds of their agent, in order to arrive at what the Company considered a fair separation of the real from the spurious stock. After months of arduous labor by an expert accountant, the conclusions arrived at were, to say the least, most unsatisfactory, and from the self-established rules upon which the researches of the accountant had to be based, the results were in most cases unrighteous, and in some instances might be considered absurdly ludicrous, if they did not involve too serious consequences to the parties concerned. How then can a stranger who has no access to the books of the company ascertain without difficulty whether he is receiving good or spurious stock, when experience has proved that the directors themselves, to whom the books were at all times

opened, were unable to ascertain this satisfactorily even after months of research.

The question of the responsibility of companies for the acts of their agents has not yet been finally settled by the highest courts of the country; until this is done any light thrown upon the question is most desirable and useful, and we therefore hope that you will recur to the subject to dispose of the grave objections which are suggested by the above remarks.

Very respectfully,
A FAITHFUL READER AND SUBSCRIBER.

In reply to the above, we would answer, that when the spurious stock cannot be detected, the Court expressly held that the company would be bound—consequently they may be held in cases where the purchaser cannot ascertain this fact from inspection of the transfer books.

In the case at issue, it would have been perfectly easy for the plaintiffs to have ascertained that the stock was fraudulent. They had only to go back, and see how KYLE got it. Now an old maxim in law is: *caveat emptor*. The purchaser must look to his title, especially when he deals with an agent. This maxim is based upon equity. The purchaser cannot take advantage of his own want of diligence.

We said we did not think the decision would injure the market value of railroad securities. We presume no one will say that it has. The commission of the fraud undoubtedly did. But this is a case which is just as broad as it is long. Had the fraudulent issues been declared *valid*, the effect of such decision would be to shift the loss from one party to another, equally innocent. A person may very well say that "I will not purchase stock in railroads, because I cannot tell whether it be *valid* or *invalid*." With the same reason would he say "I cannot purchase the stock, because it may be worthless by over-issues." The loss in either case is the same, and the fact of its falling upon one party rather than another, would have no tendency in itself to affect the market.

It is useless and unprofitable to discuss this question now that it is in the hands of the proper tribunal for adjudication. But we do not see how a person, upon carefully examining the decision, could come to any other conclusion. In the creation of the new stock Mr. SCHUYLER did not assume to act as agent for the company. He assumed an authority which the company could not give. The money received did not go to the company. There was no privity whatever between the two. How then can the company be held. Certainly not upon any legal hypothesis,—nor, in the present case, upon equitable ground.

Of course, every case must stand upon its own merits. The decision, therefore, may only settle the case in which it was made,—or it may cover all cases presenting a similar state of facts.

Forged Stamp of Lowmoor!

We have seen documents proving that the agents of the Lowmoor Iron Company have instituted legal proceedings against certain American manufacturers for making inferior iron and stamping it LOWMOOR.

The simple fact that the Lowmoor brand has been forged speaks strongly in its favor. Its intrinsic merit has created its enemies, and its counterfeits.

See advertisement of W. BAILEY LANG & Co. in this week's paper.

Vermont and Canada Railroad.

PARIS, May 29th, 1856.

To the EDITOR of the AM. R. R. JOURNAL.

Sir—You were kind enough to insert last year in your valuable Journal, (No. 41, Oct. 13, 1855,) a letter which I addressed to you in the name of two of my clients, the holders of 300 shares in the Vermont and Canada Railroad. This road, as you know, is let to the Vermont Central road, which road, since 1854, has ceased to pay the rent. In inserting my letter in your Journal, you had the politeness to add to it some lengthy explanations which terminated with the following postscript.

"Since the above was written, we are credibly informed that in consequence of the large traffic of the road, the Central will soon be able to pay the rent due the Canada Company, and resume possession of the whole line; we have little doubt such will be the result."

It appears that you were not well informed, sir. Seven months have expired since you gave me these assurances, and still the shareholders of the Vermont and Canada road vainly await the payment of the three semi-annual dividends of their rent, due since the first of December, 1854!

I said to you in my preceding letter that from the moment of the first failure to pay the rent, the Directors of the Vermont and Canada road should have proceeded to sell the property of the Vermont Central road, and thus have raised on the proceeds of the sale of this road, the amount of rent due the Vermont and Canada road. Without doubt they were perfectly authorized to do this.

It has been objected that, by the terms of their lease, the shareholders of the Vermont and Canada road are authorized to take possession of the Vermont Central four months after the cessation of the payment of the rent. But this is a right purely optional; it is not an obligation which deprives them of their rights in law; and from the moment when the exercise of this optional right becomes onerous for the Vermont and Canada Company, they ought to cease to make use of it. They ought to demand in justice the sale of the Vermont Central road or the canceling of the lease, based on the default of payment of the rent.

However, the Directors of the Vermont and Canada road, in opposition to the interests which are confided to them, have obtained authority by a judgment rendered the 17th of May, 1855, to assume the administration of the Vermont Central road, which has a floating debt of \$400,000—a debt which has to be paid before all others; so that the rent of the Vermont and Canada road continues, for an indefinite period, to be employed in the payment of the debts, and for repairs of the Vermont Central road.

In thus acting, these Directors have clearly failed to do their duty, and have betrayed the interests of their constituents.

A resolution of such importance, a resolution which so seriously compromises the interests of the shareholders, should never have been adopted without the consent of all the stockholders convened in general assembly. But on the contrary, the Directors of the Vermont and Canada road have acted on their own authority without taking the advice of the stockholders, without even in-

forming them; and they have arrogated to themselves the right of disposing arbitrarily of the rent of the Vermont and Canada road in favor of another road.

My clients cannot see in such acts anything but a culpable connivance between the Directors of the two roads, with the object of arriving at a legal spoliation of the stockholders of the Vermont and Canada road. This opinion acquires new force when we examine the present composition of the direction of the Vermont and Canada road. We see there the names of the most eminent members of the direction of the Vermont Central road, so that they represent at the same time the interests of the debtor (Vermont Central) and those of the creditor (Vermont and Canada), which is one of those enormities that we know nothing of in Europe.

When, in my letter of the 18th September last, I spoke to you of the attempts made with a view of obtaining the re-union or consolidation of the two roads, you replied that these were but the reports of journals without value and without influence. The following are your words:

"Newspapers very properly advise some arrangement by which, if possible, a portion of the cost of the Central may be saved. All such matters are topics of newspaper discussion. But such suggestions have no influence on the rights of the stockholders in the Vermont and Canada. * * * There is no occasion for the alarm manifested in the above communication."

Yet, sir, if you will take the trouble to read the report made by Mr. G. M. DEXTER to the stockholders of the Vermont Central under the date of the 31st of October last, page 40, you will see that the hope of a consolidation with the Vermont and Canada road is there formally announced by the directors of the Vermont Central. And the announcement is not a "newspaper report." My clients, therefore, would have good reason to take alarm at a project of consolidation which will be for them a veritable spoliation. But they cannot believe that such an iniquity dare to be carried into execution. How, indeed, can we reconcile the consolidation of two roads where one is bankrupt and the other in full prosperity?

I know that the great capitalists of Boston, interested in the Vermont and Canada road, are also interested in the Vermont Central, so that the fusion of the two roads may be indifferent to them or even profitable. But it is not the same with those who, like my clients, hold stock only in the Vermont and Canada road. The fusion would be for them complete ruin.

You have fought with great energy and with a force of reasoning quite incontestible, against the bad administration of the greater part of the industrial enterprizes of the Union. You have denounced the disorder, the prodigality, and the various abuses which prevail. You have courageously attacked the despotism and often the bad faith of directors who deceive their stockholders and arrogate to themselves the right of disposing of their money without authority. It is, therefore, to you that my complaints ought first to be addressed to be rendered public. I hope that you will accept and sustain them. I hope that you will make known to your numerous readers the immense harm which is done to American reputation in Europe by the negligence, the squandering

and the bad faith of the majority of the industrial enterprizes of the Union.

I have remarked with pleasure, however, that whenever stockholders who had been wronged had recourse to the tribunals, they have obtained prompt and full justice. I have confidence in their rigorous impartiality, and although a stranger I should not hesitate to address myself to the Court of Chancery of the State of Vermont in order to obtain the payment of the rent due to my clients by the Vermont Central road for nearly two years.

I beg of you to have the kindness to insert the present letter in your next number, and to add to it, if you think fit, such reflections as its perusal may suggest.

Respectfully,

Your Ob't Serv't,

J. B. LETELLIER, *avocat*.

We defer remark in reference to the above till our next number.

Coal as a Fuel for Locomotive Engines.

SYRACUSE, July 8th, 1856.

EDITOR AM. R. R. JOURNAL:

You no doubt feel, in common with those interested in railroads throughout the country, an interest in the various experiments making to use coal as a fuel for locomotive engines. Mr. H. DELANO, of this city, some time since, invented and patented a very valuable improvement in the manner of feeding coal, by supplying or feeding it underneath the fire, instead of the usual manner.—By this process all the gases are consumed, and a great saving made in the use of coal. It applies to every mode of burning and to every species of coal.

Mr. Delano has been testing his improvement on locomotives on the Boston and Worcester road for the last few weeks. An old engine called the *Bison*, with a fire box 38¼ by 39 inches; cylinder, 16 inches in diameter with 20 inch stroke; 2 inch flues and 120 in number; the whole weighing 24 tons, was taken, and the improvement applied at an expense of not more than \$200. The fire box, it will be seen, is small, and the cylinder large, but the experiment has been most triumphant and satisfies all who have seen it of its entire success. The following is the result of one week's labor with the machine, as given by Mr. A. S. ADAMS, the Master Machinist of the Boston and Worcester railroad. The coal used was not a good article, being the refuse of a pile which has been laying for more than a year.

Trial of Engine *Bison*; Boston and Worcester Railroad, in June, 1856 with Delano's Improvement for Burning Coal.

Average load through the week, 42 loaded eight wheeled cars; used in six days, 31,680 lbs. Cumberland coal—equal to 2 tons 789 lbs. per day, for 90 miles run. Coal cost \$5.50 per ton=\$12.91 per pound trip. Evaporated 6½ lbs. of water to one lb. of coal. Cost of running, 14¼ cents per mile with coal. The cost with wood per mile, same load, was 29 cents.

A. S. ADAMS,

Master Machinist B. and W. R. R.

Mr. Delano thinks that with a suitable sized fire box, and good coal, he can make a greater saving than the one given above. Any engine can be altered and this improvement applied at an expense within \$200. The Western roads, where they have an abundance of rich coal, and where wood is high, will find the improvement of Mr. Delano's

a very valuable one. It has been tried on stationary engines, and saves full 25 per cent. in the use of coal. It is adapted to locomotives of all kinds, steamboats, stationary engines, stoves, grates—in short to every species of apparatus for burning coal, either hard or soft. R.

American Securities in Europe.

"FRANKFORT ON THE MAIN, June 9th, 1856.

It is well known that a considerable amount of German capital is invested in American Bonds and Securities, (especially of railroads); at a moderate estimate, equal probably to about 90,000,000 florins, or \$42,000,000. These investments were made mostly in the years from 1848 to 1851, when the uncertainty of political condition in the old world induced capitalists to make seemingly safer investments in the new. Beside greater safety, the high rate of interest, 8 to 10 per cent., offered another attraction. But, alas, their just expectations have not been realized, as the payments of interest by several railroad companies have been for a time, or entirely, suspended, thereby not only lessening the profit held out, but at the same time endangering the safety of the capital invested. This result is owing to wickedness on the one side, combined with ignorance on the other."—*Frankfort Journal*.

Der Actionair, (The Shareholder) a financial newspaper, uses still stronger language in reference to this matter.

In Frankfort on the Main several leading banking houses have united themselves into an association in behalf of owners in Germany of American Securities, for the purpose of obtaining and diffusing information, and of commencing legal proceedings. A number of banking firms in New York, with whom those in Frankfort keep up commercial relations, were called upon and agreed to participate in that movement.

Ohio and Pennsylvania Railroad Co.—Stockholders' Meeting and Vote for Consolidation.

The stockholders of the Ohio and Pennsylvania railroad company held a meeting in the company's office, in the city of Pittsburg, on Wednesday, July 2, to consider the articles of consolidation conditionally entered into on the 6th day of May last, between said company, the Ohio and Indiana railroad company, and the Ft. Wayne and Chicago railroad company.

On motion of Mr. George W. Cass, Gen. Samuel Labm, of Canton, Ohio, was called to preside, and George E. Arnold, Esq., of this city, appointed Secretary.

Mr. Cass, the President of the Board, stated that the meeting had been called for the purpose of considering articles of consolidation between the Ohio and Pennsylvania railroad company, the Ohio and Indiana railroad company, and the Fort Wayne and Chicago railroad company into one company, to be called the "The Pittsburg, Fort Wayne and Chicago railroad company." By the law under which this action was to be had, it was necessary that the articles of consolidation should be submitted to the stockholders, and for this purpose the meeting had been called.

Mr. Cass then read the articles of consolidation, which were then formally submitted to the stockholders to be voted upon according to law.

Mr. Cass, as representing stock in the city of New York, and not in his capacity as President of the road, submitted the following resolutions:

Resolved, That a vote by ballot be now had for the adoption or rejection of the articles of consolidation as submitted by the Board of Directors of this company.

Resolved, That all those in favor of consolidation,

place upon their ballots, "For Consolidation," and those opposed, place upon their ballots, "Against Consolidation."

Resolved, That Wm. M. Edgar, R. F. Smith and C. W. Earnest be and are hereby appointed tellers to receive and count the votes, and report the same to this meeting.

Resolved, That the polls be kept open until 9 o'clock, P. M., or such further time as may be designated by this meeting.

The resolutions were unanimously adopted.

On motion of Mr. McKnight, amended by Mr. Murdoch, the meeting then took a recess until 9 in the evening, (the balloting meantime to proceed.)

The stockholders re-assembled at 9 o'clock in the evening, when the tellers of the election reported the result as follows:

For consolidation.....40,248
Against consolidation.....70

Majority40,178

The total number of votes cast is 40,318. The whole amount of stock being 53,361 shares, more than two-thirds of that amount was voted for consolidation.

The report was accepted and ordered to be recorded.

Mr. Sherman presented the following resolution:

Resolved, That the stockholders of this company having adopted by a legal majority, the articles of consolidation heretofore entered into by the Directors with the O. and I., the Ft. W. and C. R. R. Co's., we do, in pursuance of the statutes authorizing said consolidation, hereby appoint the 30th day of July next, between the hours of 9 o'clock, A. M., and 5 o'clock, P. M., of the said day as the time, and the rooms of the Board of Trade in the city of Pittsburg, as the place for holding the first election for Directors of the Pittsburg, Fort Wayne and Chicago railroad company, and that the Secretary of the company give the notice of such election as required by law.

Adopted unanimously.

Mr. Jarvis moved that an authenticated report of this meeting be furnished to the Ohio and Indiana, Fort Wayne and Chicago and Ohio and Pennsylvania railroad companies.

On motion, adjourned.

The articles of consolidation having been previously accepted and ratified by the two other companies—by the Ohio and Indiana railroad company, at a meeting held the 24th June, in the town of Bucyrus, Crawford county, Ohio, and by the Fort Wayne and Chicago railroad company, at a meeting held 26th June, in the city of Fort Wayne, Allen county, Indiana—the action of the Ohio and Pennsylvania railroad company, herein recited, was the merging of the last of the three companies into the grand measure of consolidation. The first election for Directors of the consolidated company, it will be seen, is to be held in Pittsburg on the thirtieth of the present month.

Air line length, and actual length of each road:

	Air line in miles.	Rail'd in miles.
Ohio and Pennsylvania railroad, from Pittsburg to Crestline.....	140	187
Ohio and Indiana railroad, from Crestline to Ft. Wayne.....	128 1-12	131
Fort Wayne and Chicago rail- road, from Fort Wayne to Chi- cago.....	143 6-12	147
Total.....	411 7-12	465
Minimum grades in the mile:		

	Feet.
Ohio and Pennsylvania railroad.....	47
Ohio and Indiana railroad.....	28 4-10
Fort Wayne and Chicago railroad.....	28 4-10
On the Ohio and Pennsylvania railroad, there is no curved line of less radius than 1,170 feet.	
On the Ohio and Indiana railroad, there is no curved line of less radius than 2,865 feet.	
And on the Fort Wayne and Chicago rail-	

road, there is no curved line of less radius than 3,820 feet.

When completed and equipped throughout its entire line, from Pittsburg to Chicago, the attractive location and advantages of this road will fill the company's local trains with the inhabitants and produce of four contiguous States; and their through trains with passengers and merchandise, passing both ways, between the sea and the west branches of the Mississippi.—*Phila. Railroad and Mining Register*.

The Grand Trunk Railway.

It has been our good fortune within the past few weeks, to pass over the line of the Grand Trunk railway as far as Brockville in Canada West, to witness the opening of the line from Toronto west to Guelph and Berlin, and to examine the works in progress between Toronto and Brockville, as well as the Victoria bridge. The line is to be opened from Brockville to Toronto the present season, and as far west as Stratford, one hundred miles west of Toronto, making a total mileage of 869 miles in operation the present year.

The bill granting aid to the company to the extent of fifteen millions of dollars, passed the Provincial Parliament, and received the royal assent on the 2d inst. The act in question allows the company to issue two millions sterling in pre-erential bonds, to take precedence of the government lien, and the government further agrees to pay the interest on their entire loan, for the term of five years, which loan now amounts to £3,111,500 sterling. The interest on this sum for five years reaches about one million sterling, which sum is to be represented by the company's stock. The aid, therefore, granted the Grand Trunk railway company, by the act of July 24, 1856, may be set down at fifteen millions of dollars.

Of the money thus granted, £800,000 sterling, or about \$4,000,000 is to be applied to the Victoria bridge, £450,000 to extend the line to Sarina, and £525,000 to the line below Quebec. The Province seems determined to carry out the entire scheme, as laid down in the prospectus of 1852, and to aid in addition, subsidiary lines at Prescott, Coburg and Port Hope.

It was gratifying to observe that during the long and exciting discussion on this matter, no one ever questioned the policy of purchasing the Atlantic and St. Lawrence railroad, though some doubted the propriety of paying the full cost of the line. The value of this link, in their vast system of public improvements, was generally and fully admitted, and the advantages of Portland harbor as the winter port of Canada, were repeatedly asserted in the debates.

This city, therefore, is as deeply interested in the Grand Trunk railway of Canada as any locality on its route, and the recent grant of aid will favorably affect its business.

All doubts as to the completion of the Victoria bridge are now removed, and the work of building it is now in rapid progress. With the company's engineer and Mr. Hodges, the agent of the contractors, we visited these works the present week, and saw the operation of sinking coffer dams and placing the foundations of the piers.—Two piers are already finished, and seven more are in progress—two of them on the south side of the St. Lawrence, and seven on the Montreal side. The northern abutment, 242 by 90, is raised above the water level, and the embankment, extending from it to the shore, 1,200 feet, is already finished. The bridge will consist of 25 spans or spaces for navigation between the 24 pieces (exclusive of the two abutments) for the support of the tubes. The centre span will be 330 feet wide, and each of the other spans will be 242 feet wide. The width of each of the piers next to the abutments will be 15 feet, and the width of those approaching the two centre piers will be gradually increased, so that these two piers will each be 18 feet wide, or 3 feet more than those next the abutments. Each pier is said to be 90 feet long. The stone embankment leading from the south shore of the river to the south abutment will be

600 feet long. The length of the bridge, from abutment to abutment, will be 8,000 feet, and its total length from river bank to river bank will be 10,284 feet, or 176 feet less than two English miles.

The clear distance between the ordinary summer level of the St. Lawrence and the under surface of the centre tube is to be 60 feet, and the height diminishes towards either side, with a grade at the rate of 1 in 130 or 40 feet in the mile, so that at the outer or river edge of each abutment the height is 36 feet above the summer level. The summer depth of the water in the St. Lawrence varies from 14 feet about the centre to 4 feet towards the banks, and the current runs, at the site of the bridge, at a rate varying from 7 to 10 miles an hour. The piers already built each contain about 6,000 tons of masonry, and scarcely any one block contains less than seven tons' weight.

By means of coffer dams an excavation is carried down to the rock bottom underlying the bed of the river, and the foundations bolted to the solid rock, found at depths varying from 14 to 18 feet below the surface of the water, in those already in. The placing of these foundations in the midst of a foaming cataract running at the rate of from 7 to 10 miles an hour, 18 feet below its surface, firmly bolting them to the solid rock so as to defy the mountains of ice that have heretofore swept away every opposing obstacle in the "shove" of a winter freshet, is the greatest work that has ever come to our knowledge, compared with which the Thames Tunnel seems an insignificant affair. Two of these piers and the northern abutments have stood the test of two winters, the ice rising to the top of each—the winter level of the river rising 17 feet above that of summer.

The coffer dams, the work and invention of Mr. Hodges, form immense wharves open in the centre in the middle of the river, on which habitations are erected for the summer residence of the employees on the works. The works are well worth visiting as among the greatest achievements of modern science.

The building of the Victoria bridge is the greatest work of modern times—one that is destined to affect the business relations of Canada and the Northern States more than any one enterprise of the day. Its completion is fixed for January 1, 1860.

We congratulate the friends of the Grand Trunk railway on the auspicious prospects of their enterprise, now that all doubt of its success is taken away.—*State of Maine.*

Cluclunatt and Mackinaw Railroad.

A meeting of citizens of Lansing and Hillsdale, and others interested in the building of a railroad from Amboy, via Hillsdale and Lansing, to Traverse Bay and the Straits of Mackinaw, was held at the National Hotel, in the city of Detroit, on Monday, the 23d inst. The meeting organized by the election of John P. Cook, of Hillsdale, Chairman, and Edwin R. Merfield, of Lansing, Secretary.

The following named gentlemen were present as delegates from Hillsdale county: John P. Cook, D. L. Pratt, F. M. Holloway, A. Cressey, William Waldron, C. J. Dickerson, D. Beebe, L. A. Bostwick, H. H. Sherman, C. W. Ferris, Hon. R. Gardiner, J. C. Robertson.

From Ingham county: J. C. Bailey, J. Turner, V. S. Murphy, J. W. Longyear, Benj. Hart, J. L. Blair, John Thomas, E. R. Merrifield, W. H. Chapman.

From Eaton county: A. Hamlin; from Clinton county: Hon. J. Swegles.

The Chair briefly stated the object of the meeting, which was then addressed by Hon. H. H. Emmons, and others.

On motion of Mr. Pratt, of Hillsdale, a committee of eleven was appointed, for the purpose of collecting subscriptions, &c. The following named gentlemen were appointed as such committee:

D. L. Pratt and F. M. Holloway, Hillsdale; R. Gardiner, Jonesville; H. C. Hodge, Concord; M. A. McNaughton, Jackson; A. Hamlin, Eaton Ra-

pids; J. Bailey and W. H. Chapman, Lansing; J. Swegles, St. John's; J. H. Adams, Dewitt.

A committee consisting of J. W. Longyear, H. H. Emmons and C. J. Dickerson, was appointed to draft articles of association, and were instructed to report the same at the next meeting. On motion the meeting adjourned.—*Hillsdale Gazette.*

St. Croix and Lake Superior Railroad.

We learn from a late report of Mr. Robert Patton, Chief Engineer of this road, that the surveys have been completed and the line located from the town of Superior to Hudson, on Lake St. Croix. The distance is 131 miles. For convenience in making estimates, the line has been divided into two divisions—the northern and southern. The northern division commences at Superior and extends to a point south of the crossing of the St. Croix river, a distance of fifty miles; the southern division then commences, and extends to Lake St. Croix.

The cost of making the line of the northern division ready for the superstructure, is estimated at \$526,876 95. The maximum grade on the northern division is fifty feet to the mile. The southern division will cost, to make it ready for the iron, \$476,876 96. The maximum grade on the southern division is fifty feet to the mile. The total cost of putting the road in running order the whole distance, is estimated at \$2,000,000.

The subscriptions to the stock of the company (of which five per cent. has been paid in) amount to \$145,000, and the right of way and depot grounds donated by individuals and government, is valued at \$206,000. The expenses, during the past year, have amounted to \$13,641 94.

The proprietors of the town of Superior have donated to the company forty-three acres of land, between Nemadji river and Allouez Bay, with two thousand feet of water front, for depot grounds and other uses of the road. But a moderate outlay in grading and docking upon this water front will be necessary. The depth of water is from fifteen to thirty feet; and a steamer of the largest class could land without difficulty anywhere along this front. The Superior Company also donated a right of way over its lands a distance of about three miles.—*Chicago Dem. Press.*

Pittsburg and Connellsville Railroad.

Benjamin H. Latrobe, Esq., has accepted the Presidency of the Pittsburg and Connellsville railroad company, and his energy and experience are expected to do good service in relieving the company of its present embarrassments and hastening its completion.

Effect of Land Grants to Railroad Companies in Illinois.

The Chicago Democrat, in defence of the policy pursued by Congress in granting public lands to insure the construction of railroads—for without such aid from Congress, many existing roads would not have been built—remarks that:

The public lands in this State were brought into market in the year 1813. For a period of thirty-seven years thereafter—reaching up to 1850, the sales amounted to 22,537,436 acres—averaging 595,000 acres per annum. During the five years succeeding 1850, the sales have reached 12,500,000 acres, or 2,500,000 acres per annum. And now there are less than 100,000 acres of government land in the State. This is the result of the influence of railroads; but it does not end here. The value of lands has been at least quintupled, since the iron ways sat down upon our magnificent prairies. Another effect has been to equalize the values throughout the State, so that we do not now witness the great disproportion between land in the vicinity of the lakes and rivers and the interior, which formerly existed.

In 1840 the assessed value of the taxable property in Illinois was \$58,752,000. In 1850 it had risen to \$117,560,000—showing an increase of \$58,808,000, or 100 per cent. In 1855 the valuation was \$325,300,000, showing an increase of about 200 per cent. in half the time. Here, again, we see the developing influence of railroads.

There is yet another point from which this branch of the subject may be viewed. Illinois commenced the present century with a population of less than 8,000. In 1810 there were about 13,000. By following the increase through the several decades and semi-decades since the census has been taken, it will be seen that the gain has been much larger during the last five years than in any former period:

From 1810 to 1820, the increase was	42,023
" 1820 to 1830, " "	102,284
" 1830 to 1835, " "	114,982
" 1835 to 1840, " "	204,756
" 1840 to 1845, " "	185,942
" 1845 to 1850, " "	189,345
" 1850 to 1855, " "	448,781

The increase of population has been double during the five years ending with 1855, that it was at any former period, and the annual sales of land were nearly five times as great—some of these lands had been in market for twenty and thirty years at government prices, and had it not been for railroads, they would doubtless have remained unsold for much longer. They were inaccessible—away from navigable streams—away from markets—they wouldn't bring a dime an acre. Produce was worthless, as it cost more to transport it than could be obtained for it in the market—there was no wood for fencing or building, and no means of getting it, save by land carriage, so tedious and expensive as to be entirely impracticable.

Lackawanna and Bloomsburg Railroad.

We learn that the upper division of the Lackawanna and Bloomsburg road (from Scranton to Kingston, opposite Wilkesbarre, 18 miles) was opened for business on the 24th of June. This road is an extension of the Delaware, Lackawanna, and Western, and passengers and freight can now be transported direct from New York city to Wilkesbarre by a continuous line of road.

Interesting Legal Decision with regard to Bondholders.

We find in the *Vicksburg Whig* of the 21st inst., the report of a case which involves issues of great importance to the legal profession and to our community in general. It is as follows:

Many years ago our city sought to raise a sum of money, in accordance with the provisions of her charter, and to that end executed a number of her bonds to the extent, we believe, of fifty thousand dollars in bonds, under her corporate seal, of one thousand dollars each, payable to the bearer, which she sent in the charge of an agent to the Northern cities for sale. The agent made a sale to an establishment located in Maryland, known as the Millington Bank, and took, we believe, notes of that bank in exchange or payment for the bonds of the city. This bank, it is alleged, and there appears to be no reason to doubt it, was a fraudulent concern, and soon proved bankrupt, and her notes in the possession of the city worthless; but in the meantime it had passed off, whether fairly or fraudulently, many of these bonds of the city thus procured. One of them came into the possession of Craig, and another into that of H. H. Elliott & Co., and they sued the city in the Circuit Court of this county on their respective bonds. The city, of course, defended these suits, and among other pleas filed one setting up the offset it held in the notes of the Millington Bank, to which the bonds of the city had been originally issued, but did not allege in the plea that the holders of the bonds sued on had any notice when they acquired the bonds of the fraudulent conduct of the bank, or of the possession of these offsets by the city. Our fellow townsman, Judge Barnett, who was then on the bench, upon demurrer to this plea, decided that it presented a good bar to the action, and gave judgment for the city in both cases. Craig sued out a writ of error to the High Court; it being agreed in the case of H. H. Elliott & Co., as it stood upon precisely the same questions, that it should abide the decision in that of Craig. The question came on for decision in the High Court, where it was argued, by

Messrs. Burwell, of this city, and Messrs. Wharton & Potter, of Jackson, for the city, and by T. A. Marshall, Esq., and W. C. & A. K. Smedes, of this city, for the holders of the bond. The High Court reversed the decision of Judge Barnett, in an elaborate opinion, in which the whole court concurred, delivered by Judge Handy, in which they established the following propositions, some of which are of great importance to the profession and almost of first impression, viz:

1. That a bond payable to bearer, passes by delivery from hand to hand like a bank note, or a promissory note, payable to bearer, and that the holder of such a bond claims title thereto, simply from the mere fact of his being the holder or bearer, by virtue of the contract of the maker to pay the bearer; and that such a holder may maintain an action on such a bond in his own name, without tracing his title thereto through the party to whom it was originally issued by the maker.

2. That in action on such a bond the plaintiff need allege nothing but the act of the execution of the bond by the maker, and that he is the bearer thereof. The fact of his being the holder establishes a *prima facie* right in him to recover; and if the maker wishes to set up in defense of the suit on the bond any want of consideration, failure of consideration, payment or other defense to the bond, as between himself and the party to whom it was originally issued, he must allege in his pleadings and prove on the trial that the plaintiff, the holder of the bond, had notice of such defense when he acquired the bond.

These we believe to be the main points decided by the court; and the general importance of the decision to the profession, as a legal proposition, will be apparent, when it is stated that, with perhaps a single exception, it is the only case in the U. S. in which the question of the negotiability of a bond payable to bearer has been presented for decision; and in the exception case which occurred many years ago in Alabama, the decision was against the right of the holder, claiming merely as bearer, and was adverse to the decision of our own court. The decision in Alabama, however, was that of a divided court, and deliberately overruled as an authority.

Reading and Lehigh Railroad.

The stockholders of the Reading and Lehigh railroad company met on Monday, and elected the following officers: President—Ed. G. Clymer.—Directors—George N. Eckert, G. D. Coleman, H. H. Muhlenberg, J. McManus, Horatio Trexler, G. D. Stitzel, Edward Brooke, Robt. E. Wright.—Secretary and Treasurer—William Hiester.

Eastern (Mass.) Railroad Company.

The Boston Post of the 15th inst., gives the following report of a meeting of stockholders of the Eastern Railroad Company:—

The twenty-first annual meeting of the stockholders of the Eastern Railroad, for the choice of officers and the transaction of other business, was held in Chapman Hall on Monday. John Howe, the President, occupied the chair. The report of the Directors was submitted in print.

Mr. J. B. Swasey, of Newburyport, wanted information as to the assets of the company; such as notes receivable, stocks, balance due, the price of wood, &c. He was disappointed that no plan was proposed to hold out a gleam of hope for a dividend. Without it, the report is a most bitter one to many widows and persons of limited means who own stock. He thought the financial policy of the Directors ought to have been foreshadowed in the report.

The President in reply said he did not possess foreknowledge enough to say when dividends could be expected. If negotiations now pending are successful, a different aspect may be given to the affairs of the company. We have assets, he said, which we believe to be good, to the amount of \$780,000. The debt of the company had been reduced in ten months \$350,000, and the rest has been carried along at a trifle over six per cent.

The assets were of a nature which cannot at once be realized.

The President also said that the earnings of the road for June were of a pleasant character. He gave the following figures:—

	Receipts.	Expenses.	Net.
June, 1855..	\$47,321 39	\$28,281 84	\$18,743 33
June, 1856..	69,557 19	26,624 48	*41,033 81

* Of this sum \$10,800 applies to season tickets for three months—two-thirds of which, therefore, should be applied to July and August.

The report was accepted.

The meeting proceeded to the choice of seven directors, and the following were elected with but a few scattering votes—John Howe, Samuel Hooper, Geo. M. Browne, John C. Lee, Nathan D. Chase, Micajah Lunt, Henry H. Ladd.

Cleveland and Pittsburg Railroad.

The Cleveland and Pittsburg Railroad Company, we learn, have commenced laying rails upon the Beaver division of the river line, which will be finished early in August. The Wheeling division of the same line will be completed to Steubenville early in September, and the entire river line will be in full operation in October.

Railroad Earnings.

The earnings of the Galena and Chicago Railroad for June were as follows:

1855	\$222,553.89
1856	213,898.09

Decrease..... \$9,160.80

The receipts of the New York and Harlem Railroad for June were as follows:

1855	\$86,424.02
1856	86,808.61

Increase..... \$384.59

Earnings of the Catawissa Railroad Company for June, 1856:

From Passengers.....	\$8,465.46
From Freight, &c.....	13,259.38

Total.....	\$21,724.84
Same month last year.....	18,857.44

Increase..... \$2,867.40

The earnings of the Norwich and Worcester road for June were..... \$26,778.01

June, 1855.....	24,929 35
-----------------	-----------

Increase..... \$1,848.66

ERIE R. R.

The earnings of the Erie R. R. Co. for June show an increase of \$93,927 40 over June of last year, or nearly 30 per cent. The business for three months has been as follows:

	1855.	1856.
April	\$506,597	\$613,669
May	475,127	617,664
June	396,838	490,765

Total.....	\$1,378,562	\$1,722,098
Increase in three months.....		\$343,536

This is about 25 per cent. increase, or nearly 3½ per cent. increase in three months. The aggregate earnings for the three first quarters of the fiscal year are \$4,681,349. An equal increase for the remaining three months of the fiscal year will bring the aggregate earnings above \$6,000,000.

MACON & WESTERN R. R.

The earnings of the Macon and Western R. R. for June were \$17,504, against \$18,869, for June last year. The earnings from

1st Jan'y to 1st July were.....	\$159,430
Same time last year	153,544

Increase in 1856..... \$5,886

MICHIGAN CENTRAL R. R.

The earnings of the Michigan Central railroad for the month of June, were as follows:

	1855.	1856.	
Passengers....	\$146,706	\$155,800	Inc. \$9,094
Freight.....	84,075	104,764	Inc. 20,689
Miscellaneous..	6,968	6,834	Dec. 134
Total.....	\$237,749	\$267,398	Net Inc. \$29,648

MORRIS CANAL.

Total to July 7, 1855..	\$112,102 75
Week end'g July 14, '55,	9,617 94
Total to July 5, '56	\$108,964 47
Week end'g July 12, '56,	9,671 98
	118,635 55

Decrease in 1856 \$3,085 14

Vicksburg, Shreveport and Texas Railroad.

Of the Vicksburg, Shreveport and Texas railroad, the Vicksburg Times, says: Three miles of the track opposite this city are already laid, and the track is now ready for the laying of thirty-six miles more, which carries it to the rich region of Bayou, Macon and beyond. The iron for twenty miles has already been landed, and the work is being pushed forward with all energy by the contractors and engineer of the road.

FOR SALE.

TWO second hand Locomotive Engines, Cylinders 12½ and 13x20, 5 feet drivers, weight about 20 tons; both in good order. Apply to CLARK & JESUP, 70 Beaver st.

LOWMOOR TYRES.

DURING the last year the Lowmoor Company supplied the Great Western Railroad, in Canada, with a large amount of iron and welded Tyres, and so satisfactory was the quality, that the Lowmoor Company have received orders from the same railroad, within the last three months, for eight hundred welded tyres.

We have received many gratifying testimonials in favor of the superior quality of Lowmoor Tyres, and now call the attention of railroad men to merely one letter which we received last week, without either our suggestion or solicitation.

W. BAILEY LANG & CO.

[COPY.]

Philadelphia, July 11th, 1856.

Mr. THOMAS M. CASH.

Dear Sir—In answer to your inquiries concerning the relative merits of Tyres for Locomotives, we beg to say, that out of more than 900 Locomotives, built at these works since 1833, during which time many makes of Hoops and Bars have been tried, among the most prominent, the manufacture of the Bowling, Lowmoor, and Ames'. We have found none so uniform in excellence of quality as the Lowmoor. The Lowmoor Tyre Bars in our judgment are superior to any Tyres made, such as we have imported direct.

There have been some Tyres made either in this country or Europe, which were stamped Lowmoor, and not made by the Lowmoor Company, such doubtless have proved inferior, but we know of no Tyre Iron at present, which we would use with confidence except the Lowmoor, imported direct through the accredited agents of the Company in the United States.

Very respectfully,

[signed] RICHARD NORRIS & SON.

W. BAILEY LANG & Co., 54 Cliff street, New York, and 9 Liberty Square, Boston, are the sole and accredited agents in the United States and Canada for the Lowmoor Iron Company.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8½ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order, for workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to

BRIDGES & BROTHER, 64 Courtlandt st., N. Y.

KEROSENE LUBRICATING OIL.

SECURED BY PATENTS.

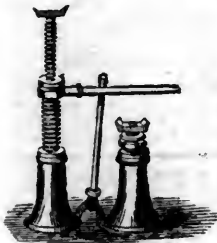
THE effect of this Oil on machinery is found to be perfectly magical. It removes the gum caused by the use of impure oils, wears equal to best Sperm Oil, and does not congeal at a low temperature. It burns magnificently in all the solar, bi-nucle and hand lamps; also in signal and bowsprit lanterns.

The attention of engineers, ship-owners, ship-chandlers, ship supply men and others, is particularly requested to the certificates to be seen at the office of

AUSTENS,
AGENTS FOR THE
KEROSENE OIL CO.,
No. 50 BEAVER ST.,
NEW YORK.

4129

BALL'S PATENT JACK SCREW.



For sale by

No.	Stand.	Screw.	Net Rise.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	28 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Freight Cars for Sale--4 ft. 8 1/2 in. Gauge.

EIGHT PLATFORM CARS, thoroughly and well made of seasoned timber, with oak sills and truck frames; axles 4 1/2 inch; Washburn & Co. Brandon wheels and warranted in every respect. These cars are now ready for delivery and will be sold low for cash or approved paper.

Inquire of
WILLIAMS & PAGE,
Railroad Supply and Furnishing Agents,
4128 44 WATER ST., BOSTON, Mass.

To Civil Engineers.

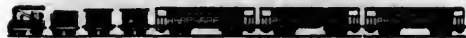
WHITE'S PATENT SILVER FOUNTAIN PEN CASE is particularly recommended to Engineers engaged in field work.

This is the only fountain pen we know of, that will not leak in the pocket, or feed too fast in using. The feed of this is perfectly under the control of the writer, who may use it without danger from blots or discoloration of the clothes. Price \$3.

They are adapted to all styles of pen. They will be sent by mail to any address upon the receipt of the price.

Address **N. DAVIDSON & CO.,**
Sole Agents for the Manufacturer and Patentee,
4m19 9 Spruce st., N. Y.

Notice to Contractors.



OFFICE OF STATE ENGINEER BURNAP, }
Orange Mill Post Office.

St. Johns River, Fla., August 20th, 1885.

SEALED PROPOSALS will be received at this office until the 20th day of August, 1885, for constructing a Canal with its necessary appendages, such as Lift Locks, Guard Locks, Basins, &c., from Lake Harney on the St. Johns river, to Indian river, a distance of thirteen miles and 3,410 feet; authorized by the General Assembly of the State of Florida at its session of 1854 and '55, entitled "An Act to provide for and encourage a liberal system of Internal Improvements in this State."

Proposals will specify, the amount for which the work will be done; the mode and manner in which payments are to be made, whether in Lands, or Money, or portions of each.

Maps, Profiles, and Estimates can be seen at this office, and any information obtained by addressing the undersigned at "Orange Mill Post Office, St. Johns River, Florida."

Proposals will be received for constructing a RAILROAD over the same ground.
F. L. DANBY,
1y35 State Engineer, State of Florida.

PATERSON, NEW JERSEY, June 16th, 1886.

NOTICE.—The Copartnership of ROGERS, KETCHUM & GROSVENOR is dissolved by the decease of THOMAS ROGERS. Either of the undersigned will use the name of the firm in liquidation.

The business of manufacturing Locomotive Engines and other machinery will be continued by "The Rogers Locomotive and Machine Works," under a charter granted by the Legislature of New Jersey.

MORRIS KETCHUM,
J. GROSVENOR.

6126

GARDINER'S CONICAL VOLUTE CAR SPRING!

Fig. 1

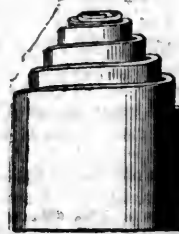
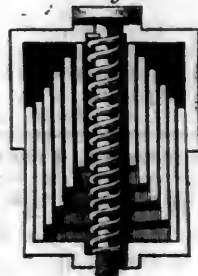


Fig. 2



Fig. 3



THE NEW YORK METALLIC CAR SPRING COMPANY

ARE NOW PREPARED TO NEGOTIATE WITH
RAILROAD COMPANIES, CAR BUILDERS AND OTHERS,
For supplying the above Spring.

THE railroad community have long felt the necessity of a good and reliable Car Spring, one with less objectionable features than either the Rubber or Elliptic Springs, for with these exceptions there are none that are in any way equal to the immense work they have to perform.

In view of obviating this evil, the above Company have been for nearly a year past engaged in testing Gardiner's Compound Volute Car Spring, erecting buildings, and constructing machinery preparatory to manufacturing them on an extensive scale; and they are now prepared to say that they can offer to the railroad interest a Car Spring that is in every respect superior to any in use. It is not liable to breakage—is of very simple construction. The motion is much greater, more steady and elastic than the Rubber Spring. It occupies the same or less space, is not as expensive, and is so graded as to accommodate itself to any load. There is no friction, which object is now for the first time accomplished. All Springs Warranted.

MANUFACTORY AND SALESROOMS:

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OFFICE: 15 NASSAU STREET, NEW YORK.

TRUSTEES OF N. Y. M. C. S. COMPANY:

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CHARLES ELY,
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CHARLES ELY, Treas.

RICHARD VOSE, Sec'y.

CHARLES MINOT, Pres't.

S. B. BOWLES,

(LATE ELLIOTT & BOWLES, 118 WILLIAM ST., NEW YORK.)

Supplies every description of

RAIL ROAD MATERIALS, AT MANUFACTURERS' PRICES.

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RAILROAD IRON EXPRESS, NEW YORK AGENTS, DAVIS & KASSON, 24 BROADWAY,

HAVING completed very favorable arrangements, via the Canals, Lakes, and Railroads for the shipment, exclusively, of RAILROAD IRON. We are now prepared to contract for the delivery of any amount from New York to points West and South-West. Confident that our facilities are unequalled, we respectfully solicit your shipments.

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N.B.—This Express being devoted exclusively to the shipment of RAILROAD IRON, affords a guarantee of rapid transit and no delay.

INSURANCE at low rates of premium, will be effected when desired.

FOR SALE.

850 TONS of Railroad Iron, Erie pattern by
CLARK & JESUP.
2128 70 Beaver st., New York.

DIVIDEND DECLARED.

NOTICE.—The President and Directors of the RICHMOND AND PETERSBURG RAILROAD COMPANY have declared a dividend for the six months ending 30th June, 1886, of two dollars and fifty cents per share, payable on and after that day to all who shall be stockholders on the same.

JNO. WILLIAMS, Treasurer.
RICHMOND, June 24th, 1886. 4126

FOR SALE.

800 TONS Rails, Erie pattern, Welsh best quality "in bond" can be delivered immediately by
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2128 70 Beaver st., New York.

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WITH extensive experience in the preliminary surveys, location, and construction, of railroads, desires a situation as Resident or Assistant Engineer. Is able to refer to the Editor of the RAILROAD JOURNAL, and others with whom he has been associated. Address "Engineer, Box 533, New York Post Office." 4127

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HARVARD UNIVERSITY,
CAMBRIDGE.
THE next term will open on the 28th day of August, 1886.
For CIRCULAR containing particulars address
625 E. N. HORSFORD, Dean of the Faculty.

300 TONS 60 LBS. T RAIL.
FOR SALE AT
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June 21st, 1886. **DRAKELEY & CO.**

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No. 44 Water Street, BOSTON, Mass.,
RAILROAD SUPPLYING AGENTS
and Commission Merchants, for the Sale of
Iron Rails, Chairs, & Spikes,
ENGINES, CARS, AND MACHINERY,
BUSH & LOBDELL's and other kinds of WHEELS,
BEST HAMMERED FAGOTED AXLES,
LOWMOOR, BOWLING, AMES', AND NASHUA TIRES,
Iron and Steel of all kinds for Railroad Shops,
CAR TRIMMINGS OF EVERY KIND,
and all articles used in Equipment and Repairs of Railroads,
Engines, and Cars, at manufacturer's prices.
THOS. S. WILLIAMS, **PHILIP S. PAGE,**
Late Supt Boston & Me R. R. Late PAGE, ALDEN & Co.

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No. 7 WALL ST., NEW YORK,
Dealers in Railway, City, County, and State
BONDS,
RAILS, LOCOMOTIVES, &c.
We have on hand and for sale, of County Bonds—
Hardin County (Ky), 6 per cts. | Davidson City (Tenn.), 6 p.cts.
Carter, Bath, and Montgomery (Ky), 6 per cts. | Iowa County (Wis.), 8 per cts.
Also a variety of CITY, COUNTY, and RAILWAY
SECURITIES in smaller lots.
April 30th, 1886.

RAILROAD TRACK,
LOCOMOTIVE & CAR JACKS.
FOR sale by **BRIDGES & BROTHER,**
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KASSON'S
LOCOMOTIVE EXPRESS
FOR THE RECEIPT AND TRANSPORTATION OF
LOCOMOTIVES,
PASSENGER AND BOX CARS
OF ANY GAUGE
To the Western and South-Western States.
PROPRIETORS—WM. M. KASSON & SON,
90 Exchange st., BUFFALO.
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Rollins & Haviland,
STOCK BROKERS,
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Railroad Iron Via Quebec.
JOHN ANDERSON & CO.
COMMISSION MERCHANTS,
SHIPPING AGENTS AND BROKERS,
Quebec and Montreal.
PARTICULAR attention given to the Transhipment of Iron
&c., in Transit for the Western Lake Ports and to the Ship-
ment of Rails in Great Britain.
Quebec, Dec. 2 1883.

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Public Stock Sales daily
AT 11 O'CLOCK A. M.,
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a choice variety of State, County, City and Railroad
Bonds and Stocks; also, Bank and Insurance Works, and
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Bills of Exchange, Mortgages, &c. REAL ESTATE SALES,
whenever required, at the STOCK EXCHANGE, or on the
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Have regular sales of Stocks, Bonds, and other Securities,
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WEDNESDAY AND SATURDAY,
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AND IF REQUIRED,

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State, County, City and Railroad BONDS and STOCKS,
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SHORTRIDGE, HOWELL, & JESSOP,
STEEL MANUFACTURERS,

ARE now prepared to execute orders for CAST STEEL
BOILER PLATES and invite the public to inspect a
sample Plate weighing 573 lbs., 13 feet by 2 feet of their make.
This Malleable Cast Steel is entirely a new article, and pos-
sesses all the ductile properties of iron, whilst from its great
strength, a saving in weight of about 50 per cent. may safely
be obtained as compared with Boilers constructed of iron,
thus securing many important advantages in Marine and Loco-
motive work. Apply to

DUNCAN LITTLEJOHN, Agent,
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H. M. SMYTH
COMMISSION MERCHANT
AND
MANUFACTURERS' AGENT,
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American and Foreign bar, boiler, and pig iron. Tyres, Axles,
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& Brown, N. Y. | SAMUEL WILLETS, Pres't of
WELLS, FARGO & Co. 18t | Am. Exchange Bank, N. Y.

Meigs & Greenleaf,
Office No. 23 William st.,
WILL give prompt attention to the purchase and sale of
STOCKS, BONDS, &c., strictly on commission. Orders
respectfully solicited.
CHAS. A. MEIGS, late Cashier Am. Ex. Bank,
A. W. GREENLEAF, late of No. 2 Wall st.
REFERENCES: American Exchange Bank, Bank of the Re-
public, Metropolitan Bank, Merchants' Bank. 17t

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[Published monthly, forwarded free by post to any part of
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(ESTABLISHED 1837.)

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this periodical is particularly directed to give them the required
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19 Arundel st., Strand, LONDON.

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RAILROAD JOURNAL, NEW YORK. 26x

LYONS' TABLES.

To Civil Engineers and Contractors.

JUST PUBLISHED—A set of Tables for finding, at a glance,
the true cubical content of Excavation and Embankments
for all Bases, and for every variety of Ground and Side Slopes.
By M. E. LYONS, Associate Engineer, Lebanon Valley R. R.

SHEET NO.	13. for Base 16ft. Slope. 1 1/2 to 1
1. General Table for all Bases and all Slopes.	14. " 20 " 1 1/2 to 1
2. For Side Hill Cuts and Fills.	15. " 24 " 1 1/2 to 1
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4. " 14 " 1 1/2 to 1.	17. " 25 " 1 1/2 to 1
5. " 15 " 1 1/2 to 1.	18. " 26 " 1 1/2 to 1
6. " 15 " 1 to 1.	19. " 28 " 1 1/2 to 1
7. " 15 " 1 1/2 to 1.	20. " 30 " 1 to 1
8. " 16 " 1 1/2 to 1.	21. " 30 " 1 1/2 to 1
9. " 16 " 1 to 1.	22. " 30 " 1 1/2 to 1
10. " 13 " 1 1/2 to 1.	23. " 32 " 1 to 1
11. " 13 " 1 1/2 to 1.	24. " 32 " 1 1/2 to 1
12. " 13 " 1 to 1.	

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

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SATURDAY, JULY 26, 1856.

[WHOLE No. 1,068, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorized European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

[New York, Saturday, July 26, 1856.

Pacific Railroad of Missouri.

We give below the recent exhibit of this important work. The whole road will be something over six hundred miles long, and will cost some \$20,000,000. The main line occupies a route on which a large business is already developed.—The South-western branch, which takes the greater part of the lands granted by Congress, runs through an excellent, though rather thinly settled country; and which is one of the richest in the United States in copper, lead and coal. We believe this route possesses all the elements necessary to furnish a lucrative traffic. We commend the statement of the company to the careful attention of the public, and hope soon to see the company in a position, which shall enable them speedily to accomplish the great undertaking.

SYNOPSIS OF LAWS.

The Pacific railroad was incorporated by an act of the General Assembly of the State of Missouri, approved March 12th, 1849; the act authorized the formation of a company, with a capital of ten millions of dollars, divided into shares of one hundred dollars each, for the construction of a railroad from St. Louis, via Jefferson city, to some point on the western boundary of the State, in what is now Cass county.

By an Act entitled, "An act to expedite the con-

struction of the Pacific railroad, and the Hannibal and St. Joseph railroad, approved February 22d, 1851, a loan of the credit of the State, to the amount of two millions of dollars, was granted to this road, for which, bonds of the State, having twenty years to run, and bearing six per cent. interest per annum, were to be issued to the company, in sums of fifty thousand dollars, upon satisfactory evidence being furnished the Governor at each application that a like sum of fifty thousand dollars had been expended by the company, of money derived from sources other than State bonds; thus limiting the use of State credit to one-half the cost of the road, the company to pay the interest and principal of the bonds issued to them, to secure which, the act gives the State a first mortgage upon the road.

At the same session of the Legislature, an Act was passed, approved March 1st, 1851, amendatory of the act of incorporation, taking off the restrictions requiring a location through Jefferson city, and terminating in Cass county, and in lieu thereof, allowing the company to locate upon any line from St. Louis to the western boundary of the State, and otherwise enlarging and defining the powers of the corporation.

On the 10th of June, 1852, an Act of Congress was passed, granting to the State of Missouri, equal to six sections of land per mile, for the construction of a railroad from St. Louis to the western boundary of the State.

By an Act of the General Assembly, approved December 25th, 1852, the land above mentioned was granted to the Pacific railroad, for the construction of a road from St. Louis, along the main line of the Pacific railroad, to a point east of the Osage river, and then on a line of road striking the western boundary of the State south of the Osage river, at any point the company might select.—This road was to be designated from the point of divergence from the main trunk line, as the South West Branch.

The same act provided for a grant of one million, of State credit, to aid in the construction of the Southwest Branch, upon certain conditions therein named. It further provided for the location of the main trunk line via Jefferson city, thence by the most practicable inland route through Johnson county, and terminating at any point the company might select in Jackson county, provided the sum of four hundred thousand dollars should be subscribed to the capital stock, by the counties along the line, west of Jefferson city.—The same act granted a further loan of one million, of State credit, to aid in the construction of the Main Trunk Line.

At the same session, a general railroad law was passed, authorizing the formation of railroad corporations, providing in detail for condemning the right of way, and requiring all railroad companies

to adopt the gauge of five feet six inches for their track. This act was approved February 24th, 1853.

By an act approved the same day, the Pacific railroad was authorized to extend, construct and operate their road to any point west of the State boundary line.

By an act approved February 10th, 1855, the law in regard to issuing State bonds, was so amended, as to authorize their delivery to the different companies, in any amounts, by showing an expenditure entitling them to the amount applied for, and authorizing the companies to sell the bonds at the market price; the old law required each issue to be for fifty thousand dollars, which must be expended, and a like sum from other sources, before making a further application; it also required the bonds to be sold at not less than par.

The "Act to secure the completion of certain railroads in this State," which passed December 10th, 1855, grants to the Pacific railroad, for the construction of the Main Trunk road, a further loan of two millions of State bonds, and provides for the transfer of the million of dollars of State bonds, heretofore granted to the Southwest Branch, to aid in the construction of the main road, west of Jefferson city, the issue of bonds to be as two for one, on the expenditure of money derived from other sources.

By the same act, it was provided that the company shall issue bonds to the amount of ten million dollars, for the construction of the Southwest Branch, secured by mortgage upon the Southwest Branch road, and about one million acres of land, and further, to aid the construction of this important road, it was provided that the State should guarantee three millions of the bonds thus provided for, the proceeds of the guaranteed bonds to be expended upon the first division of the road, extending from Franklin, to a point beyond the Gasconade river, 114 miles distant from where the branch diverges from the main road, the guaranteed bonds to be issued in sums of one hundred thousand dollars, requiring an expenditure of fifty thousand dollars from other sources, for every hundred thousand dollars of guaranteed bonds.—But, in case of a sale of a larger amount than one hundred thousand dollars, at one time, the guarantee shall be given, and the proceeds paid over to the State Treasurer, to be paid out to the company upon the ratio of two for one expended from other sources. This act requires the first division of the Southwest Branch to be completed within three years from the 10th of December, 1855, under penalty of forfeiture to the State, of the road and land, subject, however, to the mortgage above mentioned.

There is a further provision in the law, giving the right of pre-emption to settlers on the land of

the company outside of the six miles and within fifteen miles. This will include about 40,000 acres that the company may have to sell, at \$2.50 per acre, to the settlers.

The law last mentioned, was passed, and sent to the Governor for his approval, who returned it with his veto; the bill was then passed by the constitutional majority, through both Houses, was properly certified by the presiding officers, and deposited in the proper department with the other laws.

The Governor's attention being called to what was supposed to be some irregularities in the passage of the bill after it was returned with his objections, he submitted the questions to the Attorney-General, who, upon technical grounds, declared the law invalid. To settle the question, an agreed case was made up, presenting the facts and records, and submitted to the Supreme Court, in the form of a petition for a mandamus against the Governor, requiring him to issue bonds to the Pacific railroad.

The Supreme Court unanimously decided the law to be valid, and in conformity with the requirements of the constitution, thus putting all questions as to the validity of the law, forever at rest.

The law as passed is popular, and fully approved of by a large majority of the people of the State.

CONSTRUCTION OF SOUTHWEST BRANCH.

The work on this road was commenced by Diven, Stanciliffe & Co., in September, 1855, under an old contract entered into with them in March, 1854, for the construction of the Branch road. Since the passage of the railroad law of December 10th, 1855, this contract has been modified as to the manner of payments and the time of completion of contract, so as to conform to the requirements of the law.

By this contract, Messrs. Diven, Stanciliffe & Co. agree to build a first class railroad, including graduation, masonry, bridges, superstructure, ballasting, sidings, wood-sheds, water tanks, fencing, &c., all specified in detail, and the work and material to be equal in quality to the work on the first division of the Pacific railroad, and the whole made satisfactory to the company's engineer.

The company having the right to put on force at contractors' expense, if they fail to press the work; also, the right to stop the work, or limit the amount at any time, by giving contractors ninety days' notice. Payments to be made monthly, as the work progresses, less fifteen per cent., which is retained as a guarantee for the faithful performance of the contract, to the extent of one hundred thousand dollars.

The contractors to receive, for construction of the whole road complete, the sum of seven millions six hundred and seventy-one thousand six hundred and eighty dollars. This amount was based upon the engineer's estimate of quantities, and the contract provides for additional compensation to the contractors, if the quantities exceed the estimates; but they take the risk of rock or hard pan excavation, if the aggregate is within the quantity of yards specified in the estimates.

Great improvements have since been made, by a re location of a part of the line, embracing the heavy work, and no apprehension is now entertained of an excess in quantities, and the price named may be considered as the total cost of the road, exclusive of rolling stock.

The company have the right to stop the work at any point within twenty miles of the State line, by giving notice to the contractors before they have commenced work on that portion of the line; and in case the work is so terminated, the estimated value of that part of the work is to be deducted from the contract price of the road.

The company's title to the land will be complete when the road reaches a point within twenty miles of the State line, and the town of Neosho, it is expected, will be the present terminus of the road.

CHARACTER OF THE COUNTRY.

The death of Mr. O'Sullivan, the Chief Engineer, on the first of November last, created a vacancy

in that office, which was not permanently filled until the first of June, 1856, by the election of Edward Miller, Esq., of Pennsylvania. Mr. Miller has not yet had time to examine the line of road, or report on the character of country through which it passes.

The Southwest Branch was surveyed and located during the year 1853, under the immediate charge of James K. Ford, Esq., now of New York. The following remarks are extracted from Mr. Ford's report to the Chief Engineer:

"For the more conveniently considering this subject, I have divided the portion of the State tributary to this road into three portions, each of which has its distributive characteristics of soil, mineral and agricultural products, and of the grades and curves on that portion of the road within its limits.

"The first division extends from the main stem of the Pacific railroad about forty miles from St. Louis, near the west line of St. Louis county, to the Gasconade river, at the mouth of Little Piney, a distance of about ninety miles. The line is mostly on the ridge, or divide, between the waters of the Meramec and those of the Bourbeuse; it descends the valley of Beaver creek to Little Piney, and down that stream to its mouth.

"The country traversed by and tributary to this portion of the road, is rich in iron, lead and copper, the Meramec iron works are within six miles of the road, and several mines of lead and copper are now successfully worked.

"There are two iron works on the Meramec—the Moselle, at the mouth of the Bourbeuse, and the Meramec or James' at the Great Spring, near the mouth of the dry fork of the Meramec.

"James' works consists of one furnace, several bloomeries and a rolling mill. Their ore banks are inexhaustible, and their iron of superior quality. Their water power is the best in the State. Another iron furnace has been commenced on the south side of the Meramec, near the Moselle works; but operations have been suspended for the present, though not because of any deficiency of ore.

"Iron ore is in sufficient abundance on other parts of the Meramec to warrant the erection of furnaces, if proper facilities were afforded for sending the products to market.

"The lead furnaces on the Meramec, are as follows, to wit: Thews & Vallies', which smelts the products of the Mount Hope and Cove leads. These leads are vertical, and of good strength, and will produce a permanent yield of ore. I. N. Inge's furnace is 'Virginia Lead,' the richest and strongest vertical lead vein ever opened in the United States, but not worked very much now, for want of capital and mining enterprise to work it below its present levels, now about 260 feet from the surface, to which depth it has been worked by horse power. There are three other lead furnaces on the Meramec—Gallaher's, Hibler's and Chapman's. The yield of these furnaces is not known, as no steady mining is carried on in their vicinity, for want of the requisite capital, and mining experience to penetrate below the mere surface of the earth, and for want of transportation.

"No vertical lead veins have been discovered above the 'Virginia Lead,' but nearly every hill bordering the Meramec, from this point to the Courtois creek, a distance of about forty miles, will yield more or less lead; the formation being that of magnesian limestone, known as the 'lead bearing rock.' The lead ore, so far as discovered, exists in horizontal layers, beds or veins (in this region) at different elevations, which have not been opened, except in a few instances. The mining now carried on consists in searching for the loose ore beneath the clay on the sides of the hills, where its rocky inclosure has decayed, and left the ore free and easily to be obtained by the pick and shovel of the most inexperienced miner. When capital and mining experience are entered in business, it is believed the yields of lead ore on the Meramec will be very large.

"In addition to the lead veins already referred to, there are several other veins which yield well, though not yet proven to be vertical veins. These

are the Generelly and Borthold mines, the Thomas mine, Clark and Westover mines, Green's diggings, Mineral Hill diggings, and Frank and William's mines—all of which yield well, when mined with judgment. There are two copper furnaces—one owned by the Stanton Copper Company of St. Louis; the other by the Meramec Copper Co. Only one, the Stanton Copper Company's has been in operation the last year.

"Each company own several valuable copper mines along the Meramec.

"Clark and Hibler also own several, which have been only far enough explored to show that they were valuable mines.

"Mr. A. Park is owner of several copper mines of value, and has been opening one or two the last year on the Indian creek, a tributary of the Meramec. None of these mines, except those of the Stanton Copper Company, have been opened deeper than can be done by a common hand windlass, yet the yield has in some instances been very promising. The Stanton Copper Company have been working with horse power the last year; and the rich yield of their mine has induced them to resort to steam power, in order to descend to greater depths, and richer ores.

"As an agricultural country, it is not equal to the region farther west; the ridges are rocky and not very fertile—but the valleys are very productive.

"The second division extends from the mouth of the Little Piney to Springfield, a distance of about one hundred and five miles. Immediately to the south, on the head waters of the Meramec, St. Francis, Big Black, and Current river, and on the tributaries of the Gasconade, are very extensive pine forests. The pine from the head waters of Indian Creek, the Bazile, and Courtois will find its way to market over the South-western Branch, though it lies from twelve to twenty miles from the line of road. But the largest portion, for the present, will come from the Piney Creek, and other parts of the waters of the Gasconade. It is estimated that there are from thirty to forty pine saw-mills on these waters, the products of which, sent down the river, are from three to four million feet annually. The dangers and uncertainties of the river navigation operate to the serious injury of this trade. Some of the large lumber dealers were nearly ruined last year, by the loss of rafts on the Missouri. There is a good reason for believing that all the lumber sent to St. Louis will seek conveyance by the railroad, and in addition a large business be established for the broad prairie plains of the South-west.

"The line after leaving the valley of the Gasconade, lies upon the ridge between the Osage and Gasconade. From this westward, the character of the country begins to change, the ridge becomes broader, the declivities are less abrupt, the valleys wider, and a larger proportion of the land seems to be fertile and productive. I am not aware of any minerals having been discovered in this division.

"The third division extends from Springfield to the State line, a distance of about ninety miles. About thirty miles west of Springfield, the line leaves the summit between the Osage and White river waters; and passing down one branch of Spring river, and up another, it crosses into the valley of Clear Creek, down that to Shoal Creek, and down that to the mouth of Hickory Creek, near Neosho; then up a small tributary of Hickory, to the head of Lost Creek; and down that stream to the State line, at a point about twenty-five miles north of the Arkansas line.

"The region traversed by this division is of the richest and most fertile nature; broad prairies slightly undulating, wide valleys, gentle declivities of varied character, but all fertile, constitute the greater portion of this part of the State. Near Neosho, the line passes through an immense deposit of lead ore, which has been found to extend over an area of more than five hundred square miles. The ore is exceedingly abundant, and easily mined; it yields over 70 per cent. of lead, of the best and softest quality. At present only

one furnace is employed in smelting the lead, and that is only worked two or three months in the year. The pigs are hauled in wagons twenty miles to the Neosho river, sent in flat-boats down to Fort Smith, and thence in steamboats down the Arkansas, and Mississippi to New Orleans, and thence by sea to New York. This can only be done for a few months in the Spring; and though the profits are sufficiently remunerative, the great want of capital has hitherto prevented the working these mines to any great extent. It would be difficult to estimate correctly the amount that would be made and sent to market, were there a regular, cheap and speedy communication by railroad with St. Louis.

"Coal is also found in the vicinity of the line, and Shoal, Hickory, and Spring creeks on the north, and Buffalo on the south, afford abundant supplies of power for machinery."

Beyond the terminus lies a vast and fertile territory, now inhabited by the numerous Indian tribes accumulated there by the policy of the Government. Many of these tribes are partially civilized, and engaged in agriculture. Immediately beyond lay fields of salt, and thousands of acres covered with gypsum.

The settlement and improvement of the country along the line of road, since the date of Mr. Ford's report, has been rapid and encouraging. Emigrants, led by the beauty and fertility of the country, and encouraged by the prospects of an outlet to market by railroad, have flocked thither in great numbers, such as to nearly double the population of some counties in three years, and make new developments as to the value and importance of that part of the State.

The most rugged and broken country on the line is in the region of the Gasconade river, and extending about forty miles, being from the point where the road begins to descend towards the river, to where it reaches the top of the ridge beyond the Gasconade.

Although not presenting the beautiful and undulating prairies that abound on other portions of the line, yet even here the soil is rich, abounding in the best of timber, and of large size—such as oak, walnut, maple, hickory and ash—all valuable for the St. Louis market, and will be available for that purpose.

The bottom lands along the Gasconade, although irregular, are very fertile, producing the finest of corn and other grains.

As the road approaches Lebanon, it enters upon a plateau of beautiful upland, known as the divide between the Osage and Gasconade. Extending southwest, it expands, separating the waters of White river and Osage, and, further on, the waters of the Neosho from those of White river and Osage, forming an extent of table land scarcely equalled in extent and beauty in any part of the West. The division into prairie and wood land is most propitious—about two-thirds prairie and one-third timber. None of the prairies are large, so that every farm must be convenient to timber. Running springs afford excellent water; the country is free from swamps, and considered healthy.

THE GREAT LEAD REGION.

The lead region near Neosho, as mentioned by Mr. Ford, is now being developed. Late discoveries have been made, and, at this time, several hundred men are engaged in digging for mineral, and with the most encouraging success. "Extravagant accounts have been forwarded to the railroad office of the great value of the lands belonging to the company in that region for their mineral wealth. It is represented by intelligent citizens of that part of the State, that the lead mines extend over many thousands of acres of the company's land, and some tracts have been valued as being worth one thousand dollars per acre for the whole tract.

Miners' claims for discoveries (being the privilege of digging upon the company's land) have been sold at \$1,200 and \$1,500 for 150 ft. square, subject, of course, to such rent as the company may claim. A few weeks ago Messrs. Harklerodos

sent a written proposition to the railroad company, proposing to lease one tract of land for ten years, and pay one thousand dollars per year, rent, for the privilege of working the mines on the same.

The company expect to have the mining region thoroughly examined without delay by the State Geologist, (Professor Swallow,) and learn, as far as practicable, the extent and value of the mines situated on their land.

From the information derived from various sources within the last three months, no doubt is entertained that the company own many thousand acres of land of tenfold more value than heretofore estimated.

There is said to be one remarkable feature about these mineral lands—they are generally rich agricultural lands. Lead deposits are often found in the most fertile prairies. The writer of this might be justified in using more positive terms in speaking of the extent and value of these mines, as the information derived from various sources all goes to confirm the most extravagant statements of their extent and richness, but he prefers to await the scientific and detailed report by Professor Swallow.

THE EXTENT OF COUNTRY ON THE SOUTH-WEST BRANCH.

Mr. Ford, in his report, estimates the extent of country tributary to the South-west Branch as equal to nineteen thousand four hundred and fifty square miles—a territory larger than the three States of Vermont, Massachusetts and Rhode Island; and an examination of the map will satisfy any one that this estimate is not exaggerated, as the geographical formation of that region must always make the country now tributary to that line of road remain so. It embraces a part of the counties of Franklin, Washington, Gasconade, and Miller, and all of the counties of Crawford, Dent, Pulaski, Camden, Leclerc, Texas, Wright, Dallas, Hickory, Cedar, Polk, Dade, Jasper, Green, Lawrence, Ozark, Taney, Stone, Barry, McDonald, and Newton; to the country thus tributary may be added the counties of Washington, Benton, and Madison, in Arkansas, the southern end of Kansas Territory, and the Indian Territory north of the Arkansas river.

THE MEANS FOR CONSTRUCTING THE SOUTH-WEST BRANCH.

The lands granted to the Company for the construction of a road from St. Louis to the western boundary of the State amount to 1,167,000 acres; of this amount, 127,000 acres belong to the main road, being for the first thirty-seven miles of road between St. Louis and the commencement of the branch road, leaving one million and forty thousand acres as belonging to the branch road.

The Company have executed a mortgage upon this land, and also including the road to be constructed, to secure the payment of ten million dollars of the Bonds of the Company, payable in twenty years, with seven per cent. interest, payable semi-annually.

Of these Bonds, the State of Missouri guarantees the payment of three millions of dollars, requiring the proceeds of said guaranteed Bonds to be expended in the construction of the first division of the road.

The proceeds of the ten million Bonds thus secured will build and equip the road.

In addition to this, the sum of \$853,800 has been subscribed by counties and individuals along the line, payable in cash; these subscriptions will be collected within the next three years, and can be appropriated to paying interest on bonds used in the construction of the first division: the completion of the first division will ensure the payment of interest from the receipts of the road.

THE LANDS.

The lands granted to the road have all been selected, and the selections approved by the department at Washington. The examination and classification was commenced last year, under the direction of Mr. O'Sullivan, but little progress had been made before his death. Since then, the as-

sistant in charge of that department has been engaged on other work.

An immediate organization of the land department is contemplated, and competent men will be selected to examine and classify the lands in each county. When thus examined and classified, they will be valued according to classification; that is, a minimum value will be fixed upon each class.

These classifications will embrace:—

1. First class mineral and coal lands, known to be very valuable from development of ores and coals.
2. Second class mineral lands, known to abound in mineral, but not yet fully explored.
3. First class agricultural lands near the line of road, town sites and lands near the towns.
4. First class agricultural lands, equally fertile, but further from the line of road.
5. Second class agricultural lands, and lands distant from 12 to 15 miles from the road.
6. Lands along and near the Gasconade, convenient to the road, and valuable for the timber.
7. Third class farming lands, being broken and inferior land, and land distant from the line of road. This class would not embrace more than 150,000 acres, worth from two dollars and fifty cents to five dollars per acre.

Under the law of 1852, giving the land to the railroad company, the right of pre-emption is granted to actual settlers, at \$2.50 per acre. From the returns made this will take 90,000 or 100,000 acres of the land. The law of December 10th, 1855, extends the right of pre-emption to certain settlers outside of the six miles, and within the fifteen miles, at the same price. This will cover about 40,000 acres more.

Agricultural lands between Lebanon and Springfield, and beyond Springfield, range in price from \$5 to \$25 per acre, and have been sold at the highest figure named, notwithstanding the great distance they are situated from market. The opening of the road must make all the land of that region equal in value to any part of the State.

A low valuation of these lands will swell the aggregate to over ten millions of dollars, and perhaps, no lands in the West will be more enhanced in value by the construction of a railroad than those of the South-west. At least one-half the land can be put down as choice agricultural lands, worth from \$8 to \$25 per acre.

The inferior agricultural lands are nearest St. Louis, and their proximity to market, will contribute greatly to give them an increased value.

The report upon the mineral lands, it is believed will astonish the most sanguine in showing their immense value. So far as the guaranteed Bonds are concerned, the value of the lands or road, when built, is of little consideration, as the assumption and guarantee of the State makes them perfectly secure as an investment.

THE STATE OF MISSOURI

contains an area of 67,380 square miles, being only 414 square miles less in extent than the four States of New York, New Jersey, Connecticut and Massachusetts combined. From the extent and uniform richness of its soil, it is susceptible of producing twice the amount of agricultural products of the four States named.

It is larger in extent than the six New England States. It has a front on the Mississippi river of five hundred miles. The Missouri river meanders through the State from West to East, over three hundred miles.

The agricultural productions of this State are equal to any in the West. The hemp, tobacco and wheat of Missouri have a reputation in every market for their superior qualities.

The State abounds in mineral as well as agricultural wealth.

The Iron Mountain is noted for the vast quantity and quality of its ores. It has been estimated that over two hundred million tons of ore, thrown up by volcanic action, now lie above the level of the valley in which it is situated. Thousands of tons can be picked up by hand as needed for use. The Pilot Knob, near by, presents an equal

amount of ore in a more compact form, but easily procured by blasting. Lead, copper, zinc, and other metals, are found in different parts of the State. Coal of fine quality is abundant. Cannel coal is found in large quantities in the counties of Calaway, Cale, Cooper and Saline. Bituminous coal is found in various parts of the State in great abundance.

POPULATION OF MISSOURI.

In 1820,	66,586
1830,	140,455
1840,	383,702
1850,	682,043
1856, (estimated from reliable data).....	900,000

Of this population only about 10 per cent. are slaves, being a less ratio than any slave State in the Union, Delaware excepted.

THE STATE DEBT.

The debt of the State, on her own account, (being in part for the capital stock of the Bank of the State of Missouri, now worth a premium,) is \$602,000.

Bonds issued to the Railroads, for which the State holds a first lien on the roads on which the bonds are expended, \$8,200,000.

Bonds authorized by law to be issued to the different railroads, the issue of which will extend through the next five years, \$8,050,000.

PROVISION FOR STATE DEBT.

The act of December 10, 1855, requires all the railroads entitled to State bonds to set apart a sum each year, as a sinking fund, which will be sufficient to pay off the bonds as they mature. At the same session an act was passed providing for a State sinking fund, to guard against any delinquency of the companies. Out of this fund the Treasurer is to pay interest upon the State bonds or bonds guaranteed by the State, whenever necessary, to maintain the faith and credit of the State.

STATE REVENUES.

The rate of taxation for State purposes is one-twentieth of one per cent., and this is collected upon a very low valuation of property. A continued surplus in the treasury for the last six years has not made it necessary to scrutinize the assessments of property as made.

Total revenue of 1854, (last report of Auditor,) \$429,872.34.

Annual expenditure for ordinary purposes of Government, about \$97,000.

Twenty-five per cent. of the gross revenue is appropriated to support of common schools.

THE CITY OF ST. LOUIS.

The city of St. Louis is the great commercial metropolis of the Mississippi valley. A glance at the map will show the importance of it, central location upon the great river of the continent; and the statistics of its growth will show that its position has been fully appreciated by our enterprising people.

Population in 1830,	6,694
" 1840,	16,649
" 1850,	74,439
" 1856, (February,)	121,867

The city is now rapidly improving; over three thousand houses will be built within the year 1856.

PACIFIC RAILROAD.

The Pacific Railroad proper, as located from St. Louis, via Jefferson city, thence through Moneau, Cooper, Pettus and Johnson counties, and terminating at Kansas, in Jackson county, was commenced in August, 1851. The work between St. Louis and Jefferson city was very heavy, much of it rock excavation, including four long tunnels. The failure of contractors, the advance in the price of labor and materials, the visitations of cholera, for three seasons, along the line, and the want of means to meet the increased cost of the work, all tended to delay the completion of the road to a paying point.

The road was opened through from St. Louis to Jefferson city, about the first of March, 1856—a distance of 125 miles. Since that time trains have

run regularly between these points. The road is now in first-rate condition, and will, from the first of July, pay interest upon the cost of construction. The work is under contract, west of Jefferson city, and it is contemplated to have forty miles further completed by the first of June next; this will add greatly to the business of the road, and make it a paying stock.

The expenditures on the main Pacific road to June 1st, 1856, amount to seven million four hundred and twenty-five thousand dollars. Of this amount, three millions were derived from the capital stock paid in; the balance from the sale of State bonds.

There is yet due on subscriptions west of Jefferson city, and applicable to the construction of the main road, seven hundred and thirty-six thousand dollars.

The company own 127,000 acres of land appropriated to the construction of the main road. They have just issued ten-year bonds, secured by a mortgage upon this land, for six hundred thousand dollars, and expect to appropriate the proceeds of these bonds to the construction of the main road.

The company is entitled to a further loan of State bonds, to the amount of \$1,300,000, to aid in the construction of the main road. These resources will extend the road one hundred miles beyond Jefferson city and, and insure a profitable business for the road.

ROLLING STOCK.

The company have twenty-six first-class locomotives; 17 1st class passenger cars; 4 2d class passenger cars; 2 mail cars; 4 baggage cars; 172 freight cars; 47 gravel cars, and 40 iron and hand cars.

The company make their own cars, and have a commodious shop for repair of locomotives, and to do the work incident to the repair and running of the road.

NOTE.—The different laws for the benefit of the Railroad have all been accepted by the company, in the form required, but it was not deemed necessary to delay this publication, to obtain copies from Jefferson city, as the issue of State bonds and guaranteed bonds by the State, under those laws, is evidence that the acceptance was on file.

The main road and branch make a common stock.

The State required no bonus for transferring the grant of land to the railroad, and the road is exempt from taxation, "until the road is completed, opened, and in operation," and shall declare a dividend.

WM. M. McPHERSON, President P. R. R.
New York, July 10, 1856.

Cape Cod Railway.

The annual meeting of the Shareholders was held on the 9th inst., and the following gentlemen were chosen directors for the ensuing year, viz: J. H. W. Page, Richard Borden, Benjamin Burgess, M. S. Lincoln, Alexander Baxter, Nathaniel S. Simpkins, and Matthew Starbuck. All the acts and doings of the directors for the past year, to secure the Nantucket travel, were endorsed by the shareholders.—The annual report presents the following facts:

The receipts of the Company from May 31, 1855, to May 31, 1856:—

From Passengers	\$88,178 93
" Freight	26,659 50
" Mails	6,650 00
" Express	2,000 04
" Rents	221 78
" Wharfage	79 80
	<hr/>
	\$122,789 50

Expenses for same period 79,376 49

Net income \$43,413 01

The net income from May 31, 1854, to May 31, 1855, was 56,739 51

Decrease of net income compared with 1854-55 \$13,468 50

Commercial Tonnage of the United States.

We give from official documents, the following tabular statement, showing the amount of enrolled and registered tonnage owned in the several States.

	1851.	1854.	1855.
Northern States.			
New York.....	1,041,014	1,415,081	1,464,221
Massachusetts...	694,402	916,074	979,210
Maine.....	536,315	686,100	806,605
Pennsylvania....	284,373	361,827	397,767
Connecticut.....	116,179	129,318	187,180
New Jersey.....	88,895	105,047	121,019
California	58,435	102,257	92,262
Ohio	58,352	80,859	91,606
Michigan.....	41,774	56,849	69,489
Illinois.....	23,103	31,684	53,796
Rhode Island....	38,050	45,911	51,039
New Hampshire..	25,427	28,838	30,329
Wisconsin.....	2,946	14,217	16,623
Vermont.....	3,932	7,874	6,915
Indiana.....		2,952	3,698
Oregon Ter'y....	1,063	1,192	1,192

Total, Northern States..... 3,014,260 3,986,430 4,821,951

	1851.	1854.	1855.
Southern States.			
Maryland.....	204,544	220,208	234,805
Louisiana.....	252,284	187,078	204,148
Virginia.....	68,799	81,840	91,788
South Carolina..	35,187	42,115	60,935
Missouri.....	34,065	48,575	60,892
North Carolina..	43,782	57,800	60,077
Alabama.....	27,327	33,599	36,274
Dist. of Columbia.	22,903	35,982	34,530
Georgia.....	24,185	27,321	29,505
Kentucky.....	12,937	20,122	22,680
Delaware.....	11,880	18,554	19,186
Florida.....	9,374	14,393	14,833
Texas.....	4,912	9,698	8,801
Tennessee.....	3,587	7,621	8,403
Mississippi.....	1,404	1,363	2,475

Total So. States. 757,170 809,264 859,032

We also give the tonnage of the several leading ports.

Tonnage of various ports in the United States.

	1851.	1853.	1854.	1855.
New York. 931,193	1,149,183	1,262,798	1,298,234	
Boston 342,936	450,492	495,879	546,268	
Phila. 222,428	252,451	268,746	293,806	
N. Orleans. 251,900	153,184	183,818	200,836	
Balt. 160,511	158,478	170,835	183,108	
Bath, Me. 103,795	129,466	154,501	175,258	
N. Bedford. 181,409	155,630	165,910	189,986	
Waldob'ro. 103,593	103,423	122,735	148,896	
Portland.. 97,671	104,350	123,672	137,317	
Pittsburg.. 53,734	79,361	84,870	93,691	
S. Fran'co. 58,063	97,699	93,519	87,842	
Barnstable. 72,997	78,748	81,957	80,615	
Buffalo... 43,603	55,184	82,678	76,952	
Belfast, Me. 44,835	56,422	55,899	70,762	
Detroit.... 40,319	43,756	52,456	65,058	
St. Louis.. 34,065	45,441	48,575	60,592	
Charleston. 31,910	42,653	38,102	56,419	
Penobscot. 40,809	45,724	44,991	53,965	
Cuyahoga. 36,070	43,491	45,483	51,078	
Chicago .. 23,103	27,015	31,041	50,972	

Brockville and Pembroke (Ca.) Railway.

We have much pleasure in informing our readers throughout these United Counties, that the Counties Council, which terminated its labors last Saturday, has decided, as far as it is concerned, that the Municipalities should go on with the construction of the road themselves. The Municipality of Brockville has already signified its desire to do so; and Elizabethtown which had postponed coming to a decision until it had heard what course Lanark and Renfrew had adopted, will immediately follow in their footsteps. A meeting of the Directors took place yesterday at Brockville, to take into consideration, with the committees appointed on behalf of the municipalities, the immediate prosecution of the work. If no unforeseen difficulty ensues, and we anticipate none, an immense amount of work can yet be

done this fall. A sufficient quantity of iron can be delivered before the close of navigation at Brockville and Smith's Falls, so that rails can be laid down very early next spring, and we have not the least doubt but the cars will be running to Perth and Smith's Falls or Carleton Place by July or August, 1867.

The Municipalities, by adopting this course, will have a road built in every way answering the purpose intended, for at least one-half the cost that Messrs. Sykes, DeBergue & Co., or Mr. Moore, were to receive. The three Municipalities have at their command debentures equal in amount to \$287,000, which amount it is correctly ascertained will complete the road to Arnprior and Perth. It is not, however, the intention of the parties interested to discontinue operations at Arnprior; on the contrary, arrangements can so be effected without again calling upon the Municipalities, to carry on the work, as originally intended, to Pembroke.—*Perth Standard*.

New York and Erie Railroad.

The following table shows the amount of earnings of this road during the nine months, from October 1st, till June 30th, 1855-'56, compared with its earnings during the same months in 1854-'55.

	1855-'56.	1854-'55.
October	\$603,139	\$541,429
November	535,616	491,492
December	589,969	454,481
January	402,818	427,336
February	362,719	340,761
March	455,256	507,090
April	613,669	506,597
May	617,664	475,127
June	490,765	396,887

Total.....\$4,671,615 \$4,141,090
Increase in nine months.....\$530,525

Pittsburg and Connellsville Railroad Co.

The *Pittsburg Evening Chronicle* of June 28th, contains the annexed proceedings of a meeting of the Board of Directors of the Pittsburg and Connellsville Railway Company, held June 26th:—

Whereas, The City authorities of Baltimore have made it the duty of the Finance Commissioners of said city to superintend the disbursements of the proceeds of one million of dollars of bonds issued by that city in aid of the Pittsburg and Connellsville Railroad Company; and whereas, the said Commissioners of Finance, being unable to give their own attention to said disbursements, have suggested the plan of appointing as Executive officers of the company, gentlemen with whom their previous business and social connections have been intimate, in order that they may thus be relieved from personal supervision, and still comply with the requisitions of the ordinance; and whereas, for the purpose of co-operation with the Board of Directors of this company in carrying out the above views of the Commissioners of Finance of Baltimore, Oliver W. Barnes Esq., President, Chief Engineer and General Superintendent, has tendered his resignation of those offices, therefore,

Resolved, That this Board do now accept the above resignation of Oliver W. Barnes Esq., and whereas, this Board possesses full confidence in the ability and integrity of Oliver W. Barnes, and sincerely regret his retirement from the service of the company, prior to the completion of the great and important work in which he and they are engaged, be it

Resolved, That we consider it due to Mr. Barnes, to place upon the minutes of this Board of Directors our appreciation of his valuable services in the several capacities above stated, and our recognition of the industry, fidelity and ability with which he has discharged every duty of the various important trusts confided to him.

After the acceptance of Mr. Barnes' resignation, Benjamin H. Latrobe Esq., of Baltimore, was elected President of the company.

The new organization of the Board of Directors will therefore stand as follows:

Benjamin H. Latrobe, of Baltimore, President.
Oliver B. Barnes, Thomas Bakewell, Wm. J. Anderson, Samuel A. Long, Geo. Miltenberger, Joseph Pennock, of city of Pittsburgh, Pa.; Dan. R. Davidson, Connellsville, Fayette Co., Pa.; Andrew Stewart, Uniontown, Fayette Co., Pa.; Columbus O'Donnell, Chancey Brooks, George W. Dobbin, of Baltimore, Md.

Union Railroad Depot at Troy.

On a recent visit to Troy, we had the pleasure of viewing one of the finest railroad depots in the United States, and if we except one in Russia, we believe the largest in the world. The construction of this spacious and commodious edifice was commenced in 1853, and completed in 1854. The length of the building is 400 feet, and the width of the part devoted to the "entrance and exit" of the engines and cars is 150 feet—the width of the passenger rooms on the west front is 40 feet, and the width of the portion on the east side (the location of the water-tank and turntable) is 50 feet, showing a total width of 240 feet, the whole covering about 100,000 square feet, or more than two acres of ground. The main building is covered by an arched truss roof, (Howe's plan,) in one single span, covering 80,000 square feet, resting on the main wall, which is 27 feet in height. The roof is supported by arched ribs or trusses of wood, 3 feet 4 inches in depth, with horizontal or tie-rods of iron, extending from one end of the truss to the other. The trusses are placed 18 feet 10 inches apart. The roof at the centre has a rise of 28 feet above the top of the walls, making the height at the centre 55 feet above the tracks. On the top of the roof is a ventilator, 30 feet wide and 15 feet high, extending the entire length of the building, with windows and slates placed alternately on each side. The ends of the main building are constructed upon six large free-stone columns, (from the quarries of Connecticut) with elliptical arches sprung from one stone to another, and subdivided by cast iron columns, forming two gothic arches of each elliptical arch, making ten openings for tracks, eight of which are now laid through the building; each opening at the ends of the depot is provided with substantial doors, and the whole lighted with thirty gas burners.

The passenger rooms on the west front or side are divided into four suites of rooms, each suite comprising a baggage room, gentlemen's sitting room, ladies' sitting room, and private parlor.—A ticket office, wash room and gentlemen's and ladies' water closets, (with the most approved self-acting water fixtures,) are also attached to each of the four different suites of rooms. Between each suite of rooms we have passages for carriages from the cars of the four different railroad companies at whose expense and for whose use the building was erected. The building has three towers. On the front and over the centre of the passenger rooms, is situated the main tower, 115 feet in height, so constructed as to admit of a clock and bell. At each end of the passenger rooms are towers, four stories in height, which are occupied by the several railroad companies for general offices. These rooms are spacious and well adapted to the purpose for which they are designed.

In the centre of the passenger rooms, for a distance of ninety feet, the building is three stories in height—the second and third stories being used for refreshment rooms, with entrances by two flights of stairs in the main hall, and by two flights of stairs and balcony (187 feet in length) on the inside of the depot. The whole building is lighted by gas and heated by steam, there being some 14,000 feet of gas and steam pipe used for that purpose.

On the front of the passenger department is a platform, over which is a projecting roof ten feet wide, supported by cast-iron brackets, so that carriages can drive under and receive and deliver passengers in storm or sunshine without exposure

to either. The building was erected at a cost of \$125,000, the ground cost \$105,000, being a total of \$230,000. The Union Railroad Company are also the proprietors of two miles of railroad thro' the city, which connects the four roads. That company is appropriately designated from the fact that the road and depot were built by four companies, viz: the Hudson River, the Boston and Troy, the New York Central, and the Rensselaer and Saratoga Railroad corporations. The building (with the exception of the roof) is of brick, in a style resembling or nearly approaching the Gothic. It was drawn by Mr. E. Bonnet, a distinguished French architect, under the direction of E. French, Esq., Chief, and G. S. Avery, Esq., Superintending Engineer. In this connection it is but just and proper to state that to the last named gentleman we are indebted for the "facts and figures in the preceding account. We should also acknowledge our obligations to Mr. A. McCoy, the Superintendent of the Union Railroad Company, to whose politeness we are indebted for a thorough personal inspection of this model building. It is a remarkable fact that, notwithstanding the road crosses a great number of streets, (the entire width of that part of the city,) not an accident has happened to a single individual since the rails were laid, owing in a great measure, to the watchful energy of the Superintendent, (Mr. McCoy,) who is ever on the alert to detect any delinquencies on the part of the police stationed at the crossings. Indeed, the entire police arrangements at the depot are admirable. Runners, cab drivers, and hackmen, are not allowed to annoy passengers, or distract them by their officiousness, as is too frequently the case at railroad stations in our large cities. Several uniformed policemen are employed by the company whose duty it is to prevent such annoyance, and to impart information to the ignorant but inquiring traveller. We passed most of two days at the station, and it affords us great pleasure to remark that the policemen were courteous and patient in answering the hundred and one questions of the passengers constantly arriving in the several trains.—*Hunt's Merchants Mag.*

The Central Ohio Railroad.

The *Zanesville Daily Courier* thus notices the business and pecuniary prospects of this road:—

The present of this road gives earnest hopes for the future. Our citizens are beginning to have faith in the ultimate results of the plan adopted to relieve it from embarrassment, and believing this, are more inclined to give it a fair and impartial trial. This is as it should be; confidence will be restored in other quarters, and the enterprise will eventually prove profitable, and meet the expectations of its early friends.

We have for the month of June, the following gross earnings:

On Passengers	\$23,498 40
On Express	460 46
On Mails	2,252 25
On Freight	26,009 75

Total.....\$52,220 86

This is against \$42,000 in the month of May, and \$45,000 in the month of April. Prior to that time the earnings scarcely ever exceeded \$35,000. It must be remembered, too, that this is not the busiest season of the year for the transportation either of freight or passengers, and this makes the present earnings still more gratifying to the friends of the road.

We are informed that the business of the road continues in good condition so far the present month, and in all probability the earnings will show a like favorable result.

A fair prospect is now spread out to the company, and with a proper connection with the Baltimore and Ohio railroad the earnings will meet the expectations of the most sanguine, to say nothing of the future proposed connection with the Pennsylvania Central, which will attract business from some of the northern routes.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par value of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,638,100	2,973,700	6,019,929	470,647	110,247	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.				
Androscog. & Kennebec.....	56	588,042	1,022,908	2,210,947	209,476	110,247	done	14	South Western.....	92	1,097,496	468,600	1,024,920	283,506	141,168	8	60	
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,600		112,491	done	5	Tennessee and Alabama.....	30	244,486		97,006					
Portl., Saco, & Portland.....	51	1,367,000	119,237	1,486,237	270,240	120,834			Tennessee and Misissipi.....	30	170,931		176,340					
Boston, Concord & Montreal.....	93	1,808,093	1,059,512	2,771,910	380,221	143,565	2		Memphis and Charleston.....	217	2,179,440	2,127,002	4,036,796	911,561	159,672			
Cheshire.....	58	2,085,925	899,313	3,179,687	385,919	138,454	6	77	Mobile and Ohio.....	163	2,668,655	1,602,921	4,536,412	199,882	109,286			
Concord.....	36	1,500,000	8,242	1,412,676	385,919	138,454	6	77	Miss. Central.....	188	642,534		628,303					
Northern, N. H.....	82	2,768,400	none	5,016,633	370,529	138,299	2 1/2	41	N.O., Opelousas & G.W.....	56	2,930,425	671,645	2,657,565					
Conn't & Passumps. Riv.....	61	1,043,145	787,608	1,780,662	162,681	55,173	none	4	Vicksburg, Shreveport & Tex.....	111	1,117,750		1,077,895					
Rutland & Burlington.....	120	2,233,376	2,692,396	4,874,429	394,971	121,733	none		East Tennessee and Ga.....	111	1,000,000	1,600,000	2,606,000					
Vermont Central.....	117	6,000,000	3,660,236	9,660,236	320,119	214,763	none		East Tennessee and Va.....	16	625,425	1,033,781	1,659,206					
Boston and Lowell.....	27	1,830,000	325,635	2,155,635	489,754	140,877	6	63 1/2	Nash and Chattanooga.....	151	2,319,830	1,497,051	3,848,694	516,090	112,177			
Boston and Maine.....	83	4,076,974	150,000	4,179,688	684,426	839,060	6	70	Covington & Lexington.....	98	1,302,804	2,236,938	3,738,763	264,978	188,694		18	
Boston and N.Y. Central.....	74	2,240,300	1,518,671	3,463,118	68,917	8,740	none	63 1/2	Lexington and Frankfort.....	29	430,055	168,098	637,071	95,263	48,656	6		
Boston and Providence.....	66	3,180,000	359,132	3,677,132	585,671	219,689	63 1/2		Lexington and Danville.....	66	694,444	62,784	747,178					
Boston and Worcester.....	68	4,600,000	665,428	4,865,428	119,221	65,627	6 1/2	49 1/2	Louisville and Frankfort.....	65	998,236	698,061	1,696,297					
Cape Cod.....	47	681,680	280,593	967,282	286,638	103,787	5 1/2	47	Atlantic & Gt. Western.....	254	866,838	77,234	944,072					
Connecticut River.....	62	1,691,110	273,241	1,862,244	647,281	305,998	5 1/2	47	Alleghenies and Ind.....	118	1,881,835	2,025,925	2,812,652	1,290,295	732,066	9	102	
Eastern, Mass.....	60	2,583,400	2,947,737	4,821,016	647,281	305,998	5 1/2	47	Clev., Col., and Cin.	141	4,547,020	1,232,857	6,124,629	786,272	393,986	10	77	
Fitchburg.....	307	3,840,000	153,700	3,765,988	881,163	225,071	61	99	Cleveland and Toledo.....	200	2,676,425	2,698,301	5,283,633					
Northern Eastern.....	30	800,212	225,595	968,521	In progr.				Clev. and Mahoning.....	108			628,633					
N. Bedford and Taunton.....	21	600,000	none	683,963	196,491	66,593	6 1/2		Clev. and Pittsburg.....	133	2,780,744	3,043,992	6,537,466	581,877	309,818			
Old Cory and Fall River.....	87	80,100	292,650	3,862,949	663,499	295,738	6 1/2	83	Cin., Hamilton & Dayton.....	60	2,155,900	1,321,213	2,987,567	508,271	278,012		66	
Vermont and Mass.....	77	2,232,641	1,033,670	3,269,727	256,726	87,313	none	7 1/2	Cin., Wilm. & Zanesville.....	131	1,120,450	1,181,266	2,326,459				12	
Western, Mass.....	156	5,150,000	6,968,420	10,496,906	1,862,673	633,013	7 1/2	87 1/2	Columbus and Xenia.....	65	1,484,550	149,000	1,481,733	356,380	187,519	10	82	
Worcester and Nashua.....	46	1,141,000	205,565	1,351,271	294,780	76,760	2	40	Dayton, Xenia & Belpre.....	63	437,538	422,658	860,496					
Providence and Worcester.....	43	1,150,020	338,461	1,588,481	311,430	138,057	2	70	Dayton and Chicago.....	140	1,076,602	995,011	1,186,362					
Hartford and N. Haven.....	72	2,359,000	939,000	3,318,000	730,012	382,799	10	121 1/2	Dayton and Western.....	35	310,000	507,000	733,769				17	
HarVd, Prov. and Fishkill.....	122	2,009,110	2,000,665	4,009,775	258,685	119,611	none		Katon and Hamilton.....	42	454,600	904,489	1,156,135	171,925	65,000		20	
Housatonic.....	110	2,000,000	414,240	2,414,240	230,459	98,768	25		Little Miami.....	65	2,365,921	1,171,785	3,437,706	681,562	338,708		86	
Naugatuck.....	97	1,031,800	624,244	1,656,044	884,306	338,877	none	25	Mad River and L. Erie.....	206	2,481,650	2,572,932	4,448,691				15	
N.Y. York and N. Haven.....	92	3,000,000	2,378,863	5,378,863	88,007	30,318	38 1/2		Central Ohio.....	138	1,620,927	8,485,076	4,263,443	Recently opened.				
N. York and N. London.....	90	734,258	735,165	1,469,423	124,044	66,480	none		Ohio and Penn.....	187	2,451,700	3,219,000	6,670,700	1,111,626	662,117	9		
N. London, W. & Palmer.....	68	609,200	1,078,873	1,688,073	304,236	88,458	2 1/2	38 1/2	Pittsburg, Mayfield & Cin.....	50	371,350	31,000	390,933					
Norwich and Worcester.....	68	2,123,300	873,489	2,996,789	304,236	88,458	2 1/2	38 1/2	Sand'y, Mans. & New.....	127	1,360,000	2,206,367	3,562,867	929,968	164,479			
Albany Northern.....	32	430,000	1,025,098	1,455,098	171,716	9,904	none		Scioto & Hocking Valley.....	135	408,975	698,050	888,858					
Black River and Utica.....	35	643,330	317,859	961,189	In progr.				Spring Mt. Vernon & P.....	113	1,000,000	950,000						
Buffalo, Conn. and N. Y.....	100	1,487,871	1,601,188	3,089,059	172,476	66,333	none		Tel. Wabash & St. Louis.....	242	2,500,000	4,530,000						
Buffalo and N. Y. City.....	92	797,589	2,657,849	3,455,438	289,392	31,896	none		Cin., Log. and Chicago.....	255	4,196,679	1,009,126	2,080,438					
Buffalo and St. Line.....	97	1,300,000	1,040,000	2,340,000	679,750	356,763	10		Evansville & Crawford.....	109	796,045	1,177,586	1,944,541	127,400	64,552			
Canandaigua and Elmira.....	47	434,111	922,393	1,356,504	174,989	69,506	none		Ind. and Cincinnati.....	88	1,213,723	1,442,159	2,178,461	356,012	193,142	7	60	
Canandaigua & Niagara Falls.....	96	1,315,000	606,689	1,921,689	135,433	48,449	none		Indiana Central.....	66	1,141,400	1,281,179	1,907,911	580,176	184,876		50	
Cayuga & Susquehanna.....	144	8,765,466	9,250,362	17,015,828	1,812,097	803,946	none	32	Ind., Clev. & Pittsburg.....	83	826,824	1,099,400	1,931,225	226,068	93,010			
Hudson River.....	144	8,765,466	9,250,362	17,015,828	1,812,097	803,946	none	32	Jeffersonville.....	66	1,014,252	694,000	1,708,252	206,444	94,318			
Long Island.....	534	24,164,869	14,462,742	38,627,611	3,061,795	1,164,462	none	27	Madison and Indianapolis.....	87	1,647,700	1,336,816	1,205,000	284,148	112,880			
New York Central.....	494	10,022,958	25,126,639	35,149,597	4,338,993	2,627,118	none	62 1/2	New Albany and Salem.....	288	2,638,121	6,281,488	6,643,189	645,827	371,402			
New York and Erie.....	134	5,717,100	4,069,769	9,786,869	1,636,977	234,126	none	17 1/2	Perru and Indianapolis.....	73		568,814		150,000	90,000		18 1/2	
New York and Harlem.....	118	3,693,022	4,404,874	8,097,896	1,260,153	135,754	none	2	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,612	199,702	10		
Northern, N. Y.....	118	3,693,022	4,404,874	8,097,896	1,260,153	135,754	none	2	Chicago and Rock Is'd.....	182	3,141,600	2,387,155	6,214,152				93	
Oswego and Syracuse.....	29	487,200	294,159	781,359	In progr.				Chicago and St. Louis.....	220			1,077,312					
Pottsdam and Watertown.....	26	610,000	140,000	750,000	241,149	82,600	7		Chicago, Burl. and Quincy.....	68	1,639,100	1,694,736	2,584,622	722,580	379,321	20		
Rensselaer & Saratoga.....	48	600,000	395,000	995,000	171,909	21,089	none		Central Military Tract.....	58	1,202,500	2,133,050	2,920,241	471,899	219,588			
Saratoga and Whitehall.....	80	768,359	1,578,804	2,347,163	159,484	22,503	none		Chic. St. Paul & F'd du Lac.....	178	2,500,000	1,325,000	3,825,000					
Syracuse & Binghamton.....	27	337,870	737,079	1,074,949	104,374	17,474	3 1/2		Galena and Chicago.....	259	5,441,400	3,818,039	7,742,614	3,315,789	1,102,043	22	113	
Troy and Boston.....	97	1,370,378	700,979	2,071,357	161,355	75,534	none		Illinois Central.....	627	2,271,960	10,416,392	20,374,446	1,532,118	527,952		106	
Watertown and Rome.....	64	1,000,000	1,619,000	2,619,000	201,127	961,941	12	120	Peoria and Oquawka.....	93	569,889	818,544	1,388,342					
Bolivers Delaware.....	94	3,000,000	11,407,200	14,407,200	8,636,523	1,017,327	none		Ohio & Hans. (Wst. Div.).....	147	1,780,296	8,292,403	4,870,586	Recently opened.				
Camden and Amboy.....	60	369,320	1,522,131	1,891,451	122,417	60,080	none		Terre Haute and Alton.....	178	2,261,420	1,256,000	3,517,424					
Camden and Atlantic.....	30	3,492,850	690,000	4,182,850	881,514	500,747	10	124 1/2	Detroit and Milwaukee.....	185	838,000	1,128,964	1,966,969					
New Jersey.....	63	2,000,000	2,284,176	4,284,176	398,728	171,003	none		Mich. Central.....	282	6,032,444	5,996,013	10,668,155	2,215,283	879,560	10	92	
New Jersey Central.....	53	1,157,905	375,000	1,532,905	229,341	94,267	6		Mich. South'n & N. Ind.....	476	6,928,900	6,316,224	11,645,200	2,410,000	876,000	10	92 1/2	
Morris and Essex.....	44	1,637,897	342,564	1,980,461	121,263	62,450	none		Green Bay, M.L. & Ch.....	155	764,074	442,720	1,198,796					
Allegheny Valley.....	63	1,700,000	1,940,000	3,640,000	219,263	62,450	none		Milwaukee and Miss.....	106	1,828,428	2,677,899	5,578,757	691,843	417,443	17	80	
Cataw. Wil. & Erie.....	56	1,099,500	12,211	1,111,711	146,381	66,994	none		Milwaukee & Western.....	72	844,861	132,000	976,861	514,238				
Gum																		

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	1st Jan. 1st July	N.Y.	1872	80	82½	
Bombay and State Line	600,000	Do. convertible	1st April, October	"	1866	90	91½	
Bellevue and Indiana	600,000	Do. convertible	Jan'y, July	"	1866	90	91½	
Do. do.	200,000	Real estate, convertible	Jan'y, July	"	1868	90	91½	
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	Feb'y, August	"	1869	90	91½	
Central Ohio	1,250,000	1st mort. conv. east. sec.	1st March, Sept.	"	1861-64	82½	82½	
Do. do.	800,000	2d do. inconvertible	1st March, Sept.	"	1866	91	91½	
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	20 Jan. 20 July	"	1867	91	91½	
Do. do.	450,000	2d do. do.	1st May, Novemb.	"	1868	86	86	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	1st Jan'y, July	"	1868	62½	75	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	1st May, Novemb.	"	1862	85	85	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	1st Feb'y, August	"	1861	91	96	
Cleveland and Pittsburgh	800,000	Do. convertible	1st Feb'y, August	"	1860	93	93	
Do. do.	1,200,000	Do. on branches	1st March, Sept.	"	1873	77½	82½	
Cleveland and Toledo	625,000	Do. inconvertible	1st Feb'y, August	"	1863	87½	87½	
Chicago and Mississippi	800,000	Do. conv. till 1857	1st April, October	"	1862-72	80	80	
Do. do.	1,200,000	Do. inconvertible	1st April, October	"	1862-72	80	80	
Covington and Lexington	400,000	Do. do.	1st April, October	"	1862	75	75	
Do. do.	1,000,000	2d mortgage, convertible	1st March, Sept.	"	1863	63	65	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	1st April, October	"	1875	90½	90½	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	1st Jan'y, July	"	1873	80	80	
Greene and Chicago	2,000,000	Do. inconvertible	1st Feb'y, August	"	1863	94½	95½	
Do. do.	2,000,000	2d mortgage, do.	1st May, Novemb.	"	1875	84½	89	
Great Western (Illinois)	1,000,000	1st mortgage, do.	1st April, October	"	1868	85	88	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	1st 10 April, 10 Oct.	"	1863	96	96	
Jeffersonville	800,000	Do. 2d sec. inconv.	1st April, October	"	1873	75	75	
Indiana Central	600,000	Do. convertible	1st May, Novemb.	"	1866	90	90	
Indianapolis and Bellefontaine	450,000	Do. do.	1st Jan'y, July	"	1860-61	80	80	
Indianapolis and Cincinnati	500,000	Do. conv. till 1857	1st March, Sept.	"	1866	86	86	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	1st May, Novemb.	"	1874	82½	84	
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	1st Feb'y, August	"	1865	75	75	
Little Miami	1,500,000	Do. inconv.	1st 5 May, 2 Nov.	"	1863	81	81	
Michigan Central	1,000,000	No mortgage, convertible	1st April, October	Bost.	1860	100½	101½	
Do. do.	600,000	Do. do.	1st March, Sept.	"	1869	101	102	
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	1st Jan'y, July	N.Y.	1862	96½	96½	
Do. do.	650,000	Do. 2d do. 1858	1st April, October	"	1863	96½	96½	
Do. do.	1,250,000	Do. 3d do. 1860	1st June, Decemb.	"	1877	89½	89½	
New Albany and Salem	500,000	Do. 1st section	1st April, October	"	1863-62	80	80	
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	1st May, Novemb.	"	1864-75	80	80	
Northern Cross	1,200,000	1st mortgage, convertible	1st Jan'y, July	"	1873	95	95	
Ohio and Indiana	1,000,000	Do. do.	1st Feb'y, August	"	1867	90	90	
Ohio and Pennsylvania	1,750,000	Do. do.	1st Jan'y, July	"	1865-66	95	95	
Do. do.	2,000,000	Income, convertible	1st April, October	"	1872	79½	80	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	1st Jan'y, July	Phila.	1860	97½	98	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	1st Feb'y, August	N.Y.	1875	85	85	
Soloto and Hocking Valley	800,000	Do. 1st sec. conv.	1st May, Novemb.	"	1861	90	90	
Stouvenburg and Indiana	1,500,000	Do. convertible	1st Jan'y, July	"	1866	80	80	
Terre Haute and Indianapolis	600,000	Do. do.	1st March, Sept.	"	1866	96	100	
Terre Haute and Alton	1,000,000	Do. do.	1st Feb'y, August	"	1862-72	77	79	
Do. do.	2,000,000	2d do. do.	1st Feb'y, August	"	1870	74	75	

NAMES OF COMPANIES. (The following quotations include the earned interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6 April, October	Balt.	1885	85½	85½	
Do. do.	1,123,500	Do. do.	6 Jan'y, July	"	1875	86½	86½	
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7 10 Jan. 10 July	N.Y.	1870	95	95½	
Erie Railroad	3,000,000	1st mortgage	7 May, Novemb.	"	1867	104	104½	
Do. do.	4,000,000	2d mortgage, convertible	7 March, Sept.	"	1869	98	98	
Do. do.	6,000,000	3d mortgage	7 March, Sept.	"	1863	97	97½	
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7 Feb'y, August	"	1875	97	97½	
Do. do.	4,851,000	Convertible, Inscription	7 Feb'y, August	"	1871	90½	90½	
Hudson River	2,500,000	Convertible	7 Jan'y, July	"	1862	91	91	
Do. do.	4,000,000	1st mortgage, Inscription	7 Feb'y, August	"	1860-70	102	103	
Do. do.	2,000,000	2d do. do.	7 10 June 10 Dec	"	1860	89	89½	
Do. do.	8,000,000	3d do. convertible	7 May, Novemb.	"	1870	69½	70	
Illinois Central	17,000,000	Mortgage, inconvertible	7 April, October	"	1875	92½	93	
Do. do. (Free Land)	3,000,000	Mfgs \$45,000 acre-priv. 7 shares	7 March, Sept.	"	1860	100	100	
Michigan Southern	1,000,000	1st mortgage, inconvertible	7 May, Novemb.	"	1860	96	96	
New York and Harlem	1,800,000	Do. do.	7 May, Novemb.	"	1861-72	84	85	
New York and New Haven	750,000	No mortgage, do.	7 June, Decemb.	"	1865-66	78	80	
New Haven and Hartford	1,000,000	1st mortgage, do.	6 Jan'y, July	"	1873	92	94	
Northern Indiana	1,000,000	Do. do.	7 Feb'y, August	"	1861	93	95	
Do. Goshen Branch	1,500,000	Do. do.	7 Feb'y, August	"	1868	89	91	
New York Central	8,287,000	No mortgage, do.	6 May, Novemb.	"	1863	89½	89½	
Do. do.	3,000,000	No m'ge conv. from June 57-59	7 15 June 15 Dec	"	1864	102½	102½	
Panama, 1st issue	900,000	Convertible till 1858	7 Jan'y, July	"	1866	101	104	
Do. 2d do.	1,478,000	Do. till 1858	7 Jan'y, July	"	1866	101	104	
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6 Jan'y, July	Phila.	1860	92	92	
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6 Jan'y, July	"	1860	92	92	
Do. do. 1849	3,469,000	Do. inconvertible	6 April, October	"	1870	84½	85½	

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	86	88
Do. 5 do. 1858-60	May,	95	96½	New Orleans, 6 per ct. cp. R. E. X	Do.	76	80
Do. 5 do. 1870-75	August, and	93½	95	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	80	88
Do. 5 do. 1880	November,	94½	96	Philadelphia, 6 per ct. 1876-98	Jan'y, July	91½	92½
Albany, 6 per ct. coup. 1871-81	Feb'y, August,	97	100	Pittsburgh, 6 per ct. coup. X	Divers	78	78
Albany, 6 per ct. coup.	Jan'y, July,	97	99	Queincy, 8 per ct. coup. 1867	Jan'y, July	85	85
Baltimore, 6 per ct. 1870-90	Quarterly,	97	99	Racine, 7 per ct. coup. 1873	10 Feb'y, Aug	85	85
Boston, 5 per ct. coup.	April October,	97	99	Rochester, 6 per cent. coup. X	Divers	75	78
Brooklyn, 6 per ct. coup. Long	Jan'y, July,	100	101	St. Louis, 6 per ct. coup. Long X	Do.	75	78
Clear 7½, 1 per ct. cp. W. W. 1879	Do. do.,	101	102	Do. Municipal	Do.	79½	80½
Cincinnati, 6 per ct. coup.	Divers	89½	90	Sacramento, 10 per ct. 1862-74	Do.	80	80
Chicago, 6 per ct. coup. 1873-77	Jan'y, July	99½	99	S. F. & Co. 10 per ct. 1866 pay N. Y.	May, Novemb.	80	80
Do. 7 per ct. coup. 1880	Jan'y, July	100	100½	Do. 10 p. ct. cp. 1871	Do.	80	80
Detroit, 7 per ct. cp. W. W. 1873-78	Feb'y, August,	100	103	Do. 10 do. pay N. Y.	Jan'y, July	80	80
Dubuque, 6 per ct. cp. Long	March, Sept.,	101	105	Do. 6 per ct. pay N. Y. 1875	Do. do.	80	80
Jersey City, 6 per ct. cp. W. W. 1877	Jan'y, July	91	96	Whaling, 6 per ct. coup. X	Divers	87½	87½
Louisville, 6 per ct. cp. 1880-88	Divers	78½	80	Do. 6 p. ct. cp. Man. 1874	March, Sept.	81	81
Memphis, 6 per ct. coup. 1883	Jan'y, July	70	70	Zanesville, 7 do. coupon	April, October	97½	97½

Cincinnati Stock Sales.

By RISK COOPER.

For the week ending July 15th, 1866.

BONDS.

Per ct.

Little Miami, 6 per ct. Mort.	80	82½
Covington & Lexington, 2d Mort. 7 per ct.	84	84
Ohio & Mississippi, 2d Mort. 7 per ct.	80	80
Indianapolis & Cin., 2d Mort. 7 per ct.	79	79
Cin. Ham. and Dayton, and Mort. 7 per ct.	80	80
Hillsboro' and Cin., 7 per cent. 1st Mortg.	80	80
Covington & Lexington, 10 per ct. Income	87	87
Indianapolis and Cincinnati Dividend	70	70
Columbus and Xenia Dividend	88	88
Cin. Hamilton and Dayton, Divid. Scrip, due 1867, Int. 108	108	108
Little Miami, Dividend Scrip, issued June, 1866	79	79

STOCKS.

Bellevue and Indiana, 30.—Cin. Ham. and Dayton, 65.	
—Col. and Xenia, 62.—Cincinnati and Chic., 4.—Covington & Lexington, 18.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 60.—Little Miami, 80.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 16.—Ohio and Mississippi, 6½.—Hillsboro' and Cincinnati, 16.—Peru and Indianapolis, 16½.—Cincinnati, Wilm. and Zanesville, 12.	

By HEWSON & HOLMES.

For the week ending July 15th, 1866.

BONDS.

\$5,000 Fayette Co. Ky., 6 per cent.	70	(4 Int.)
2,000 Cincinnati 6 per cent.	90	
2,000 Little Miami, 6 per ct., 1st Mortg.	81	
1,000 Cin. and Chic., 5 per ct. Real Estate	80	
4,000 Covington & Lex., 7 per ct. 2d Mortgage	64	
1,240 Little Miami, Dividend Scrip.	80	
2,000 Indiana Central, 10 per ct. Income	95	
1,000 Cin. Ham. and Dayton, 7 per ct. 2d Mortg.	82½	
800 Columbus & Xenia, Dividend	88	

STOCKS.

20 Shares Indiana Central	48	
110 " Cin. Wilm. and Zanesv.	12	
165 " Cin. & Chicago	8½	
16 " Cleve. Col. and Cin.	102	
40 " Covington and Lexington	15	
92 " Hillsboro' and Cincinnati	15	
100 " Little Miami, 30 day	90	
18 " Indianapolis and Cincinnati (ex div.)	60	
44 " Cin. Wilm. & Zanesv.	15	
12 " Little Miami	90	

Extract from De Coppet & Co.'s Money Circular for the European Steamers of the 23rd Inst.

[TRANSLATED.]

NEW YORK, Tuesday, July 22, 1866.

To several days of activity in the Stock Market during the beginning of the week has succeeded a dullness not unusual at this season of the year. Prices have experienced oscillations upon most of the more active stocks, which have resulted generally in a decline. The aggregate transactions of the week were considerable, embracing as well some of the State Stocks, as the Bonds and Shares of the best accredited railways. Besides this, the Bonds of several of the Western roads which, for a long time, had remained entirely dormant, seem disposed to emerge from their protracted inaction. Money, although in rather better demand from the importing merchants, remains very easy to procure, the Banks appearing disposed to lend freely the balances from the interior, which are again on the increase with them.

State Stocks.—There were large transactions in Missouri 6s, at a decline of $\frac{1}{2}$ to $\frac{3}{4}$; Indiana 6s have been freely done without alteration of price.

City and County Bonds.—Prices are well sustained, but we have merely to mention some retail transactions in St. Louis 6s, Milwaukee 7s, and Albany 6s. To-day an auction sale of \$184,000 St. Louis 6s, from 81 to 75½ and interest, averaging 76 4-5th, and of \$10,000 St. Louis County 6s, at 75 and interest, rather reduce our quotations.

Railroad Bonds.—Large transactions have taken place in Erie 7s, 1871, at steady prices, and in Illinois Central Construction at a decline of $\frac{1}{2}$. There has been a fair demand for New York Central 6s and 7s, at a trifling advance; the new 7s of this Company, redeemable in 1876, and to the redemption of which an annual sinking fund of 3 per cent. is provided, are now in the market. At private sale, transactions have taken place in Ohio and Pennsylvania Income, in Lake Erie, Wabash and St. Louis 1st mortgage, and in Cleveland and Pittsburgh 1st mortgage on branches. They are quoted at an advance. Michigan Central 8s, 1869, have been done freely and are looking up.

Railroad Shares.—The activity which prevailed

during the earlier part of the week turned mostly on Erie, Reading, New York Central, Cleveland and Toledo, and Michigan Southern. The last named are quoted ex-dividend. The decline on these has been general. Illinois Central, with very little doing, declined 2 per cent. Exchanges on Europe rather flat. Paris 5.16 $\frac{1}{2}$ 25.17 $\frac{1}{2}$; London 109 $\frac{3}{4}$ 110. DE COPPET & CO.

Extract from the Circular of Robt. Benson & Co.

The circular of Messrs. Robt. Benson & Co., received by the Persia, states that—

"In American Securities there has been much greater activity, and to-day, well known Railway Bonds and State Stocks are inquired for. Illinois Central R. R. Construction Bonds 7 per cents. have been sold at 82 $\frac{1}{2}$, and Freeland's at 88a88 $\frac{1}{2}$ a89. Pennsylvania 1st Mortgage Bonds at 91; 2d Mortgage Sterling Bonds 94 $\frac{1}{2}$ a95. New York Central 7 per cents. at 95 $\frac{1}{2}$ a96; Michigan Southern and Northern Indiana Sinking Fund Bonds at 80, and Erie Bonds of 1862 at 82. The transactions in State Stocks are chiefly purchases—United States 6 per cents. at 103, ex-coupon; South Carolina Bonds (Barings' 1858) at 99 $\frac{3}{4}$; Pennsylvania 5 per cent. Bonds are quoted 80a82, and Maryland Sterling 98a99 ex-coupon."

Marie & Kanx's Money Circular for the European Steamer of the 23d Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, July 22d, 1856.

Several weeks of great activity and buoyancy have been followed by one of reaction. The heavy exportation of specie to Europe, and the continued system of expansions by our Banks, have caused some fears that the present ease in money matters might be disturbed before long. The business in speculative stocks has not been very large throughout the week, and prices show a decline without exceptions; Investment stocks have been tolerably active, but prices have been more or less influenced by the general tone of the market. The orders for our stocks from Europe, by the last mail, have been less important than by the last two or three steamers. The principal orders having been for Michigan Central bonds, Illinois Central bonds, Cleveland and Pittsburg 2d mortgage, and Ohio and Pennsylvania Income bonds; there were also some purchases of other Western railroad bonds made for foreign account, but only in limited amounts. State Stocks.—The largest transactions have taken place in Virginias and Missouri, the former declining $\frac{1}{2}$, the latter 1 per cent.; Indiana 5s sold also at a decline of $\frac{1}{2}$; the new California loan of 1875 was again down at 70a69 $\frac{1}{2}$. City and County Bonds.—Except the sale at auction of St. Louis City and County bonds, which was mentioned in a separate paragraph, nothing of importance has been done. Some Cincinnati 6s, Milwaukee 7s, and Chicago 6s sold at former prices. Railroad bonds have not been so active of late. Illinois Central bonds declined 1; Erie 1875 bonds $\frac{1}{2}$; Erie 1871 bonds $\frac{1}{2}$; Hudson River 3d mortgage $\frac{1}{4}$; Michigan Central bonds, 1869, at an advance of $\frac{1}{2}$; the Cleveland and Pittsburg mortgage bonds and the branches at an advance of 2 $\frac{1}{2}$ per cent, have been bought for Europe to some extent. Ohio and Pennsylvania Income bonds went up 3 per ct. Several lots of the La Crosse and Milwaukee Sinking Fund mortgage bonds having been taken for foreign account, we shall hereafter quote them regularly. Railroad Shares.—The transactions have been moderate, compared to the last fortnight, and prices are all lower. Erie sold as low as 61 $\frac{1}{2}$, but recovered to 62 $\frac{1}{2}$, which is still 1 $\frac{1}{2}$ per cent. less than our last quotation. New York Central declined $\frac{1}{4}$; Panama 1; Michigan Southern $\frac{1}{2}$; Michigan Central 1 $\frac{1}{2}$; Illinois Central 2 $\frac{1}{2}$; Cleveland and Toledo 1 $\frac{1}{2}$; Cleveland and Pittsburg 1 $\frac{1}{2}$; Galena and Chicago $\frac{1}{2}$; Milwaukee and Mississippi 1; Wisconsin and Lake Shore 1 $\frac{1}{2}$ per cent. Money.—The demand for money has been a little more active, without creating any change

in rates. We quote loans on call 6a7 per cent.; first class paper, 7a8 per cent.; names less known 8a10. Exchanges.—Sterling is a fraction lower, 109 $\frac{3}{4}$ 110. Paris and Continental exchanges remain without alteration.

MARIE & KANZ.

The Rising Fever of Speculation in England.

The fever of speculation now gradually commencing will be watched with anxiety by all who regard the permanent welfare of the country.—Every one can see that, with the influx of bullion, the demand for new investments will increase, that this demand will be met on all sides, and that the majority of the schemes introduced will call not merely for the surplus funds seeking employment at the moment, but will pledge the community to a continued outlay long after the tide may have turned. They can also recognize that the final result will be a crash such as was witnessed in 1825, 1836, and 1847, and which in this country may be looked for with absolute precision once every eleven years. The whole population will nevertheless go on, each man believing that he will pause in time, and that his neighbor is to be the person who must suffer. In such a state of affairs all warnings are useless, since there is no difference of opinion as to the end. The only service that can be rendered is to remind the public from time to time of their actual position, so that, if they increase their commitments to an extravagant extent, they may at least do so with a full knowledge of what they are undertaking. Thus far no danger has been incurred, but a retrospect of the enterprises of the past half year will show that the amounts already engaged to be furnished are considerable, and that when these shall have been doubled and trebled—as will, perhaps, be the case during the next six months—they will make an aggregate sufficient to absorb the disposable means of England for three or four years thereafter. Annexed is a list of companies introduced on the Stock Exchange since the 1st of January, 1856:

The Times enumerates forty-three new enterprises introduced since the commencement of the year, and adds:

"The aggregate capital apparently demanded for the above is £23,490,000—a total which would already seem alarming, but that it admits of several important deductions. The schemes from No. 1 to No. 22 inclusive, are alone those which involve outlay in foreign countries. They amount to £19,110,000, and as several of them, such as the Lombardo Venetian Railway, the Italian Junction Railway, the Bank of Switzerland, and the Societe des Clippers Francais have been subscribed jointly on the English and Continental Exchanges, the sum will be by that means diminished about £6,000,000. Another million or two may be estimated for the Bank capitals, which will probably not be required to be paid up in full. The actual amount, therefore, now promised to foreign countries may be set down within £11,000,000. This will not appear extremely heavy, when it is recollected that in 1853 a sum nearly as large was undertaken to be supplied to one concern alone—namely, the Grand Trunk Railway of Canada—but it is of sufficient magnitude to produce a sensible effect, and, if it were in the shape of an immediate loan, instead of a number of works which will be spread over a few years, it would not fail to exert, as our recent experience regarding the Turkish loan may illustrate, a very decided and inconvenient influence on the money market. It is to be borne in mind, moreover, that these claims do not represent all that are in progress, since Australian and Canadian and a variety of other debentures are quietly negotiated almost every week, and there is likewise an advance of £1,000,000 to be made to Sardinia.

"With regard to the companies in the above list numbered 23 to 44, whose operations are confined to home, there is little to call for remark. Their total is £4,380,000, and £1,000,000 of this is placed in the Imperial Hotel scheme, which is

either in abeyance or abandoned, while £2,100,000 is taken by the National Discount Company and several Banks, and is therefore in no way diverted from public use. It is a singular fact that while the law of limited liability has been assailed on the ground that it would prove a stimulus to the wildest speculation, it has thus far led only to a few moderate, and for the most part useful projects, which may serve in their degree the healthful purpose of finding employment for our energies within the limits of our own shores."—*London Times*, July 4.

American Railroad Journal.

Saturday, July 26, 1856.

Illinois Central Railroad.

The Illinois Central Railroad Company offer for sale \$900,000 of certificates, due 1st of January, 1858, bearing interest at 7 per cent., payable semi-annually. These certificates are issued in anticipation of the installments to be received on the thirty thousand shares of *privilege* stock held at the option of bondholders, and which option expires on the 1st of Jan'y, 1858. The amount to be raised from this option stock is pledged for the redemption of the certificates now issued, and they are receivable in payment for said stock.

These optional shares are at a premium, and are likely to advance rather than fall.

Toledo, Wabash and Western Railroad.

The proposed consolidation of the Great Western; the Toledo, Illinois and Lake Erie; and the Wabash and St. Louis railroads, has been accomplished by the votes of the stockholders of the several companies.

The Locomotive.

No. 5.

By THEOPHIL KRAUSCH, Civil and Mechanical Engineer.

Locomotive boilers as at present built, are capable of resisting a pressure equal to 70,000 tons; in many cases exceeding this amount. This power acts in two directions,—longitudinally and vertically. To ascertain the amount of pressure in the former direction, we multiply the area of the tube sheets (assuming them to be equal to a cross section of the boiler,) by the units of pressure acting on them. For example: If the diameter of the cylindrical part be 48 inches, the sum of the units of the surface of one cross section is equal 1809.5. Assuming the pressure upon an unit of space to be equal to 200 lbs., the total pressure is 200×1809.5=361,900 lbs. upon the cross section. This we have to multiply by two, which gives 723,800 lbs. as the whole pressure acting longitudinally.

To find the pressure acting against the periphery of the boiler, take the original figure of a circle, the polygon, the length of one side of which is equal to one inch. Multiply the number of sides by the length of the cylindrical part, and this product by the pressure on the square inch. The result will give the sum of the pressure acting on the periphery. The diameter of the boiler before mentioned, being 48 inches, and its circumference 150.7 inches, the latter is equal to a polygon of 151 sides,—150 of one inch each, and one of .7 inches. The length of the cylindrical part being 11 feet, is equal 132 inches. The steam pressure, per square inch, being 200 lbs., the pressure acting on each side is 1×132×200=26,400 lbs. The pressure, therefore, acting upon

the cylindrical part, is the sum of the pressures on all the side surfaces of the polygon:

In practice a shorter calculation is used—multiply the periphery of the cylindrical part of the boiler by its length, and the product by the pressure per square inch. Thus

$150.7 \times 132 \times 200 = 3,978,480$ lbs. the force exerted.

The fire-box, the form of which is generally a rectangle, is inclosed in the boiler—its walls standing from $2\frac{1}{2}$ in. to 3 in. from the boiler sheets, and parallel to them. This intervening space allows the fire-box to be surrounded by water.

The advantages of this construction is the saving of heat and room. Stay-bolts, placed about six inches apart, (making a number of squares), are riveted to the exterior boiler sheets, giving the necessary strength to the fire-box. Each one of these stay-bolts is capable of resisting a pressure of about 15 tons, and, if the steam pressure amounts to 200 lbs. per square inch, a square (produced by the position of the bolts) resists a pressure of $200 \times 6 \times 6 = 7200$ lbs. Each bolt has to resist such a pressure. The proportion between the capability of resistance of the stay-bolts and the pressure acting upon them, is as $4\frac{1}{2} : 1$. It is also to be mentioned, that the flat surfaces above the tubes belong to the weakest parts of the boiler, and must be specially secured by stay-bolts.

Suppose, now, a boiler has been built according to all the foregoing rules. Is an engineer justified in recommending it? No! The boiler must first be proved able to resist a much higher pressure than that to which it is ordinarily to be subjected. The same experiment will show the quality of the work and the materials used.

Without such trial and result, no engineer is justified in recommending a boiler as perfect. [Some builders do not prove their boilers by hydraulic pressure, but by steam, the consequence of which we sometimes have to deplore]. Some governments require all boilers to be proved by hydraulic pressure before a commission of engineers; a very necessary regulation, and one which should be adopted in our country.

Carelessness, or superficial education is the reason that boilers, of different diameters, are made of the same thickness and quality of iron. Every practical man knows that the iron should increase in proportion to the diameter of the boiler; or, more plainly, a boiler of 4 ft. diameter requires iron just twice as thick as one of 2 ft. diameter,—of course under equal pressure.

I lately had occasion to find the thickness of iron in a boiler of $47\frac{1}{2}$ in. diameter and 13 feet long; and in another, 44 in. diameter, and only 11 ft. 6 in. long (made by the same builder). Both were of the same thickness.

When steam is worked at 200 lbs. pressure, the cylindrical part of the former boiler has to resist a force of about 420 tons greater than the latter.

No great improvements relating to the system of the boiler have been lately made, with the exception that the fire-box surface has been increased by extending it about 30 inches into the cylindrical part of the boiler; thus increasing the direct heating surface equally. The increase is about 25 square feet. For the purpose of strengthening boilers, and especially to secure them against sudden and unforeseen pressure, Mr. Fairbairn re-

commends, instead of stay bolts, angle iron; fastened on the end pieces.

Lately, the mischief arising from the use of thimbles, in regard to steam production, (diminishing the tube openings, and consequently reducing the draft through them,) has been removed, by extending the iron tubes about 8-16 of an inch beyond the tube sheets, and calking the iron.

Freehold and Jamesburg Agricultural Railroad.

The earnings of this road for the year ending May 31, last, were as follows:

Months.	From Passengers.	From Freight.	Total.
June.....	\$991.68	\$1,216.36	\$2,207.94
July.....	1,596.48	1,157.87	2,754.35
August....	1,851.68	1,626.48	3,478.16
September.	1,449.42	1,891.33	3,340.75
October....	1,007.73	1,729.62	2,727.35
November..	986.11	1,463.04	2,449.15
December..	999.36	1,388.04	2,387.40
January....	888.20	1,053.47	1,921.24
February...	634.45	1,358.29	1,992.74
March.....	793.94	1,813.59	2,618.85
April.....	976.38	2,278.20	3,249.58
May.....	959.77	1,876.10	2,835.87

	\$13,085.10	\$18,797.39	\$31,923.88
For carrying U. S. mail			40.89
			\$31,923.88

We copy the following statement from the company's books, showing expenditures to the present time.

CURRENT EXPENSES.	
Station expenses.....	\$3,959.34
Car expenses.....	1,816.35
Motive power.....	7,916.90
Salaries.....	1,000.00
Office expenses.....	232.50
Car repairs.....	633.69
Contingent expenses.....	659.34
Repairing track.....	1,664.16
Telegraph expenses.....	40.06
Repairs to locomotives.....	364.29
Damages.....	172.52

	\$18,458.15
Net earnings.....	\$18,465.23
Total cost of road and equipment.....	\$219,062.78
Current expenses.....	45,444.90
Interest.....	6,208.40
Amount in hands of the Treasurer...	5,066.17
	\$275,782.20

The total receipts have been as follows:	
Installments on Capital Stock.....	\$180,341.52
Bonds sold.....	70,000.00
Gross earnings up to July 1, 1854.....	10,082.17
Passenger earnings since July 1, '54..	27,394.44
Freight.....	37,023.18
Mail.....	40.89

	\$275,782.20
Net earnings previous July 1, 1854,...	\$5,776.91
" for 11 mos. end'g May 31, '55	10,763.64
" for year ending May 31, '56.	13,465.23

Total net earnings.....	\$29,995.78
Interest paid.....	\$6,208.40
Paid on account of capital.....	18,721.21
Balance in hands of Treasurer.....	5,066.17

East Tennessee and Virginia, and Virginia and Tennessee Railroads.

The cars on the East Tennessee and Virginia railroad have reached Morristown, forty-four miles above Knoxville. The cars on the Virginia and Tennessee road are now running to Emory and Henry College, ten miles east of Abingdon, leaving a distance between the termini of the two roads, of about 110 miles.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. Hysaw, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31×45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address

JAMES W. HILTON.

Jersey City, N. J.

July 24th, 1856.

3m.

The Late Disaster on the North Pennsylvania Railroad.

The recent terrible accident on this road has excited almost universal discussion as to the manner by which such disasters can be prevented. In the present case it would seem that by ordinary care on the part of the conductors the collision could have been avoided. But all experience shows that from incapacity, unfaithfulness, misconception of orders, inattention or mistake, conductors or engineers are never implicitly to be relied upon. Additional precautions against accident must be sought for, and used.

Of these, a double track appears the most obvious. But beside involving an outlay which few companies can afford, there is another much more effectual—a magnetic telegraph working between stations. With such, it can always be known whether or not the track be clear. The Erie railroad is a good illustration of what may be accomplished by a telegraphic line. No road, save one, in the United States has a business at all to be compared with it. Yet, it must be called a single track road. Nearly the whole of the Delaware Division has only a single track, for the reason that a double track upon it is hardly possible from the nature of the ground. Nearly all the traffic of the road passes over this division, yet we hear of no accidents upon it,—nor in fact upon the road. Its singular exemption from accident, and the ease and order with which its immense traffic is carried on, is due to its telegraphic line, by which every station master, and the Superintendent may know the exact position of each train moving upon the road.—We are assured by Mr. McCallum, that not only would it be impossible to work the road without a telegraphic line, but that with it, the capacity of the road, without any additions to its double track, is almost unlimited. The Company, we believe, do not propose to lay down an additional track on this division, as they find no difficulty in conveniently passing over it their immense traffic.

A line of telegraph can be constructed, maintained and worked, at very low cost. With it, accidents from collisions may be absolutely avoided. No road should be without one. No company should complain for being censured, or for being mulcted in heavy damages, if they neglect such a cheap and effectual remedy for the most disastrous kind of accidents.

Memphis, Clarksville, and Louisville Railroad.

Ground was broken on this road at the town of Clarksville, on Monday, June 23.

New York and Erie Railroad.

The work of tunnelling Bergen Hill for the Erie Railroad Company is rapidly progressing, and will be carried to an early completion. The east approach has been cut in within forty or fifty feet of the end of the tunnel, and most of the shafts are nearly half way down. The western approach is being pushed on very rapidly.

the greatest possible facility to the business of transportation. Some six or seven hundred miles of canals, draining the products of the richest valleys in the West, have their terminus at Toledo; and six or seven different railroads, from the North, the South, the East, and the West, culminate here with the products gathered from a circuit of a thousand miles. Commerce, therefore, demands an easy transition from the car to the boat, and from the boat to the car.

To answer this demand the Middle Ground has been skirted with immense docks and studded with immense store houses. The dockage room already extends two thousand feet and can be stretched three or four times that distance, if circumstances require it. About a thousand feet is also occupied with permanent storehouses, including a substantial brick emigrant house and other conveniences. There are also two immense grain houses, built with all the modern improvements, and a large steam engine by which their lofts are filled and emptied. These erections are of the most substantial kind and so arranged that the work of loading and unloading can be performed with the least possible outlay of manual strength.

The Freight Depot which, as we have said, is about a thousand feet in length, stretches along the edge of the dock, and the cars come in under shelter and unload on one side, while the boat, a few feet distant, lies at the dock, ready to swallow up the products on the other side.

The Passenger Depot is on the city side of the Island, and though very large, will probably be lengthened two or three hundred feet before many years. It is now 480 feet long and 160 broad. It is divided into two parts, the trains of the east roads taking one side and the trains of the western roads the other side.

The passage way from one side of this depot to the other is through the public hall of the Island House where the ticket offices are located. This hall is on a new plan and embraces an idea which will be largely copied. The lower rooms of the Island House are handsomely fitted up for the convenience of passengers and answer the double purpose of sitting rooms for gentlemen and ladies who wait for the cars, and of common parlors for those who occupy the house. The office of the clerk is on the floor, and the various rooms are always under the supervision of watchful eyes, so that they have all the neatness and good order of a hotel drawing room. The sitting room for gentlemen is on one side of the hall and the ladies' parlor on the other; and there is besides a barber's shop, a baggage room, and any quantity of wash bowls with living fountains of water pouring into them, so that the traveler can enjoy the luxury of a wash without much trouble to any body. All these conveniences are public and at the service of the traveler.

On the floor above is the great dining hall which we should think, will seat two or three hundred persons at table. It is kept by Mr. R. B. Angier, late of Cleveland, who seems to understand his business and provides his table liberally with good things to eat and with polite and attentive waiters who know how to administer to the wants of hungry travelers. Above the dining room are the sleeping rooms which are sufficiently large and comfortably furnished.

The hotel is a wonderful convenience to the traveller. If he is obliged to wait a few hours, a night, or a day, it furnishes him with a comfortable home, without going half a mile in a hack to look up a public house and to be sheared by two or three classes of sharpers. He can have his baggage stowed or sent up to his room and stay the time required, and be on hand at the sound of the whistle to take the desired train.

But even this is not all. Though the Middle Ground belongs to the Southern road, an arrangement has been made with all the other roads by which the erections are used in common under certain regulations, so that all the cars that come to our city come in on the Island tracks and stop at the same station. There is no going half a mile or a mile, in a hack, to another depot, or running

off after intelligence to a distant quarter of the city. The Lake Steamers start from the Middle Ground; the cars east, west, north and south start from the same depot on the Middle Ground; and the Middle Ground is just about the middle of creation, from which a man can put out in any conceivable direction, and take either of the four winds of heaven, for the uttermost parts of the earth.

New York Central Railroad.

The following comparative statement of receipts from passengers and freight during the months of May, 1855 and 1856, speaks well for the high character of the management of this truly imperial work, and the great resources of its line of route:—

1856.....	\$696,913 86
1855.....	633,881 69
Increase.....	\$63,031 67

Extension of the Southwestern Railroad.

At a special meeting of the Board of Directors of the Southwestern Railroad Company—present, R. R. Cuyler, President, Wm. A. Black, John W. Anderson, Wm. S. Holt, T. M. Farlow, Robert A. Smith, Directors—the following resolutions were read and unanimously passed:

Resolved, That the President be, and is hereby, requested and instructed to cause a survey to be made, forthwith, for the extension of the railroad of this company from Americus to Cuthbert, Randolph County, and a survey, also, from Sumter City to Cuthbert.

Resolved, That if a satisfactory arrangement can be made for the transfer by the Georgia and Florida Railroad Company of their road from Americus to Sumter City to this company, so as to make the same part and parcel of the Southwestern Railroad, then the extension will be made from Sumter City to Cuthbert—otherwise, from Americus to Cuthbert.

Resolved, That so soon as the survey and location can be made, twenty miles of the extension be placed under contract, to be paid—one-half in cash and one-half in the stock of the Southwestern Railroad Company—such stock to come in on the same terms with the now existing stock, so soon as the said twenty miles of extension shall be opened for transportation and travel.

Resolved, That this company, by the preceding undertaking, contributing at least three hundred thousand dollars towards the further development of Southwestern Georgia, by actually building, of itself, unaided by the people, their road to within a distance of twenty miles from Cuthbert and forty from Eufaula, and with less than forty from Fort Gaines—feels that the people of all these places and of the country tributary to them, respectively should unite themselves to the Southwestern railroad, and, through that road connect and identify themselves with Macon and Savannah—with the Seat of Government, the mountain country of Georgia and the general railroad system of the Union.

Resolved, That the preceding resolutions be communicated by the President to the meeting which has been called to be held at Cuthbert on the approaching anniversary of American Independence.

True extract from the minutes.

JNO. T. BOISFUELLET, Sec'y.

This action of the Southwestern Company, it strikes us, has a most important bearing upon the system of Internal Improvement in the lower half of the State of Georgia. Whilst the Brunswick and Florida Railroad Company and the Savannah, Albany and Gulf Company have respectively, been endeavoring of late, to embark the people of Eufaula, of Cuthbert and Fort Gaines in the wild scheme of building from the Chattahoochee through Albany to Brunswick or Savannah—a scheme manifestly against the interest of the Southwestern company, and whilst no specific aid has been rendered by the seaboard to carry out the scheme—the Southwestern company has come out with the means and the determination to see

their road extended to Cuthbert. This movement we think most important for these reasons: It determines the future policy of the Southwestern Company. It prompts Eufaula and Fort Gaines to instant movement towards Cuthbert. It is calculated to preserve the symmetry and usefulness of the railroad system of the State. It cuts off the hope of Brunswick from the plan of injuring the Southwestern company. It gives security and permanency to Southwestern Railroad stock, in which this city and its people are interested to the extent of three-quarters of a million of dollars.—It is calculated to extend the business and increase the wealth of Macon. It hurts no existing interest but benefits all. It will fix Macon as the traveling centre of the State. It will tend to increase the revenues of the Central Road, in which some three millions of Savannah capital are embarked. Finally, it will give quiet and well grounded hope and eventual success to those portions of Georgia and Alabama just now so much disturbed and perplexed on the subject of their connection with the sea. We hail the movement with joy and satisfaction.—*Sav. Rep.*

The Florida Railroad.

A gentleman connected with the operations of the Florida R. R. has given us some interesting details respecting its progress and prospects. As may be recollected, it connects Fernandina, on the Atlantic, with Cedar Keys, in the Gulf of Mexico, a distance of 140 miles. The road was only commenced on the 1st of October last, and there is already thirty miles of it graded and ready for the iron, and 1½ miles of trestle bridging, and the only draw-bridge on the line of the road completed. Such rapid progress is highly creditable to the contractors, commencing, as they did, at an isolated point, having to collect from remote sources laborers, tools, provisions, and materials of every description.

One thousand tons of iron for this road have been shipped from New York to Fernandina. Four thousand tons of iron have recently been purchased in England for the road, fifteen hundred of which have been already shipped for Fernandina, and the balance will be shipped during this month. These purchases will iron fifty miles of the road, and it is the intention of the Company to have it all laid down by the 1st of Feb'y next, at farthest, so as to have fifty miles of the road opened for business at that time. A locomotive and cars will be shipped from Philadelphia for Fernandina during the present month, and will aid greatly in facilitating the construction of the road. About three hundred hands are now employed, to be increased in October to six hundred, and the work will be pressed to its completion with the utmost energy. It is the expectation and determination of the Company to have it finished and in operation in two years from this time.

Fernandina is situated at the northern point of Amelia Island, at the mouth of St. Mary's Sound. It has an admirable harbor, with an ample depth of water for a large commerce. It is about 152 miles from Charleston, or about twelve hours run by steamers. The road across the Peninsula (140 miles) can be readily travelled in four and a-half hours, and the time between Cedar Keys and New Orleans, by steamers, will not exceed twenty-four hours. This will make the entire time between Charleston and New Orleans, by this route, about forty-one hours.

The pressing importance of establishing, at the earliest possible time, a direct steam communication between Charleston and Fernandina, is apparent. This will, to a great extent, counteract the serious mistake which was made in permitting Charleston to be thrown off the great line of travel between the North and South by the construction of the Wilmington and Manchester railroad. Fernandina will be the outlet of a valuable amount of produce, even during the coming season, and when the railroad is finished, it must, inevitably, be a great thoroughfare of travel.—*Charleston Mercury.*

Oceanic Telegraph.

The great problem of placing the old world and the new in a telegraphic connection is soon to be tested. Next week the United States steamer Arctic will sail from this port with a competent scientific corps on board, to complete the necessary oceanic surveys, in which Lieut. Berryman, the commander of the present expedition, has already been engaged. It has been shown by Lieut. Maury that between Newfoundland and the coast of Ireland there is, for a considerable portion of the distance, a comparative elevation of the bottom, which he denominates the telegraphic plateau. Along this it is proposed to carry the wires of the submarine telegraph; the distance between these two points is a little over 1,600 geographical points.

In the view of Lieut. Maury, with whom we have conversed, and who gives his active co-operation in the enterprise, there is no reason why this great work cannot be completed in one year from the present time. The wire can be made during the approaching winter, so as to be in readiness for the laying down next spring. It was upon the plateau above noticed that the Brooke's celebrated sounding apparatus brought up its first trophies from the bottom of the sea. These specimens Lieut. Berryman and his officers judged to be clay, but upon being submitted to microscopic examination, they were found to consist of calcareous shells, unmixed with sand or any foreign substance. It was deemed probable that the occupant lived near the surface of the water, but that the shells settled to the bottom after death. According to Lieut. Maury, the inference is, that in the place of their deposit, if anywhere, the waters are at rest. "There was not motion enough there to abrade these very delicate organisms, nor current enough to sweep them about and mix up with them a grain of the finest sand, nor the smallest particle of gravel torn from the loose beds of the debris that here and there strew the bottom of the sea. This plateau is not too deep for the wire to sink down and rest upon, yet it is not so shallow that currents or icebergs or any abrading force can derange the wire after it is once lodged." Icebergs have been known to ground at a depth of 700 feet. The month of June is the most favorable part of the year for laying the submarine wire. Though fogs are most frequent at that time, gales seldom occur to roughen the sea.

Cyrus W. Field and Peter Cooper (the New York, Newfoundland and London Telegraph company) are the gentlemen principally concerned in the success of the undertaking; and the general government, while promoting scientific research, has wisely determined to afford encouragement to private enterprise, in the practical application of scientific principles, by employing the United States propeller Arctic, (well known in connection with Polar explorations) in taking soundings on the telegraphic plateau, preparatory to laying the cable. Several of the officers of the Arctic are peculiarly qualified for the service. Beside Lieut. Strain, whose narrative of sufferings and achievements in the Isthmus of Darien is well known, she will take out Mr. Brooke, U. S. N., the inventor of the sounding instrument bearing his name, by which specimens of the bottom are furnished; also, Midshipman Mitchell, who was with Captain Berryman on the United States surveying brig Dolphin, and became remarkably expert in obtaining deep soundings. From the experience then had, it is expected that the average depth of water on the plateau will be from 2,000 to 2,800 feet. The officers of the Arctic are as follows:

1. Lieut. Commanding—O. H. Berryman. 2. Lieutenant—J. G. Strain. 3. Acting Master—J. G. Mitchell. 4. Passed Midshipman—C. F. Thomas. 5. Midshipman—J. C. Barnes. 6. 1st Asst. Engineer—H. Newell. 7. 8d Asst. Engineer—L. Williams. 8. Draftsman—A. Von Burck.

The Arctic will first steer north for Newfoundland, taking out provisions for ninety days, and a moderate supply of coal; expecting to replenish the latter at Newfoundland, as may be found necessary. The instruments furnished are the most

important part of her equipment. First, is Brook's instrument, consisting of an iron spindle about three and a half feet in length, the lower extremity of which is a tubular, filled with the open barrels of quills. This spindle passes through either a perforated 68 pound shot or a pear shaped leaden weight (100 or 150 pounds) two feet in length, suspended by brass wire. The spindle projects below the weight, so that when the latter touches bottom, the wire unhook by a very simple, yet ingenious contrivance, leaving the weight detached. Above the weight is secured "Massey's attached" for determining the depth—a vertical propeller turned by the downward motion of the lead, and which indicates the depth on a graduated dial, by showing the number of revolutions made by the propeller. A clam is raised while the lead is descending, and falls when the motion ceases, stopping the propeller, so that no false indications can be given by the lateral current. Thus three elements may be employed to form the basis of a calculation of depth; the length of time required for a weight to descend; the position of the indicator; and the measured length of the line.—From the lower end of the spindle, specimens are found, adhering to the tallow lining of the quills. The sounding line is being made at the Government ropewalk in Boston, which is the largest in the country, and will comprise 10,000 fathoms. A steam reel, with which to use the line is making in this city. It will be run by a small engine placed on deck. It is supposed that a depth of 5,000 fathoms, or nearly five miles, may be measured without breaking the line, as no part of the sounding apparatus is returned, but the spindle. Besides thermometers for determining the temperature of the ocean at the various depths, are other instruments designed to elucidate the physical geography of the ocean.

The description of wire to be used is not fully decided upon, though there is no doubt but that the one adopted will be smaller, lighter and more pliable than the one lost a few months ago on the coast of Newfoundland. Still another wire, of much the same character, was lost while attempting to connect Corsica with the North coast of Africa. Such an one as is required can be manufactured at the rate of eighteen miles a day. A light flexible wire laid in the Black Sea, between Varna and Balaklava, was laid without difficulty, the steamer employed going five miles per hour without once stopping.

Should the survey on which the Arctic is now employed terminate as favorably as anticipated, it is probable the wire will be laid at the earliest practical day. Profiting by the experience of the past, it is determined to employ two steamers in laying the wire. They will proceed from England, having on board equal portions of the line. Uniting these, each will proceed direct to the opposite shores, passing out the cable as she sails, thus avoiding the fatal difficulty before encountered, when it was attempted to tow the vessel having the cable on board, and, a gale arising, both of them became unmanageable. Furthermore, the time required to lay the line is reduced one-half by the process now proposed, so that six days is considered a liberal allowance for the execution of the work. It is thought the wire will offer little impediment to the progress of the steamers.—A curious circumstance will be the manner of maintaining telegraphic communication between the two vessels while this work is going on, it being in view to connect the extremities of the wire on each ship with galvanic batteries, so that the electric current will pass through the huge pile on each vessel, as well as through all such portions as may be submerged, conveying intelligence instantaneously and uninterruptedly, uninfluenced by apparent obstacles or confusion. The progress of each vessel can thus be regulated with reference to their relative position, or other incidental circumstances. Success is regarded as certain.—The same parties commenced laying a wire seventy-five miles in length, on the 2d inst., between Cape Ray and Cape Breton, and have now probably completed their work.

DRAKE & CARTER,

49 Merchants' Exchange, Wall Street.

THE subscribers have formed a Co-Partnership under the name of DRAKE & CARTER, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Loaning Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be JAMES M. DRAKE and GALEN A. CARTER. EDWARD B. LITTLE Esq. has contributed Fifty Thousand Dollars as special partner.

D. & C. will occupy the Office No 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)
JAMES M. DRAKE. GALEN A. CARTER.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.
New York, July 21st, 1856.

Railroad Iron.

800 TONS best quality Welsh Rails "Eric" pattern, 56 lbs. per yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William at
Im30
New York, July 26th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per lineal yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William at
Im30
New York, July 26th, 1856.

BALL'S
PATENT JACK SCREW.

For sale by

No.	Stand.	Screw.	Net Elev.	Whole height.	Price.
1.	8 in.	12 in.	9 in.	17 in.	\$8
2.	12 in.	20 in.	17 in.	30 in.	11
3.	16 in.	23 in.	24 in.	40 in.	14
4.	20 in.	36 in.	33 in.	56 in.	16
5.	24 in.	42 in.	39 in.	62 in.	20

BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Freight Cars for Sale--4 ft. 8½ in. Gauge.

EIGHT PLATFORM CARS, thoroughly and well made of seasoned timber, with oak sills and truck frames; axles 4½ inch; Washburn & Co. Brandon wheels and warranted in every respect. These Cars are now ready for delivery and will be sold low for cash or approved paper.

Inquire of
4128 WILLIAMS & PAGE,
Railroad Supply and Furnishing Agents,
44 Water St., Boston, Mass.

FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8½ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 30 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$20,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to

BRIDGES & BROTHER,
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CIVIL ENGINEER, SURVEYOR AND DRAFTSMAN,
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RAILROAD routes located, planned and estimated. Maps and Reports furnished. Researches made for Coal, Iron, Copper, Lead and other Minerals, Metals, &c. Contract work in Tunnels and heavy Graduation measured and reported in detail. Topographical Drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological Plans prepared.

8tf

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THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

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IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible situations on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

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Orders by Post, or otherwise, will be punctually attended to.

Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the northern extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and seeding.

Wheat sown on the newly turned soil is sure to yield very large profits. A man with a plow and two yokes of oxen will break one and a half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the and of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried

either in wagons, or interrupted water routes. Nations increase the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, Ill.

Huffy's

Engineers, Architects and Draftsmen's
STATIONERY EMPORIUM.



WHATMAN'S TURKEY MILL DRAWING PAPER,
Tracing paper, Plan and Profile, Protractors, Drawing Pins, Faber's Jackson's and other makers' Pencils; Field, Level, and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Gross Section paper, Triangles Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and sand, Water Colors, Pallets, Patent Binders for letters, Portfolios, etc., together with a general assortment of Stationery and Blank Books.

All Goods packed with care, and forwarded to any part of the United States.

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Successor to H. L. Lipman,
139 Chestnut st., Philadelphia.

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CONTRACTOR'S OFFICE MINERAL POINT RAILROAD,
Hanover Building, New York.

THE subscriber desires to purchase twelve hundred tons of T rails, Erie pattern, 56 lbs. to the yard, for which proposals are invited.

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Brass Cocks.

MONAB & CARR, 133 Mercer st., N. Y., manufacture constantly all descriptions of Plumbers' Brass Work, Steam and Gas Cocks, Heaters, Oil Cups, &c., for Locomotive and Stationary Engines.

They would also especially call the attention of all who use GLOBE VALVES to their recently PATENTED IMPROVED VALVES which can be easily re-ground without being removed from the pipes.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
HON. J. V. O. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. F. FRENCH, Associate Judge, Superior Court, Essex, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 31.]

SATURDAY, AUGUST 2, 1856.

[WHOLE No. 1,069, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, August 2, 1856.

New Jersey Central Railroad. REPORT OF DIRECTORS.

The Directors of the Central Railroad Company of New Jersey present to the stockholders the following report for the year ending March 31st, 1856:

SERVICE OF ROAD AND FERRY.

During the year the service of road has been as follows:

Miles run by passenger trains*	145,668
" " freight "	50,645
" " wood "	6,977
" " construction "	24,023

Total miles run by trains

227,313
During the same period the ferry boats have made 2,964 trips, of 12 miles each, between New York and Elizabethport, the commencement of the road, making a service of 35,568 miles.

The number of passengers carried on the railroad and ferry has been 302,013. The number of miles traveled by passengers or number of passengers carried one mile has been 6,491,733. This does not include commuters or free passengers. The number carried the previous year was 318,449, who traveled 7,470,542 miles; showing a decrease the present year of 16,436 in the number of passengers, and 978,809 in the miles traveled.

*This includes 21,276 miles run on the Lehigh Valley railroad by our trains.

The same causes which have reduced the travel on other roads have operated here also.

The number of tons of freight (2,000 lbs. each) carried has been 83,487. The total movement of freight, or number of tons carried one mile, has been 3,007,303. The tonnage of the previous year was 73,309, which was carried 2,932,366 miles; showing an increase the present year of 10,178 tons, and 74,937 in miles carried.

TRANSPORTATION ACCOUNT.

The following is a statement of the ordinary receipts and expenses for the year:

RECEIPTS.	
Passengers	\$186,769.11
Freight	202,159.43
Mail	5,786.00
Express	2,280.00
Rents	1,444.68
Miscellaneous	150.63
	\$298,489.85

EXPENSES.	
Running expenses	\$55,595.66
Repairs of road	20,469.05
Repairs of engines	13,652.09
Repairs of cars	10,923.37
Repairs of build'gs, bridges, &c.	10,223.03
Expense account	12,673.02
Miscellaneous expenses	5,134.58
Wood consumed	85,241.23
Coal consumed	14,068.71
Ferry running expenses	25,782.56
Ferry boat repairs	6,925.32
Ferry miscell's expenses	6,736.21
	\$217,424.83

Balance net earnings

\$181,065.02
The comparative tables of receipts and expenditures for the past two years, given at the end of this report, show an increase in the receipts the past year of \$21,855.40, and a decrease in the expenses of \$3,921.50, making a total increase in the net earnings, of \$25,776.90. This is from the road itself, as the Lehigh Valley road has, as yet, added nothing to the business, owing to deficiency of equipment.

An apportionment of expenses between the road and ferry gives—

For the road, \$163,912.03, or 83 cents per mile run by passenger and freight trains.

For the ferry, \$53,512.80, or \$1.50 per mile run by boats.

The expenses of the dock and handling, in New York, are charged to the ferry, those at Elizabethport to the road.

Last year the ordinary expenses apportioned between the road and ferry should have been stated as—

For the road, \$163,093.72, or 89 cents per mile run by passenger and freight trains
For the ferry, \$53,252.60, or \$1.63 per mile run by boats.

Thus showing an increased economy in running on both.

OPERATIONS OF THE YEAR.

The following is a statement of the financial operations during the year:

RECEIPTS.	
Second mort. bonds	\$1,500,000.00
Warren railroad stock, (reduction)	83,920.50
Sundry acc'ts	13,452.80
Gross earnings, as per statement	898,489.85
Cash from old account	4,666.18
Total	\$2,005,529.33

EXPENDITURES.	
Construction account, and—	
dries	\$1,705.83
Land damages (including farms)	20,729.13
Engineer department	3,451.39
Grading	115,730.77
Masonry	19,254.38
Railway superstructure	276,037.64
Bridge superstructure	12,849.53
	\$449,758.67

Discount on second mort. bonds	225,000.00
Station houses	5,303.83
Land and work at Elizabethport	25,548.09
Engines and cars	34,608.48
Wood on hand, increase	52,000.00
Sundry property accounts	7,563.69
Sundry accounts, reduced	1,249.00
Bills payable, reduced	72,337.93
Ordinary expenses as per statement	217,424.83
State tax, $\frac{1}{2}$ per cent.	14,028.42
Interest acc't, balance	127,179.78
Interest dividends, Nos. 12, 13 & 14	184,927.80
Stock and bonds on hand, increase	112,300.00
Bills receivable on hand, increase	450,463.54
Lehigh Valley Railroad Co., balance due	19,391.08
General freight agent	2,476.66
Cash on hand	3,978.53

Total

\$2,005,529.33
The bonds, \$1,500,000, proposed to be issued by the last report, for the completion of the second track from Elizabethport to Hampton Summit, and for the other facilities immediately required, were divided among the stockholders, *pro rata*, in July last, at 85 per cent. They were made convertible, and secured by a second mortgage, the interest payable May 1st and November 1st, and the principal reimbursable May 1st, 1875. The bonds of the 1st mortgage are not convertible, the interest payable February 1st and August 1st,

and the principal payable, \$500,000 August 1st, 1860; \$500,000 August 1st, 1865, and \$500,000 August 1st, 1870. A portion of the second mortgage issue are in sums of \$500. The discount on this issue has been charged as a portion of the expense of the second track, and the difference will be more than made up in the cost by the greater economy with which the work is now constructing, over what it would have cost if left till indispensable, and then pushed through with all the disadvantages arising from the simultaneous transaction of a heavy business on the adjacent track.

The profit and loss account has been debited as follows:

Ordinary expenses, as per statement..	\$217,424.83
State tax, $\frac{1}{2}$ per cent.....	14,028.42
Interest on bonds, &c.....	127,179.78
Interest dividend in stock, 13 mos..	184,927.30
Renewals, old acc't closed.....	45,048.88
Sundry accounts, closed as bad debts, or reduced to inventory.....	16,568.72
	\$605,177.93

It has been credited as follows:

Gross earnings, as per statement.....	\$398,489.85
Balance, say interest, charged to railroad.....	206,688.08
	\$605,177.91

The property accounts have all been carefully examined, full inventories taken and the accounts reduced to correspond, whenever found to exceed. All doubtful claims have been charged off as loss. Interest on the stock has been paid up in full to the 1st April, in stock, as a matter of justice to the present holders, now that the business appears likely to make a full return on the capital invested. The desire has been to square up everything to the beginning of the fiscal year, and let the coming two years show whether those who, for the last ten years, (some very much longer,) have been laboring to build up the Central New Jersey railroad into a leading thoroughfare, are or are not correct in their anticipations of business for the road and profit for the stockholders. For this reason the balance of the profit and loss account, as above, has been charged off, for the time being, to the railroad.

The balance sheet shows \$669,882.79 on hand, in stock, bonds and notes, for the construction of the second track.

CONSTRUCTION.*

During the past year a large amount of work has been done on the road. No great effort was made to push the second track, until the means had been provided by the issue of the second mortgage bonds; but immediately after, all the grading was placed under contract, as well as the small remaining amount of masonry. The third rail for the broad gauge connection with the Lackawanna road has been placed on the present track as far as Hampton, and on the second track as far as laid; and the substitution of long ties on that part of the road principally completed. Many small variations in the grades of the older part of road below Somerville have been corrected, and the reduction of the heavy grade at Scotch Plains, from 45 feet to 21 feet per mile, has been finally effected. It is a matter of some credit to our efficient superintendent and engineer, that this reduction, involving, as it did, the entire reconstruction of three miles of road, raising or lowering the track in some as much as 16 feet, and extending over a period of two years, has been completed without accident to trains or interruption to the business of the road; the regular passenger and freight trains having been run over it during the whole time. There is now no grade on the road over 21 feet to the mile against the trade.

*This statement of construction is to the 1st April only. Since that time, very rapid progress has been made, and many sections have since been finished.

The masonry, graduation and ballasting of the second track are in a very forward state. Of the 48 miles, 11 are completed, the track laid, ballasted, and in running order; 10 miles are ready to ballast, and on the remaining 27 miles the work is about half done.

The amounts charged to construction embrace 38,602 cross-ties on hand not yet laid. The entire amount of the iron required, 6,000 tons, has been contracted for at Scranton, at \$65 on the cars, deliverable regularly through the season.

The present year will, without accident, see a complete double track in operation between Elizabethport and Hampton, 48 miles. Of the remaining: 16 miles, between Hampton and Easton, about 9 miles can be put in at a trifling expense besides the superstructure; the remaining 6 miles on which the work will be very heavy, will not be required for many years.

Besides the second track laid, there are about 12 miles of siding at stations and the terminus at Elizabethport. Total of first and second track sidings, &c., about 86 miles.

At Elizabethport the construction of track, wharves and buildings has been continued, and a large amount of grading and filling at moderate cost. An additional and very valuable track of land, including the water-front, and lying east of the Company's land, has been secured; and immediately contiguous to this, the Delaware, Lackawanna and Western railroad company have purchased a large tract, and established there their coal depot. All coal, lumber, &c., from the Lackawanna region, are brought to Hampton in their cars, hauled over our road by our engines, and delivered on their grounds. All wharves, tracks, &c., required, are furnished by them. These arrangements, by relieving this company from a large outlay for cars and a terminus, enable us to do a very large business from the Lackawanna region, with a trifling additional investment after the second track and the third rail on the two tracks are provided.

It also facilitates very much the necessary separation of the broad gauge business from that of the Central road and the Lehigh Valley railroad and its connections, which is done on the narrow gauge.

CONNECTING LINES.

A small map of the road and its connections is prefixed to this report. A large and accurate map can be obtained at the office. The tables of distances, from the report of 1854, are reprinted at the end of this report.

The Lehigh Valley railroad was opened through from Easton to Mauch Chunk; 46 miles, in September last, thus giving a continuous line from the Lehigh coal fields to Elizabethport. Distance from Mauch Chunk to Elizabethport, 109 miles; to New York, 121 miles. The mines are about 17 miles above Mauch Chunk. As yet this road has done little business, having a very insufficient equipment, and laboring under some other disadvantages; but when these difficulties are removed, it cannot avoid doing a large and profitable business, as it has all the advantages derived by the Reading road from a level or descending grade throughout its entire length, is likely to be without a rival in its location, and will have the benefit of many outlets for its coal and many feeders for its business. When its main line is extended from Perryville, 6 miles below Mauch Chunk, to Tamaqua, where it intersects the Catawissa road, a distance of 16 miles only, a large through business from the Sunbury and Erie road will be brought over to the Central railroad of New Jersey. This work is entirely within the ability of the Company to complete, as soon as their business is developed.

The link of road from Allentown westward, to connect with the Pennsylvania Central railroad and thus form an air line of unbroken gauge from New York to Pittsburg, still remains to be supplied. Important as this enterprise is to the country through which it will pass, a country rich in soil, in cultivation, in minerals, in everything but avenues to a market; to the city of New

York and the Western States, brought by this channel into more intimate connection; and to the Central railroad of New Jersey, which it will supply with an entirely new source of traffic; it cannot be much longer delayed. Little as the public are disposed to embark in new railroad enterprises, till the results of previous investments are more certainly ascertained, the advantages of this link are so obvious to all concerned, and especially to the business classes of New York, that there can be little hesitation in furnishing the comparatively small amount required for its construction.

The Delaware, Lackawanna and Western railroad and the Warren railroad, together forming the line from Hampton Summit to Scranton, in the Lackawanna coal basin, the youngest in charter and latest in commencement among the coal roads, was opened throughout its entire length on the 27th May just past, and is now in successful operation. Already the passenger, freight and coal business of this road begin to develop, and it is believed by its friends that its success will be immediate. Every effort has been made and is making, by the Central, to give them every facility consistent with proper economy, and it is hoped that the relations of the companies will be as friendly as their business connections will be intimate. This is the more likely, as the large stockholders in each are generally interested in the other also. If one-fourth of the anticipations of managers of this company are fulfilled, the addition of this business alone to that of the Central New Jersey road cannot fail to make it highly remunerative. This report has been delayed beyond the regular time, to announce this opening.

CONCLUSION.

The company have now a line complete from New York, through the Lackawanna coal field, to Oswego on Lake Ontario.

They have a line complete from New York to Mauch Chunk and the Lehigh coal fields.

Forty miles built will make an air line of unbroken gauge to Pittsburg, and also bring in the Schuylkill coal.

Eighteen miles built will make a connection of unbroken gauge with the Sunbury and Erie road. Schuylkill, Lehigh and Lackawanna coal will be the same distance (say 125 miles) from Elizabethport.

For further information see the maps and reports of any Western road looking to the New York market.

By order of the Board,
June 1, 1856. JOHN T. JOHNSON, President.

Central Pacific Railroad.

REPORT OF HON. JOHN M. WOOD, OF MAINE.

The undersigned, being one of the Select Committee to whom was referred the subject of a railroad from the Atlantic States to the Pacific Ocean, and differing from the views entertained by a majority of that committee, asks leave to submit the following as a minority report:

It is admitted by all parties that it is desirable to have constructed, as speedily as may be, a railroad from the valley of the Mississippi river to the Pacific Ocean. The agitation of this question during the past few years has necessarily had the effect of rendering the project somewhat familiar to the popular mind. The subject is unquestionably one involving many difficulties, owing in part to the vastness of the country embraced within the limits explored and the numerous and perhaps conflicting interests that are striving for particular and favorite routes. The question therefore should be approached, as far as possible, without prejudice, and with the leading view of accommodating the largest possible portion of the community who are to be benefitted by this great work. Having given the subject some consideration, I have come to the following conclusions, namely:

That to accomplish this object with certainty and in a reasonable time, the Government of the United States must furnish the cash means to prosecute the work. The mode in which these

means may be furnished is indicated at the conclusion of this report.

The only one line is at present required.

That in selecting a route for that line, regard should be had to the geographical position of the thirty-one States of the Union relatively to each other, and also to other lines of railway already leading to the Mississippi Valley.

By an examination of the map of the United States, and tracing the different lines of railway thereon designated, the converging termini of these roads will be found at a point on the Missouri river, somewhere between the thirty-ninth and forty-first parallels of north latitude; and from such a point, the road should be commenced at this end and follow the most direct and practicable route to San Francisco.

The harbor of San Francisco is acknowledged to be the best; and that port is now the great centre of all the commercial relations of our western coast. The Columbia river at the North will, in time, become a point of importance as a commercial port for the inhabitants of the territories of Oregon and Washington; and, at the south, we have the port of San Diego, with a good harbor, but less capacious than either of the others. It is not believed, however, that any route can be made satisfactory under the present state of things which does not contemplate San Francisco as the terminus on the west, and also some point at the eastern terminus sufficiently central to accommodate the greatest amount of population and business enterprise. In this instance, as in all others of a like nature, the same rule of action shall be observed which lies at the foundation of all success, namely—a due regard to the great centres of commercial enterprise and industry.

The explorations and surveys, reports of which accompany the report of the Secretary of War, are sufficient to decide upon what route the road should be built. There are, undoubtedly, preferences according to sectional localities, but if only one road is to be built, the common sense of the people will at once yield to a decision in favor of a route which, if practicable, will accommodate the greatest amount of the busy population of the country.

The determination of a route for a railroad is not always to be governed by the facility or cheapness with which it may be constructed. If such were the case, many roads would be built in favorable localities where there are but limited means for their support.

The map and profiles, accompanying the Secretary's Report, indicate five distinct routes from the Mississippi Valley to the Pacific Ocean.

Profile No. 1 is of the most northern line, commencing at St. Paul, and terminating either at Vancouver or Columbia river, or Seattle in Port Discovery, on Puget's Sound.

Profile No. 2 is of a line commencing at Westport or mouth of Kansas River, passing through South Pass and terminating at the same point as No. 1.

Profile No. 3 is of a line commencing at Council Bluffs and going through the Cheyenne and Bridges Passes of the Rocky Mountains, and near Salt Lake, across the Great Basin, through Made-line Pass and Sacramento Valley to Benicia, in San Francisco Bay.

Profile No. 4 is of the Central route through Sangre de Christo and Co-che-to-pa Passes to the Great Basin, where the route was abandoned as impracticable.

Profile No. 5 is of a cross route from Independence, Missouri, to El Paso del Norte.

Profile No. 6 is of a route from Fort Smith, passing near Santa Fe, and terminating at San Pedro.

Profile No. 7 is the southern route from Fulton through El Paso, El Dado, mouth of Gila and Gorgonia Pass to Martinez, on an arm of San Francisco Bay, opposite Benicia.

Profile No. 8 is a spur of the last named route, commencing at Indianola, Texas, a harbor on the Gulf of Mexico.

The information contained in the report and

estimates furnished by the Secretary of War would lead to the rejection of all these routes except the first, third and seventh; that is to say, the routes of the 47th, 41st and 32nd parallels of latitude.

On Profile No. 2 there is no estimate or report, the minutes seeming to be made up by former reports not combined with the late surveys or explorations.

Profile No. 4 is left unfinished and declared impracticable.

Profile No. 5—a cross line—is not suitable for the road in question.

Profile No. 6 is considered as too expensive, and is objectionable on the score of high grades.

From the reports it appears that the nature of the explorations will not admit of determining the amount of curvature upon any of these lines; and as regards the estimates, probably no two of them were made by the same party; consequently no standard could have been assumed to govern all the estimates. This is exhibited in the fact that upwards of twenty millions of dollars were added to the estimates of Governor Stevens for the northern route, and a very large amount deducted from the estimates of the southern route, thus making the estimate for the northern line read \$140,871,000, instead of \$117,121,000, and reducing the estimate of the southern line to \$93,120,000. The estimate for the route by the 35th parallel (Profile No. 6) is left undisturbed at \$169,000,000, though it is stated to be in excess of the probable cost.

The profiles of all these roads exhibit only the lines of average grades. Undoubtedly many undulations will occur in construction, which are not at present represented.

An analysis of what is given is shown in the following table:

	Grades level and up to 30 feet.....	Grades above 30 and up to 60 feet.....	Grades above 60 and up to 90 feet.....	Grades above 90 ft. up to 120 feet.....	Maximum Grades.	
					Length.....	Rate per mile.....
Profile No. 1. Miles.	1,761	264	...	...	25	60
Northern line..	1,761	264	...	...	25	60
Profile No. 2.....	1,908	95	38	116	3.5	324
Profile No. 3.						
Central line.....	1,747	164	71	6	3.6	125
Profile No. 6, and part of No. 7.....	1,837	219	101	141	3.5	183
Profile No. 7.						
Southern line.....	1,661	176	112	87	7.2	173

The lengths of the several lines are as follows:

	Miles.
Profile No. 1.....	2,025
Profile No. 2.....	2,162
Profile No. 3.	
Central line.....	1,988
Profile No. 6, and part of No. 7.....	2,298
Profile No. 7.	
Southern line.....	2,039

On the examination of this table, we are led to remark upon the extraordinary proportion existing among all the lines, somewhere about 85 per cent. of the length of each, consisting of gradients of 30 feet per mile, and less to a level. Profile No. 1 of the Northern line is very favorable, and must be allowed to be superior to all the others, both in its grades and the small sum of its ascent and descent. Were there no other questions to be taken into consideration, this route would certainly be preferable to all the others as regards facility of construction. The objections to it are its high northern latitude, leaving almost the whole United States territory to the south of it; its requiring a tunnel $4\frac{1}{2}$ miles in length; its terminating in a remote corner of the country at a great distance from the commercial centre of the Pacific coast; and its high cost as given in the Secretary of War's report.

Profile No. 2, represents a line terminating at the

same points as above, is longer than that of No. 1, and is more objectionable on account of its grades, thirty-eight miles of which rate from sixty to ninety feet per mile, and one hundred and sixteen miles of which rate from ninety-nine to three hundred and twenty-four feet per mile.

Profile No. 3, the Central route, as respects grades, is second only to No. 1, and is greatly superior to any of the others. It has seventy-one miles rating from sixty to ninety feet per mile, the maximum grade being one hundred and twenty-five feet per mile; but that grade is only three miles and six-tenths of a mile in length. Besides, the whole of this extreme high grade is concentrated at the Western Pass of the Sierra Nevada mountain, and may, probably, be reduced to a rate of ninety feet per mile or less. Indeed, it is stated in the report that a new and more feasible route has been discovered since the report of Lieut. Beckwith was made. The total rise and fall upon this line 29,120 feet.

Profile No. 6, continued to San Francisco Bay by the western portion of Profile No. 7, shows one hundred and forty miles length of gradients ranging above ninety feet per mile, with a maximum grade of one hundred and eighty-three feet per mile for three and a half miles, and a total cost of \$169,000,000.

Profile No. 7 represents the Southern route, 2,039 miles from Fulton to San Francisco Bay. As respects grades, this line is much superior to Profile No. 3, the Central line. There are 112 miles having grades from 60 to 90 feet, and 87 miles with grades above 90 feet per mile, to which must be added a maximum grade of 175 feet per mile for a distance of $7\frac{1}{2}$ miles. These high grades are distributed occasionally throughout the length of the line, rendering it necessary to stock a large portion of the whole length of road with the heaviest and most expensive locomotives. Of the grades ranging above 20 feet per mile on this route, we have those of 91, 93, 94, 95, 108, 116, 119, 132, 155 and 157 feet per mile. The total rise and fall upon this line is 42,934 feet.

Admitting that each of these three roads is suitable for the purpose of constructing a good and sufficient railroad, it must also be admitted that, as regards gradients, the Northern line is superior to the other two. The manner of estimating, however, is open to some criticism. It appears that the standard of estimating has been fixed by likening the route to some well-known railroad in operation, mostly in the north, such as the "Baltimore and Ohio," the "New York and Erie," the "Hudson River," &c.

Now it is indisputable that the same amount of work required on any of the above mentioned roads could not be done as far south as the thirty-second parallel of latitude by an equal number of men in the same space of time, nor at the same rate of expense. The climate is such that the amount of work done is less per day, and the rate of wages must be also somewhat higher. This must also greatly enhance the cost of any public work commenced so far south as the thirty-second degree of north latitude.

The Secretary of War objects to the Northern line, because it runs so near the territory of a powerful foreign government. Will not the same objections apply in some measure, at least, to the Southern route also? Are we so weak as to express any fears on this account? Shall we not be better able to protect our frontier from the very fact that we have the means of transporting war materials all along the line?

But the main facts which ought to decide the question of route have not yet appeared. Let us put the inquiry, "On what latitude is the central great mass of the population of this country situated? and in what direction is the current of the moving population pressing?" The replies to these queries should have more bearing in determining than any other considerations, after the practicability of the three great routes is admitted. Referring to the map of the United States, and the last census, it will be found in the latter that the whole population was enumerated at 23,-

000,000. Scanning closely the map of the United States, it will be perceived that every State north of Arkansas, Tennessee and North Carolina, will be better accommodated by the central line than by any other. Considering St. Louis as a point of departure for the Central line, it will be seen that Arkansas and Tennessee are equally as well accommodated by the Central as by the Southern line.

The population of the States north of Arkansas, Tennessee and North Carolina is upwards of 17,000,000, nearly three-fourths of all the people of the Union. Even excluding New England, New York, Michigan and Wisconsin, we yet have a population centrally situated of 10,577,000 or nearly one-half of the whole. Every one who is familiar with railroad enterprises knows that it is the moving population which actually supports the system, and that a railroad to be well supported, must be constructed on the line in which that population wishes to move. The population even north of the latitude of forty degrees is 10,880,000, nearly one-half of the whole, and if we look upon the railroad map, we see most of the lines lying in an east and west direction, absolutely indicating the course of the greatest amount of travel.—The overland travel is already great on the Central line, a fact which cannot be shown of either of the other two. The communication of the Mormons, both East and West, is also large. The Mormon settlement, situated as it is, must be a great aid in the construction and support of a railroad.

Again, the Central line is the shortest between the two great commercial cities on the Atlantic and Pacific coasts:

	Miles.
From New York to Benicia, via Central line, is	3,240
From New York to Martinez, via Southern line, is	3,647
From New York to Vancouver, via Northern line, is 2,054, and adding 580 miles not yet surveyed, we have a total of	3,634

Here is a distance of about four hundred miles in favor of the Central line, or nearly a ninth part of the whole distance.

The Northern line does not accommodate the State of California at all without an extension of about 580 miles parallel to the sea coast to carry the line to San Francisco Bay.

Objection has been made in some quarters to northern and central lines, on account of the deep snows, common to high northern latitudes. This objection has some plausibility, when we take into consideration the manner in which roads were located and constructed in the old States some years ago; but the observation and experience of later years have taught our engineers; and those having charge of the location of roads, the necessity of elevating their road bed much higher than was formerly the practice, thus avoiding the evil consequences attendant upon hugging the surface of a level plain so closely. This improved elevation has resulted in entire relief from the effects of snows, as experience has sufficiently shown, besides producing a better drainage, and not adding materially to the cost of construction.

Taking a broad view of the whole matter, the construction, the conditions when built, the amount of population to be accommodated, and the amount of moving population to support the road, added to various other considerations, there would seem to be no question as to the vast preponderance of the argument in favor of the Central line.

A further survey, however, for a final location will be necessary, and this, it is believed, could be best accomplished by a mixed commission of engineers. One-half of this commission should consist of gentlemen in the employ of the government, and the other half should be taken from the most eminent of the profession who have been employed upon railroads and public works by corporations.

In the appointment of commissioners to superintend and take charge of the construction of the work, there should be appointed, in connection

with the Secretary of War, a Board of Directors or Commissioners, consisting of not less than five, nor more than thirteen practical, experienced men—men who have been engaged heretofore on works of a like kind. A portion of this Board should be constantly on duty on the line of the road.

Propositions should then be called for, and two hundred miles of road at each end be placed under contract simultaneously, and the further progress should be as rapid as prudence and circumstances would permit.

For the purpose of meeting the expenditures necessary to carry on this work, an appropriation of one hundred millions should be made by Congress, to be supplied in the following manner, viz: That all surplus money in the treasury, after defraying the ordinary current expenses of the government, should be appropriated to this use; and further, if necessary, that bonds of the United States government, having thirty years to run, and bearing five per cent. interest, should be issued in such annual amounts as the requirements of expenditure on the road might demand.

For the redemption of these bonds at maturity, the public lands of the United States, not otherwise appropriated, should be set apart, and from and after the 1st of January, 1858, a sinking fund should be established for this purpose, to be made up of the avails of these lands, as rapidly as they are disposed of.

In accordance with the foregoing views, the undersigned has prepared a bill, which he herewith submits, embodying the principal ideas expressed in the report. Many important matters of detail are necessarily omitted as being only fit subjects of consideration when the question itself shall come up for discussion in the ordinary course of legislative business.

The chief object of the undersigned has been to foreshadow what he believes to be the only feasible method of commencing and carrying on to completion this great national work—a work demanded alike by the requirements of a great majority of the people of the United States, and by all the exigencies and interests of every section of the country.

J. M. Wood.

Railroads in Great Britain.

Extracts from the recent Governmental report upon the railways of Great Britain.

The total amount of money authorized to be raised by railway companies, by shares and on loan, to the end of 1855, amounted to £374,971,266, of which £297,583,284 had been raised, leaving £77,388,682 to be raised. There are no means of ascertaining how much of this sum is apportioned to the miles of railway for which the parliamentary powers have expired, but it may be assumed approximately that from £30,000,000 to £40,000,000 of this amount would have been applied to those portions of railway, and that it will not, therefore, be now raised.

Of the 8,297 miles open for traffic on the 31st of December, 1855, the proportion constructed on the narrow gauge, broad gauge, mixed gauge, and Irish gauge, is as follows:

	Narrow Gauge.	Brd Gauge.	Mix'd Gauge.	Irish Gauge.	Total.
	Miles.	Mil's.	Mil's.	Mil's.	
In England.....	5,345	667	208	...	6,218
In Scotland.....	1,092	...	...	...	1,092
In Ireland.....	8	...	979	...	987
Total.....	6,445	667	208	979	8,297

The length of new line reported to be in course of construction on the 30th of June, 1855, was 880 miles; of these about 170 miles were opened before the 31st of December, 1855.

The number of persons employed on the 30th of June upon the railways in course of construction, amounted to 38,546, being on the average 43.8 per mile.

With the view of affording some measure of the comparative progress of railway enterprise, the following table has been prepared, showing the

number of miles of railway in course of construction in each year since 1848, and the number of persons employed thereon, together with the amt of money received and the number of miles of railway opened during the year:

Year.	Miles.	Number of persons employed.	Average number employed per mile.	During the year.	Money raised by shares and loans.	Miles of railway opened during the year.
1848..	2,958	188,177	63.6	...	...	...
1849..	1,604	108,816	69.0	1849	£29,574,719	809
1850..	864	58,884	68.15	1850	10,622,967	625
1851..	734	42,938	58.49	1851	7,970,161	269
1852..	738	35,935	48.69	1852	15,924,783	446
1853..	682	37,764	55.36	1853	9,158,885	350
1854..	889	45,401	51.07	1854	12,452,374	368
1855..	880	38,546	43.80	1855	11,614,490	243

The length of line open for traffic in the United Kingdom on the 30th of June, 1855, was 8,116 miles, and the number of persons employed thereon amounted to 97,952 persons, or 12.07 per mile. This, as appears from the following table, is a larger number per mile than have been employed in any year since 1848:

Year.	Miles.	No. of persons employed.	Average number employed per mile.	Stations.	No. per mile.
1848..	4,262	52,688	12.3	1,321	.31
1849..	5,447	55,988	10.2	1,850	.33
1850..	6,308	60,325	9.56	2,030	.32
1851..	6,698	63,566	9.49	2,107	.31
1852..	7,076	67,601	9.55	2,253	.31
1853..	7,512	80,409	10.7	2,463	.32
1854..	7,803	90,409	11.59	2,410	.30
1855..	8,116	97,952	12.07	2,798	.34

Table No. 1, in Appendix No. 7, shows the several classes to which the persons employed belonged.

And by the following table is shown the length of lines open for traffic at the same dates:

	No. of companies having single lines.	Narrow gauge.	Broad gauge.	Mixed gauge.	Irish gauge.	Total.
		Miles.	Miles.	Miles.	Miles.	Miles.
In England..	85	1,064	209	72	...	1,345
In Scotland..	20	254	...	...	...	254
In Ireland....	21	2	...	...	568	570
Total	126	1,320	209	72	568	2,160

*Thirty-nine miles of this length is laid with a second line on a narrow gauge.

From the above details it appears that the length of new lines opened for traffic during the year 1855, including 17 miles of line belonging to private individuals, amounted to 248 miles; of these, 235 miles were laid with only one line of rails.

Chicago, Burlington and Quincy Railroad.

The Chicago, Burlington and Quincy road, as consolidated, is represented by the following Board of Management: Messrs. James F. Joy, of Detroit; Henry Ledgard, do.; John W. Brooks, of Boston; John Van Nortwick, of Batavia, Ill.; I. H. Burch, of Chicago, Ill.; W. Selden Gale, of Galesburg, Ill.; Chauncey S. Colton, do.; S. Willard, do.; James Bunce, do.; W. J. Selden, do.; George W. Gale, do. At a meeting of the Board, James F. Joy was elected President, Amos T. Hall, Secretary and Treasurer, and Charles G.

Hammond, Superintendent. The line for the first six months of 1856 shows a traffic of \$722,496, against \$514,366 same period in 1855, being an increase of 28 per cent.

Coal for Locomotive Engines.

The Illinois Central railroad company have been experimenting for some time past in the matter of burning coal in locomotive engines. The use of this kind of fuel is of the greatest importance to this company, as their road traverses a country only sparsely covered with wood, but underlaid with abundant supplies of coal.

Below we annex a report of Mr. Jas. C. Clarke, to whom was confided the experiments referred to.

ILLINOIS CENTRAL RAILROAD COMPANY,
Division Superintendent's Office,
AMBOY, July 24, 1856.

No. 51 completed its twenty-first trip yesterday, and has run 2,810 miles, doing regular freight train service between Wapella and Amboy. The results are highly gratifying, and it is a fixed fact that all our wood burning engines can be converted into coal burners, at an expense not exceeding \$275 each. I have caused the fire box, fire sheets, and flues to be thoroughly examined every trip, both at Wapella and Amboy, in order to detect any defect or injury which might result, and up to last night we have not discovered the slightest. The fire box, fire sheets and flues are as free from scales and expansion as on the day coal was put in the furnace. The flues have not leaked a drop, the engine has not lost a trip, nor has it ever failed for steam on any part of the road, although on six trips the run from Wapella to Amboy was made without shaking the grate bars. It is a strong piece of evidence in favor of the success of the use of Illinois coal in locomotive engines, that the grates have not sprung or warped in the least, and are to day as straight and clean as if new.

Here are the performances of several engines of the same class as the coal burner, doing the same work, with wood, on alternate days.

The figures are taken from the monthly report of fuel consumed by engines on this division. The cost of wood being estimated at \$4.35 per cord, and coal at \$3 per ton:

Engine.	Miles Traveled.	Wood Consumed.	Cost.
No. 57	1,320	49½ cords....	\$225.32
No. 39	1,526	65¾ cords....	286.01
No. 54	1,803	52½ cords....	228.37
No. 70	1,968	80 cords....	348.00
No. 65	2,062	89½ cords....	389.32
Coal 12	2,062	38½ tons coal..	115.50

These engines are engaged on freight train service between Amboy and Wapella, except No. 54, which is ditching, and Nos. 65 and 70, which run freights between Dunleith and Amboy.

The loads drawn by these engines have averaged 15 loaded 8-wheeled cars, or a tonnage of 300,000 lbs. each; and the cost of fuel per mile run has been as follows:

	Miles run.	Cords of Wood at	Cost per mile.
No. 57	1,320	49½	4.35
No. 39	1,526	65¾	4.35
No. 54	1,803	52½	4.35
No. 70	1,968	80	4.35
No. 65	2,062	89½	4.35
No. 81	2,062	38½*	3.00

*Tons coal.

From these figures I institute the following comparisons, showing the saving to be made in the use of coal:

No. 57 ran 1,320 miles at a cost of.....	\$215.32
No. 51 ran 1,526 " " " " " "	72.60

Saving in favor of coal.....	\$142.72
No. 39 ran 1,526 miles at a cost of.....	\$285.01
No. 51 ran 1,320 " " " " " "	83.93

Saving in favor of coal..... \$202.06
The coal used in No. 51 is from the upper vein

of La Salle Mines, which seems to answer as well as that of the lower veins for locomotives, though the lower, for other purposes, is esteemed the best.

The amount of cinders and dirt found in the fire box after a trip of 110 miles is small—averaging say two bushels from 51½ bushels of coal—the average of coal used per trip.

In conclusion, I submit the above to your consideration, confident I shall be able to make a large reduction in the cost of fuel in my division the coming year. I am, very respectfully,

J. C. CLARKE, Div. Supt. I. C. R. R.

Railroad Connection between Chicago and Galveston.

The *Democratic Press*, of Chicago, is calling the attention of the public to the connection of that place by railroad with Galveston, Texas. The distance it states at 1,020 miles, or about the same as from Chicago to New York. The proposed route is as follows:

	Miles.
Illinois Central, to Cairo.....	365
Cairo and Fulton, (to Fulton, Ark.).....	378
Galveston and Red River, (from Fulton to Galveston).....	282

Total, from Chicago to Galveston..... 1,020

Of these, the first mentioned, the Illinois Central, is already built, and in successful operation. Relative to the prospect of the construction of the other sections, the *Democrat* remarks:

The second link, from Cairo to Fulton, Southwest Arkansas, passing through Little Rock, the capital of the State, is organized by charter from the States of Missouri and Arkansas, and has wealth enough from federal, State and county donations of land to insure its completion. In landed wealth the Cairo and Fulton road will almost rival the Illinois Central itself.

Let us make an inventory of the property of the Cairo and Fulton railroad. The portion lying within Missouri, (71 miles) has about 600,000 acres of the so-called swamp lands, given to it by the counties of Missouri through which the road will pass. The Legislature of Missouri gave to the counties of that State all the swamp lands within their respective borders. The counties of Southeast Missouri, penetrated by the Cairo and Fulton road, have liberally turned over about 600,000 acres of the same to the railroad. The road will redeem the land and make it worth fully \$10 per acre, for it is all wonderfully rich. Here is the snug sum of \$6,000,000 secured from this source. The State of Missouri has also lent her credit to the road for the amount of \$250,000. And there are stock subscriptions besides. So much for the Missouri portion of the Cairo and Fulton road.

Next comes the Arkansas portion. Congress gave to the State of Arkansas every alternate section for a width of six miles on each side of the Cairo and Fulton road, to aid in its construction. The line of the road has been surveyed and located, and the lands selected and indicated, and from this source not less than 1,250,000 acres will be obtained. This land we will suppose to be worth \$5 per acre—in all, \$6,250,000. Besides all this, the Cairo and Fulton road has the right of way for its entire length secured, and evidenced by deeds. This is an item worth \$150,000; but we will not take it into account.

Now let us see on what basis the second division of the Chicago and Galveston road stands:

Missouri—County grant of swamp lands.....	\$6,000,000
State loan of credit.....	250,000
Arkansas—Government grant of lands.....	6,250,000

Total wealth of Cairo and Fulton road..... \$12,500,000

The entire cost of building and equipping the Cairo and Fulton railroad, according to careful estimates of engineers of high character, will be \$7,528,341.73. With reasonably prudent management, therefore, it seems that the stockholders of the Cairo and Fulton road can build their road

with the proceeds of their lands, and have a bonus of about five million dollars and the stock of the road to reward them for their enterprise. Who can say that this is not one of the richest roads in the country, or that it will not be rapidly built? Hon. Mr. Cross, of Arkansas, one of the Directors, and a chief agent, is now in Chicago, in consultation with the wise heads of the Illinois Central, with which the Cairo and Fulton will connect.—Let the public be prepared to see another stupendous speculation, with the 2,000,000 acres of lands given to the road that stretches from Cairo to Fulton, and forms the second link of the Chicago and Galveston railroad.

We come now to the last link that takes us through to Galveston, Texas. From Galveston to the Red river, at Fulton, the road is chartered, and it has a grant from the State of Texas of sixteen sections of land to the mile to aid in its construction. This road need not be over 280 miles long, but may run up to 300 miles. The land grant to this part of the road may be set down at 2,500,000 acres, worth at \$5 per acre, \$12,500,000—certainly largely over the cost of the road, at least \$3,000,000, calculating the road at \$30,000 per mile. To show that the lower end of the Chicago and Galveston road is a reality, and coming to meet us, we may inform our readers that twenty-five miles of the road from Galveston, northward, towards Chicago, is already built and operating, and about fifty miles more are graded and ready for the iron.

With regard to the line of the Chicago and Galveston railroad through Missouri and Arkansas, we should observe that it possesses easy and excellent grades—only a small portion of it rising to forty feet per mile, and that the entire length of it—373 miles—only exceeds the air line by seven miles.

Mexican Gulf and Henderson Railroad.

B. F. Marsh, Esq., Engineer of the above railroad (formerly called the Birkville railroad) of which A. W. Thompson, of New York, is President, has been engaged, for the past week, in making some preliminary surveys in the neighborhood of Bolivar Point. He informs us that the company have already purchased the iron for twenty-five miles of the road, also one locomotive and ten freight cars for transporting materials. This road, he says, will be built with the utmost dispatch, and twenty-five miles will certainly be completed before the 1st of February next. The object of Mr. Marsh's present visit, is to select a suitable point for commencing the road. This point, according to the charter, must either be at Bolivar Point, or at Sabine Pass. He has not yet decided between them. The charter requires the road to be built from one of these points through Nacogdoches to Henderson, in Rusk county, the distance being about 200 miles, and 25 miles must be completed by the 1st of February next or a forfeiture will follow. Mr. M. says about 250 hands will be on the spot to commence operations, in about six weeks from this time. A part of these hands will commence cutting ties, while another portion will be employed on the graduation, and another in track-laying. This road probably passes through the best timbered region in Texas, which, of course, is a great advantage to the company.—The 25 miles of iron is already purchased and is only awaiting, in New York, advices from Mr. Marsh, as to what point it shall be shipped, when it will be immediately forwarded. Our readers will remember that we published some strong assurances in regard to this road, some few months ago, on the authority of Commodore Moore, who appears to be interested in it.—*Galveston News*.

Wisconsin Central Railroad.

We learn that the Wisconsin Central road is now completed as far as Geneva, Walworth county, and that the trains now run regularly from Chicago to Geneva. Between Geneva and Whitewater the grading is nearly finished, and the track will shortly be laid. The opening of this new thoroughfare will give a great impulse to the growth of Whitewater.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.				
Anchorage & Kennebec.....	55	588,042	1,622,905	2,210,947	208,475	110,247	6	14	South Western.....	92	1,097,496	465,500	1,624,920	263,306	141,168	8	---	---
Kennebec & Portland.....	56	1,114,725	1,661,236	2,775,961	208,475	110,247	6	89	Tennessee and Alabama.....	30	248,436	---	679,906	In progr.				
Portl., Saco, & Portland.....	51	1,367,000	119,237	1,486,237	270,814	112,491	6	59	Tennessee and Missouri.....	30	170,931	---	175,440	In progr.				
Boston, Concord, & Montreal.....	98	1,608,063	1,059,512	2,667,575	233,234	120,834	2	17 1/2	Memphis and Charleston.....	217	2,179,440	2,127,002	4,028,796	811,631	159,672			
Cheshire.....	35	2,085,925	899,313	2,985,238	390,221	143,565	2	17 1/2	Mobile and Ohio.....	183	2,648,555	1,902,921	4,536,412	199,932	109,230			
Concord.....	58	1,500,000	8,242	1,508,242	386,919	138,464	6	17	Miss. Central.....	193	647,534	---	628,308	In progr.				
Northern, N. H.....	82	2,768,400	---	2,768,400	3,018,633	1,382,250	2	42 1/2	N.O., Opelousas & G.W.....	55	2,930,425	671,645	2,657,565	In progr.				
Conn't & Passumpsic Riv.....	91	1,048,148	787,608	1,835,756	162,577	55,173	none	4	Victory, Shreveport & Tex.....	111	1,171,750	---	1,077,896	In progr.				
Rutland & Burlington.....	120	2,233,376	2,692,396	4,925,772	394,971	---	none	---	East Tennessee and Va.....	116	1,000,000	1,500,000	2,500,000	In progr.				
Vermont Central.....	117	5,000,000	3,550,236	8,550,236	489,764	149,877	6	63 1/2	Nash. and Chattanooga.....	161	625,425	738,593	1,033,731	In progr.				
Boston and Lowell.....	27	1,830,000	325,635	2,155,635	489,764	149,877	6	63 1/2	Covington & Lexington.....	98	2,518,530	1,497,081	3,945,694	316,000	112,177	none		
Boston and Maine.....	83	4,078,974	150,000	4,228,974	354,426	339,060	6	77 1/2	Lexington and Franklin.....	29	1,302,504	2,225,939	3,738,753	264,978	123,904			18
Boston and N.Y. Central.....	74	2,240,300	1,518,671	3,758,971	69,917	8,740	none	6	Lexington and Danville.....	29	230,955	158,099	387,071	90,593	48,635	6		
Boston and Providence.....	55	3,180,000	359,132	3,539,132	558,671	219,689	none	62 1/2	Louisville and Frankfort.....	65	694,444	52,734	747,178	In progr.				
Boston and Worcester.....	68	4,500,000	665,428	5,165,428	119,221	65,627	3	40 1/2	Atlantic & Gt. Western.....	224	698,236	699,031	1,397,267	244,014	96,902	6		
Cape Cod.....	47	681,690	290,506	972,196	1,802,244	236,563	103,787	5 1/2	Bellefontaine and Ind.....	118	1,881,614	2,025,925	2,862,692	268,293	140,828	none		30
Connecticut River.....	52	1,591,110	273,241	1,864,351	647,281	305,099	6	47	Clev., Col., and Cin.	141	4,547,020	122,857	4,613,722	1,290,295	732,056	9		102
Eastern, Mass.....	60	2,583,400	2,947,737	5,531,137	681,163	225,071	6	68	Cleveland and Toledo.....	209	2,676,423	2,689,301	5,365,724	736,272	396,990	10		76
Fitchburg.....	67	3,840,000	158,700	3,998,700	---	---	---	---	Chev. and Mahoning.....	108	---	---	628,538	In progr.				
Northern Eastern.....	30	500,242	225,586	725,828	---	---	---	---	Chev. and Pittsburg.....	138	2,730,748	5,043,992	6,837,466	881,677	309,618			60
N. Bedford and Taunton.....	21	600,000	---	600,000	339,949	59,738	6	8	Cin., Hamilton & Dayton.....	90	2,153,900	1,321,213	2,987,577	508,271	278,012			65
Old Colony and Fall River.....	87	3,015,100	252,650	3,267,750	254,726	87,313	none	7 1/2	Cin., Wm. & Zanesville.....	131	1,120,450	1,311,266	2,326,459	In progr.				12
Vermont and Mass.....	77	2,232,541	1,033,670	3,266,211	1,869,673	693,013	7	88 1/2	Columbus and Xenia.....	151	1,486,450	149,000	1,635,450	346,306	187,618	10		82
Western, Mass.....	155	5,150,000	6,066,420	11,216,420	204,789	75,760	2	40	Dayton, Xen. & Belpre.....	140	1,437,535	425,468	1,862,993	---	---			
Worcester and Nashua.....	46	1,141,000	203,556	1,344,556	311,430	138,557	0	32 1/2	Dayton and Michigan.....	140	1,076,692	393,011	1,469,703	In progr.				
Providence and Worcester.....	72	3,510,020	358,461	3,868,481	730,012	362,799	10	32 1/2	Dayton and Western.....	35	810,000	509,000	1,319,000	---	---			17
Hartford and N. Haven.....	122	2,008,110	2,000,000	4,008,110	259,165	118,671	none	---	Katon and Hamilton.....	42	454,690	904,498	1,359,188	171,928	65,000			20
Hartford, Prov. and Fishkill.....	110	3,000,000	414,240	3,414,240	338,196	71,427	none	---	Little Miami.....	62	2,968,321	1,171,785	4,140,106	681,562	338,708			90
Housatonic.....	62	1,031,800	524,244	1,556,044	220,459	93,769	25	---	Mad River and L. Erie.....	205	2,451,550	2,573,932	5,025,482	446,661	---			15
Nantuxet.....	50	738,288	735,165	1,473,453	884,306	338,877	none	---	Central Ohio.....	138	1,620,927	875,078	2,496,005	Recently opened.				---
N. York and N. Haven.....	60	738,288	735,165	1,473,453	884,306	338,877	none	---	Ohio and Penn.....	187	2,451,700	3,219,000	5,670,700	1,111,626	602,117	9		---
N. Haven and N. London.....	60	738,288	735,165	1,473,453	884,306	338,877	none	---	Pittsburg, Mayfield & Cin.....	60	371,350	81,000	452,350	990,933	---			---
N. London, W. & Palmer.....	66	1,222,300	873,439	2,095,739	304,236	83,453	2 1/2	36 1/2	Sand. Man. & Newk.....	127	1,350,000	2,206,357	3,556,357	328,958	164,479	none		---
Norwich and Worcester.....	32	439,005	1,025,098	1,464,103	117,716	9,904	---	---	Scioto & Hocking Valley.....	135	403,975	509,000	912,975	---	---			---
Albany Northern.....	35	643,330	317,859	961,189	---	---	In progr.	---	Springs, Mt. Vernon & P.....	113	1,000,000	950,000	1,950,000	In progr.				---
Black River and Ulen.....	100	1,487,871	1,401,133	2,888,004	171,476	66,533	none	---	Tol. Wabash & St. Louis.....	242	2,500,000	4,530,000	7,030,000	In progr.				---
Buffalo, Conn. and N. Y.....	92	708,459	2,677,849	3,386,308	288,392	31,896	none	---	Cin., Log. and Chicago.....	255	1,996,679	1,008,126	2,990,433	In progr.				---
Buffalo and N. Y. City.....	69	1,300,000	1,040,000	2,340,000	249,364	75,673	10	---	Evansville & Crawfordsv.....	109	706,945	1,177,556	1,884,541	127,400	64,552			---
Buffalo and St. Line.....	47	434,111	922,363	1,356,474	174,089	69,506	10	---	Ind. and Cincinnati.....	88	1,213,723	1,442,559	2,656,282	356,012	193,142	7		60
Canandaigua and Elmira.....	47	1,315,000	2,279,854	3,594,854	---	---	---	---	Indiana Central.....	66	611,400	1,261,719	1,873,119	360,176	134,876			50
Canandaigua & Niagara Falls.....	36	687,000	506,699	1,193,699	133,433	43,449	---	---	Ind., Clev. & Pittsburg.....	83	828,525	1,069,400	1,897,925	228,058	98,010	none		---
Cayuga & Susquehanna.....	134	3,753,466	9,250,362	13,003,828	1,812,087	603,946	none	31 1/2	Jedburghville.....	66	1,014,262	694,000	1,708,262	206,544	94,318	none		---
Hudson River.....	134	3,753,466	9,250,362	13,003,828	1,812,087	603,946	none	31 1/2	Madison and Indianapolis.....	87	1,647,700	1,336,816	2,984,516	286,146	112,880	none		---
Long Island.....	534	24,154,800	14,462,742	38,617,542	6,663,581	3,162,126	8	27	New Albany and Salem.....	288	2,838,121	6,281,948	9,119,869	645,327	371,402	none		---
New York Central.....	494	10,023,958	25,136,669	35,160,627	3,439,431	1,485,977	6	61 1/2	Penn. and Indianapolis.....	73	---	658,814	---	150,000	90,000	none		16 1/2
New York and Erie.....	134	5,717,100	4,069,769	9,786,869	1,355,677	234,126	none	17	Perru Haute and Ind.....	73	974,800	604,355	1,579,155	287,512	189,702	10		---
New York and Harlem.....	134	1,633,022	4,408,874	6,041,896	126,153	186,754	none	1 1/2	Chicago and Rock Island.....	182	3,141,500	2,387,155	5,528,162	In progr.				93
Northern, N. Y.....	55	899,000	216,681	1,115,681	126,540	50,982	3 1/2	---	Chicago and St. Louis.....	220	---	---	1,077,312	In progr.				---
Oswego and Syracuse.....	29	467,200	294,189	761,389	---	---	---	---	Chicago, Burl. and Quincy.....	58	1,439,100	1,684,736	3,123,832	722,880	379,821	20		---
Pottsdam and Watertown.....	25	610,000	140,000	750,000	---	---	---	---	Central Military Tract.....	58	1,202,500	2,133,050	2,920,241	471,399	219,658			---
Rensselaer & Saratoga.....	48	500,000	395,800	895,800	71,909	21,089	none	---	Cin., St. Paul & P'd du Lac.....	178	2,800,000	1,325,000	4,125,000	892,000	---			---
Saratoga and Whitehall.....	80	768,369	1,578,804	2,347,173	169,484	22,503	none	---	Galena and Chicago.....	259	5,441,500	3,318,039	8,759,539	2,315,786	1,192,402	22		117 1/2
Saratoga & Binghamton.....	27	437,830	737,079	1,174,909	156,363	55,184	---	---	Illinois Central.....	627	2,271,050	19,416,392	20,374,442	1,531,118	627,962			100
Troy and Boston.....	97	1,370,378	700,979	2,071,357	404,374	172,474	8 1/2	---	Peoria and Quawake.....	93	569,859	818,545	1,388,342	In progr.				---
Watertown and Rome.....	64	1,000,000	1,019,000	2,019,000	161,555	75,534	none	---	Ohio & Miss. (Wat. Div.).....	141	1,786,295	8,292,408	4,870,586	Recently opened.				---
Belvidere Delaware.....	94	3,000,000	11,407,200	14,407,200	6,634,523	1,071,127	12	125	Perru Haute and Alton.....	173	2,281,420	1,256,000	3,537,420	In progr.				---
Oamden and Albany.....	60	369,320	1,622,131	1,991,451	122,417	50,080	none	---	Detroit and Milwaukee.....	185	838,000	1,128,964	1,966,964	In progr.				---
Camden and Atlantic.....	30	3,482,850	990,000	4,472,850	410,614	600,747	10	118 1/2	Mich. Central.....	282	6,032,444	6,999,013	13,031,457	2,215,283	879,658	10		91
New Jersey.....	30	2,000,000	2,268,176	4,268,176	393,223	171,003	---	---	Mich. South'n & N. Ind.....	475	6,928,900	6,919,224	13,848,124	2,410,000	875,000	10		92 1/2
New Jersey Central.....	63	1,157,805	775,000	1,932,805	229,341	96,267	6	---	Green Bay, M.E. & Ch.....	165	784,074	442,726	1,226,780	In progr.				---
Morris and Essex.....	44	1,637,807	342,564	1,980,371	---	---	Recently opened.	---	Milwaukee and Miss.....	106	1,826,428	2,467,859	3,578,757	691,843	417,443	17		78 1/2
Allegheny Valley.....	63	1,700,000	1,940,000	3,640,000	219,233	62,450	---	---	Milwaukee & Waterford.....	72	354,861	132,000	486,861	In progr.				---
Outaw, W. & Erie.....	56	1,099,500																

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	80	82½
Buffalo and State Line	500,000	Do. inconvertible.	7	April, October.	"	1866	87	87½
Bellefontaine and Indiana	600,000	Do. convertible.	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	82½	82½
Do. do.	800,000	2d do. inconvertible.	7	March, Sept.	"	1868	81	81
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible.	7	20 Jan. 20 July	"	1867	81	81
Do. do.	485,000	2d do. do.	7	May, Novemb.	"	1880	86	86
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1863	70	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.	"	1861	91	95
Do. do.	800,000	Do. convertible.	7	Feb'y, August.	"	1860	93	93
Cleveland and Toledo	1,200,000	Do. on Branches	7	March, Sept.	"	1873	77½	82½
Chicago and Mississippi	625,000	Do. inconvertible.	7	Feb'y, August.	"	1863	87½	87½
Do. do.	800,000	Do. conv. till 1857.	7	April, October.	"	1862-72	80	80
Do. do.	1,200,000	Do. inconvertible.	7	April, October.	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1862	75	75
Do. do.	1,000,000	2d mortgage, convertible.	7	March, Sept.	"	1863	63	65
Detroit, Lackawanna, and Western	1,000,000	1st mortgage, do.	7	April, October.	"	1876	90	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1878	80	80
Gaines and Chicago	2,000,000	Do. inconvertible.	7	Feb'y, August.	"	1863	94½	95½
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	88	89
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	87	89
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	10 April, 10 Oct.	"	1863	95	95
Jeffersonville	800,000	Do. 2d sec. inconv.	7	April, October.	"	1873	75	75
Indiana Central	600,000	Do. convertible.	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	80
Indianapolis & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857.	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	82½	85
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859.	7	Feb'y, August.	"	1866	70	75
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	81	81
Michigan Central	1,000,000	No mortgage, convertible.	8	April, October.	Boat.	1860	100½	101½
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101½	102
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	95	96½
Do. do.	650,000	Do. 2d do.	8	April, October.	"	1863	96½	96½
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88½	89½
New Albany and Salem	500,000	1st section	10	April, October.	"	1855-62	75	75
Do. do.	2,325,000	Do. 6th sec. con. till 1858	8	May, Novemb.	"	1864-75	95	95
Northern Cross	1,200,000	1st mortgage, convertible.	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible.	7	April, October.	"	1872	79	80
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860.	6	Jan'y, July	Phila.	1860	97	98
Racine and Mississippi	680,000	Do. conv. sink'g p'd	8	Feb'y, August.	N.Y.	1875	86	86
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Steubenville and Indiana	1,500,000	Do. convertible.	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	78	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	74½	75½

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	85	85½
Do. do.	1,128,500	Do. do.	6	Jan'y, July	Balt.	1876	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868.	7	10 Jan. 10 July	N.Y.	1870	93	95
Erie Railroad	8,000,000	1st mortgage	7	May, Novemb.	"	1867	104	105½
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1860	98	98½
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	97	97½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	96½	97½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	90½	91
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	92½	95
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	103	103½
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	88½	89½
Do. do.	8,000,000	3d do. convertible	7	May, Novemb.	"	1870	98½	99½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1875	91½	91½
Do. (Free Land)	3,000,000	Mfg 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	100	101
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	95	98
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	83	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	78	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	93	96
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	89	89½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89	89½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102½	103
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	99½	100½
Do. 2d do.	1,478,000	Do. till 1856	7	Jan'y, July	"	1866	99½	100½
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	91	92
Do. do. 1844, '43, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	91	92
Do. do. 1849	3,489,000	Do. inconvertible	6	April, October	"	1870	84½	85½

NEW CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	86	88
Do. 5 do. 1858-60	May,	95	96½	New Orleans, 6 per ct. cp. R.R. X	Do.	74	77
Do. 5 do. 1870-75	August, and	93½	96	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	80	84
Do. 6 do. 1880	November.	94½	96	Philadelphia, 6 per ct. 1870-78	Jan'y, July	91½	92½
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	97	100	Pittsburgh, 6 per ct. coup. X	Divers	75	77
Alleghy, 6 per ct. coup.	Jan'y, July	76	76	Quincy, 5 per ct. coup. 1868 X	Jan'y, July	80	80
Baltimore, 6 per ct. 1878-90	Quarterly	97	99	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	86
Boston, 5 per ct. coup.	April, October.	97	99	Rochester, 6 per cent. coup. X	Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	101	St. Louis, 6 per ct. coup. Long X	Do.	76½	79
Clav'd, 7 per ct. cp. W.W. 1877 X	Do. do.	102	102	Do. do. Municipal X	Do.	79½	80½
Cincinnati, 6 per ct. coup.	Divers	89½	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	70	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89½	90	S. Francisco, 7 p. a. cp. 1864, pay N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100½	Do. 10 p. ct. cp. 1871 X	Do. do.	96	96
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	100	103	Do. 10 p. ct. pay N.Y. X	Jan'y, July	83	83
Idubque, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 6 per ct. pay N.Y. 1876 X	Do. do.	53	59
Jackson City, 6 per ct. cp. W.W. 1877 X	Jan'y, July	91	96	Wheeling, 6 per ct. coup. X	Divers	67½	67½
Louisville, 6 per ct. cp. 1880-83 X	Divers	78½	78½	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	81	81
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70	70	Zanesville, 7 do. X	April, October	97½	97½

Cincinnati Stock Sales,

By KIRK & OHEEVER.

For the week ending July 22nd, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	65
Ohio & Mississippi, 2d Mort. 7 per ct.	49
Indianap. & Cin., 2d Mort. 7 per ct.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	82½
Hillsboro' & Cin., 7 per cent. 1st Mort.	50
Covington & Lexington, 10 per ct. Income	58
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	87½
Do. do. due July 1, 1866	80
Cin. Hamilton and Dayton, Divid. Scrip, due 1867, dat. 1868	103
Little Miami, Dividend Scrip, issued June, 1866	79

STOCKS.

Bellefontaine and Indiana, 25.—Cin., Ham. and Dayton, 67½.
Col. and Xenia, 82.—Cincinnati, 83½.—Covington & Lexington, 17.—Dayton & Western, 17.—Easton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 60.—Little Miami, 59.—Mad River & Lake Erie, 14.—Marietta and Cincinnati, 16.—Ohio and Mississippi, 6.—Hillsboro' and Cincinnati, 16.—Peru and Indianapolis, 16.—Cincinnati, Wilm. and Zanesville, 12.

By HEWSON & HOLMES.

For the week ending July 23rd, 1886.

BONDS.

\$1,000 Columbus & Xenia, Dividend, 7 per cent. 5 and 10 years	85 to 88
702 Little Miami, Dividend Scrip.	60
3,000 Covington & Lex., 7 per ct. 2d Mortgage	65
1,000 Ohio and Miss., 7 per cent. 1st Mortg.	65 (& Int.)
5,000 Little Miami, 6 per ct., 1st Mortg.	60
2,000 Bellefontaine and Indianap. 7 per ct. 1st Mort.	80
1,500 Marietta & Cin., 7 per ct. Domestic	40
3,000 Hillsboro' & Cin., 7 per ct. 1st Mort	45
1,000 Junction (Indiana), 10 per cent. Real Est.	70

STOCKS.

5 Shares Little Miami	88
25 " "	89
36 " "	89½
144 " Marietta and Cincinnati	75
21 " Columbus and Xenia	60
200 " Cin. & Chicago	3
80 " Cin., Wil. & Zanesv.	15
116 " Cin., Harrison and Indianap.	9
20 " Indianapolis and Cincinnati (ex div.)	60
41 " Covington and Lexington	16

Marie & Kaniz' Money Circular for the European Steamer of the 30th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, July 23, 1886.

The European news received since our circular of 22nd inst. has not tended to improve our Stock market, though the general commercial news contains nothing unfavorable. The returns of the Banks of England and France were not looked upon as very satisfactory, and this, added to the causes already mentioned in our last advices, exercised again a depressing influence on our market. The decline has been most marked in speculative stocks. Investment stocks have remained pretty steady, with only a few exceptions. The business of the week altogether has been light. Money has been a little more active for a day or two, but the supply has always fully come up to the demand.

State Stocks—Only Missouri have been tolerably active at an advance of $\frac{3}{4}$; Indiana 5s declined $\frac{3}{4}$; California 7s sold at $70\frac{1}{4}$ to 70, which is a fraction higher than last week.

City and County Bonds.—The balance of the St. Louis City Bonds alluded to in our last circular have been sold at improving prices; in other City and County Bonds the transactions have been very trifling.

Railroad Bonds—Illinois Central Bonds have been active, declining, gradually $1\frac{1}{2}$. Erie 1875 Bonds sold at a decline of $\frac{1}{2}$; New York Central 6s; $\frac{1}{4}$; Panama, 1; Erie 1871 Bonds advanced $\frac{3}{4}$; Michigan Southern Sinking Fund Bonds are in demand at 87½.

Railroad Shares.—The business has been light in a declining market. Erie is down 2½; Reading, 1½; New York Central, $\frac{3}{4}$; Panama, 1; Michigan Central, $\frac{5}{8}$; Michigan Southern, $\frac{1}{4}$; Cleveland and Toledo, $1\frac{1}{2}$; Chicago and Rock Island, $\frac{3}{4}$; Cleveland and Pittsburg, 1 per cent. Money has been in better demand without causing any change in rates. Loans on call, 6½; first-class paper, 7½; names less known, 8½ to 10.

Exchanges.—The demand is very limited, and rates are tending downward. Sterling 109½ to 110; Paris 5.17½ to 5.16.

MARIE & KANIZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 30th Inst.

[TRANSLATED.]

NEW YORK, Monday, July 28, 1856.

The same absence of animation which prevailed for some days previous to our advices of 22nd inst., has been the leading feature of our Stock market during the whole of last week. That dullness has extended to all classes of stocks, as well as those for investment as the more speculative kinds, and the general tendency of prices has been downward. The last Liverpool steamer seems to have brought but few executable orders. The ease in the Money market continues, but the demand is rather better.

State Stocks.—The only transactions, to any amount, have taken place in Virginia 6s and Missouri 6s, without alteration in prices. Tennessee 6s, with very limited sales, have declined $\frac{3}{4}$ per cent.

City Bonds.—With the exception of a pretty large sale of St. Louis 6s, we have no transaction, of any moment, to notice. A few Cleveland 7s changed hands.

Railroad Bonds.—The decline of $1\frac{1}{2}$ in Illinois Central Construction has maintained some activity in it. Freeland Bonds with privilege are in some request at 100. The demand for New York Central 6s and 7s, as well as for the different kinds of Erie Bonds, has been very limited. At private sale no transactions worth recording have taken place.

Railroad Shares.—The decline of prices has been general, and the few following are the only ones which have been dealt in to a moderate extent: Erie at a decline of $2\frac{1}{4}$; Reading of $1\frac{1}{4}$; Cleveland and Toledo of $1\frac{1}{4}$ per cent.; New York Central of $\frac{3}{4}$ per cent. Galena and Chicago, and Reading railroads are quoted ex dividend. Money remains at 647 for calls and loans. Paper 7a9, according to length. DE COPPET & CO.

American Railroad Journal.

Saturday, August 2, 1856.

Railroad to the Pacific.

It is not probable that any action will be taken by Congress at its present sitting, in reference to a railroad to the Pacific, although the Special Committee of the House, of which Mr. DENVER is chairman, has reported a bill advising that large grants of lands be made to three routes,—the Northern, a Central route, and the Southern. Mr. JOHN M. WOOD, a member of the Committee, and who represents the Portland District in Maine, has submitted a minority report in which he argues in favor of the Central route, and of a proposition that the General Government shall loan the sum of \$100,000,000 towards the construction of the road. Mr. KIDWELL of Virginia, also submits a minority report, in which he argues against any connection of the General Government in the matter, either by donations of lands, or by direct pecuniary assistance.

In another place we give Mr. Wood's Report. His opinion is supposed to carry weight, from the fact that he has been successfully engaged in the construction of railroads. His plan has this to recommend it, that it looks to the Government to supply the means for its execution. He mainly assumes the question of route upon, as we conceive, no adequate ground. The question of route is yet an unsolved one. We will suppose, for argument's sake, that the respective termini of such a work should be New York and San Francisco. But it by no means holds that either the most direct route, or the one having the most favorable

grades between the two, should be taken. Prior to all such questions is to be settled whether a road can be built or sustained on any route at a reasonable cost, considering the objects to be effected. This primary question is yet to be disposed of,—though it seems thus far to have mainly escaped attention. The problem of a railroad to the Pacific has been generally stated as follows—given the cost per mile of the roads in the States, and multiply this sum by the length of a railroad across the continent, and you obtain the cost of the latter.

Now as far as the cost and maintenance of a railroad across the continent is concerned, the analogies of other roads can afford very little evidence. All these were built through regions abounding in timber and water; possessing a fertile and cultivated soil affording abundant supplies of food, with any number of efficient and trained laborers always at command. Now against these conditions, there is upon all the routes that have been proposed a deficient supply of wood and water, wide belts of sterile soil, in some cases of many hundred miles in extent, which are utterly incapable of culture, from the absence of rain. Upon every route proposed, the road as it progresses must serve as a medium for conveyance not only for nearly all the materials used in construction, but for the subsistence of the workmen upon it. It cannot, as is the case with most of our long lines, be approached laterally. As we before stated, we have no parallel case to serve as a guide in this. The first point, therefore, to be settled is the practicability of the road. That it is possible no one will deny. By practicability we mean expediency—that is, the road should be worth in one way or another, either as a political or commercial engine, all it is to cost. Unless the affirmative can be made out we should not attempt its construction.

Now it strikes us that this is a very difficult proposition. How are the parties engaged in construction upon distant portions of the line to be sustained? How is the road to be maintained after its completion? How is the locomotive upon long stretches of the line to be supplied with wood and water? How are the parties engaged in keeping up the road to be maintained? Money will do all this, no doubt—but all that we, as a people, can afford to spend upon it, may not. These are the questions first to be answered, and we have never seen them satisfactorily replied to.

When these are disposed of, the next question is that of means. We are satisfied that, for various reasons, the General Government will not, at present, go further than grants of lands. There are several reasons why they will not. In the first place, the opinion is common that such grants may be made to secure the construction of one or more roads. This delusion has first to be dissipated. Upon no route proposed, does Government possess lands that could be made the basis of any considerable fund. Upon all, the Western settlements are rapidly reaching the boundary that separates the arable land from the desert. This boundary on the East follows, with remarkable uniformity upon about the latitude of ninety-nine. With the exception of a few patches, all the immense area between this line and the Pacific ocean is entirely incapable of culture, and, consequently, as far as a railroad is concerned, must be pro-

nounced worthless. No fact in reference to the western portion of the continent is more clearly proved than this.

The delusion in reference to any lands possessed by the General Government must be dissipated, before Congress will look the matter fairly in the face. If the road is to be built at all, the means must be supplied from Washington. There will, of course, be very great repugnance to such a step. Many will oppose it on constitutional grounds. All will fear that the enterprise will be converted into a political engine, and become a source of corruption so potent as to seriously endanger the healthy action of Government. The inability of Government to construct and successfully to maintain works of a similar kind, is almost universally admitted. All these drawbacks united will lead our people to hesitate a long time before they will consent to make it a Government measure.

We state these facts not because we are opposed to having the road a Government work, but that the public may at the earliest moment look at the whole subject in its proper light. One of the greatest misfortunes that we could possibly commit would be to undertake such an enterprise without an adequate idea of its nature and magnitude, and the difficulties by which it is surrounded. Defeat and discouragement from any misguided step, with such a body as the American Congress, would prove fatal to the whole undertaking. We can only hope to succeed by adopting exactly the proper plan at the outset.

Notwithstanding the very grave difficulties in the way, we still think that the one road at least will ultimately be taken up by Congress. That body must reflect and carry out the will of the people. A railroad to the Pacific is looked upon as essential to the symmetry of our system, and as a commercial and political necessity. The age is one thoroughly imbued with ideas of physical progress, and will not rest contented without attempting what must be the master-piece of human achievement. It is regarded on all hands as a work eminently fit to be executed. The commercial results that are to flow from it, are pictured in the language of hyperbole, such as the imagination alone can give utterance to. All these impulses combined will in the end compel Government to undertake the work.

The Late Accident on the North Pennsylvania Railroad.

The coroner's inquest touching the late terrible accident on this road, finds it immediately attributable to the conductor of the excursion train, in not observing the regulations for running the road. The inquest acquits VAN STORVEN, the conductor of the regular train, and finds that he was running in conformity to the regulations. The Jury also censure the company for not having proper regulations in the case of extraordinary trains. The principal censure falls upon HOPPEL, the conductor of the excursion train. Van Storven, though fully exonerated, was so affected by the accident, that he almost immediately committed suicide. By this terrible calamity 66 lives were lost, and at least 100 wounded. Most, if not all the wounded, it is thought, will recover. The accident would not have happened had HoppeL acted in conformity with his instructions.

Death of John H. Done.

We regret exceedingly to be obliged to record the decease of this gentleman, Superintendent of the Illinois Central railroad, from injuries received in attempting to get aboard a railroad train when in motion, by which he was so severely injured as to survive only a few hours.

In the death of Mr. DONE both the public and the railroad company have sustained an uncommon loss. Although comparatively a young man, he possessed a mind thoroughly matured and trained in the management of railroads; qualities the most valuable in a country like our own, with vast systems of public works and with very inadequate experience for their management. The Central Company selected him to take charge of their great work, after the most careful inquiries as to his fitness for the station to which they called him. Although the replies to their inquiries were uniformly favorable, he more than justified the high expectations that had been formed of his qualities. He gave entire satisfaction, and we know that the Directors and officers of the Company have been congratulating themselves with the hope that he would soon relieve them of many of the laborious duties which have so long pressed upon them.

At his decease, Mr. Done was justly regarded as one of the first railroad managers in this country. He would undoubtedly have continued in the front rank in his profession, and would by his experience and admirable qualities, have proved a real benefactor to the railway interests of the country. The officers of the Central Railroad Company who knew him well, most deeply feel and deplore his loss. Not only was he the leading mind in the management of their road, but he was equally a model of everything becoming a Christian and a man.

The Baltimore American thus notices his death:

The announcement of the death of J. H. Done Esq., Superintendent of the Illinois Central R.R., was received here on Saturday with a very general expression of sincere regret. Mr. Done was early connected with our Baltimore and Ohio Railroad, as one of its constructing engineers; and the subsequent official relation he bore to that work as Master of Transportation, whilst it made him better known to our citizens and developed a high regard for him as a man, also established his character as an able, intelligent, and most efficient railroad officer—one thoroughly understanding all the details of duty connected with his post, and discharging them with an integrity and capability that made his services of the highest value. He left the Baltimore and Ohio road to take the General Superintendency of the Illinois Central Railroad, and in that position of increased responsibility and influence had added to the reputation that was already placing him in the front rank among the practical and scientific railroad men of the country. In political life he had previously held the position of State Senator from one of the Eastern Shore counties of this State.

Allentown Railroad.

We publish this week the circular of this Company which is about commencing the construction of the only link wanting in a very direct line of railroad between this city and Pittsburg, Penna. The circular to which we invite attention, sets forth in a very distinct and lucid manner the value and importance of this link as a means of communication between New York and the West. The character and ability of the parties who have this work in hand is a sure guarantee that it will

be speedily constructed. We shall again take occasion to call attention to it.

STATIONERY.

We are often inquired of by Engineers and others, by letter or otherwise, as to the best place to procure such books, papers and articles, as are ordinarily required by them in the pursuit of their various avocations.

In another column will be found a lengthy advertisement of Messrs. NATHAN LANE & Co. of this city, who, in the capacity of Stationers, Lithographers, Printers, and Account book Manufacturers, are prepared, at the shortest notice, and upon the most reasonable terms, to supply Railroad Companies with all their various blanks and books, of the latest patterns and most approved styles, also Tickets, Freight and Way bills, &c.—Messrs. N. L. & Co. invite particular attention, in their advertisement, to their style of lithographing bonds, certificates of stock, checks, &c., which are scarcely distinguishable from steel plate engravings—though executed at much less cost. Specimens of these bonds are said to have attracted special attention at the late Fair in the Crystal Palace. Engineers, Architects and Draftsmen will find here a good quality of tracing paper and tracing cloth, pencils, portfolios, and all the various articles required by them either in their offices or in the field. Insurance offices are here supplied with Policies, and all the blanks and forms pertaining to insurance. Merchants, Banks and Manufacturing Companies are invited to give them a call, before purchasing elsewhere. Appended to their advertisement will be found a list of some of the articles which they offer for sale.

After visiting their establishment and conferring with the proprietors, we have no hesitation in recommending our friends to give them a trial.

Columbus, Piqua and Indiana Railroad.

The Columbus, Piqua and Indiana Railroad has passed into the hands of John W. Andrews of Columbus, Ohio, and Mr. Fulton, Superintendent of the Steubenville and Indiana Railroad, as Receivers. Wm. Neil Esq. has resigned the office of President, and Thomas L. Jewett, President of the Steubenville and Indiana Railroad, has been elected in his place.

THE IMPERIAL CYCLOPEDIA OF MACHINERY. By WM. JOHNSON, Esq. William Mackenzie, Glasgow; C. B. Russell & Bros., 12 Tremont-st., Boston, and 290 Broadway, New-York.

This work consists of a series of Plans, Sections and Elevations, of Stationary, Marine and Locomotive Engines, Spinning Machinery, Grinding Mills, Tools, &c., &c., all of the newest and most approved construction. The plates are finished in the highest style of execution, and accompanied by full descriptions and explanations. The intention of the work is to afford the Mechanic and Engineer an opportunity of becoming possessed at a cheap rate, of accurate representations of some of the latest improvements, including many of the most important from the Great Exhibition. It contains also an essay on the Steam Engine, and a history of the Railways of America and Great Britain.

We recommend the work to the Machinist and Engineer as a valuable auxiliary, and to all as a complete record of the progress made in the ap-

plication of human ingenuity to practical uses.

The work is printed on fine Imperial paper,—each part containing five or six plates alternately, and eight pages letter-press. It is furnished only to subscribers, and completed in about thirty parts at fifty cents each.

New Jersey Central Railroad.

We give in another column the late annual report of this Company. The importance and value of their road has been recently largely increased by the connection formed with the Delaware, Lackawanna and Western, and by the steps that have been taken for the construction of the Allentown railroad, which will open a direct communication between New York and the Pennsylvania railroad. The Central railroad is now in direct connection with the two great coal fields of Pennsylvania, and is the only line of road which is. It is also a part of the shortest line not only to the Western States, but to Western New York. In the matter of coal, its traffic from this source must always be fully up to its capacity with a double track. There can be no reason why it should not become one of the most productive works in the country.

Railroad Earnings for June.

The annexed table gives the receipts of the various railroads for June, as far as received:—

	1855.	Per Mile.	1856.	Per Mile.
Baltimore and Ohio	\$341,468	\$901	\$402,885	\$1,068
Clev. Columbus and Cincinn...	101,826	719	104,270	789
Clevel. and Toledo	58,726	294	71,080	355
Clev. and Pittsburg	56,019	421	62,000	466
Chicago & Rock Island	123,815	538	142,063	620
Covington and Lexington .....	...	...	29,751	...
Erie	404,085	818	490,765	998
Galena and Chicago	225,980	1,086	218,393	857
Hudson River ..	120,412	836	126,876	881
Illinois Central ..	123,416	218	194,727	811
Indianapolis & Cincinnati ..	28,875	315	37,010	411
Little Miami ...	80,250	955	90,063	1,072
Michigan Central	287,749	884	267,398	994
Mich. Southern and Northern	...	...	...	...
Indiana	248,000	738	...	...
Milwaukee and Mississippi ...	65,127	632	66,521	646
Macon & West'n.	18,870	185	17,504	172
New Albany & Salem	60,163	209	63,312	220
N. York Central ..	521,436	938	654,842	1,178
New York and New Haven ..	65,808	1,061	69,035	1,112
New York and Harlem	87,593	669	88,808	678
Ohio & Penna...	78,123	418	82,101	439
Penna. Central..	302,177	856	344,291	975
Reading	382,339	3,983	...	...

A Large Locomotive.

A locomotive engine for the Baltimore and Ohio railroad has just been constructed by Ross W. NANS in Baltimore, which is said to be the largest in the United States or in the world. Its size and peculiarities of construction are as follows: It has 12 wheels 44 inches in diameter, 22 inch stroke, 11 feet fire-box, and weighs 83 tons. This engine has been built as an experimental one, to test the practicability of drawing a train of six passenger cars up the heavy grades on the road

(of which some are 117 feet to the mile) at the rate of 25 miles per hour. This engine presents a singular appearance from those now in use; one striking feature is that the engineer stands in front.

Morris Canal and Banking Co.

The receipts of the Morris Canal have been:—
Total to July 19, 1856 \$130,282 51
Week ending July 26, 1856 11,365 80

..... \$141,648 31
Total to July 21, 1855 ... \$130,847 02
Week ending July 28, 55 9,204 38
..... 140,051 40

Increase in 1856..... \$1,696 91

Production and Consumption of Rails in the United States.

The consumption of rails within the past nine months has greatly increased over the average of the previous year. The importation in the six months ending December 31st, 1855, amounted to 89,854 tons; or fifty per cent. more than in the average of the previous twelve months. In the six months named, American mills produced about 70,000 tons. As the returns of last year's harvest are now exerting their greatest influence upon the general prosperity of the interior, railroad enterprises are much encouraged. If the promised peace of Europe is fully re-inaugurated, there is no doubt that with an average harvest the present year, our railroad extensions will be greater than in any period heretofore. In addition to the requirements for new roads and extensions, the older roads are progressively needing a greater amount of rails for renewals, where in most instances heavier rails are put down. It is worthy of note, that a large proportion of the old rails taken up is used in other manufactures, to which this description of iron is regarded by many as being better adapted. The increasing amount of this stock, which comes in competition with pig, is worthy of special consideration.

The product of American rails this year promises to be at least 145,000 tons, and may possibly reach 175,000 tons. Brady's Bend Works have commenced full operations; Cambria and the Lackawanna have added considerably to their puddling capacities.

By reports from sixty-one railroads, it is ascertained that they have an aggregate length between termini, of 5,840 miles, and of sidings and second tracks, 974 miles; making a total of 6,814 miles of track. These roads are to have an addition in 1856, of 878 miles, of which 300 miles is for renewals; the remainder, 578 miles, is for additional sidings and extensions. These sixty-one roads are laid with rails having an average weight of 91.3157 tons per mile, or 58.11 pounds per yard.

The weight of the whole of the old track, 6,814 miles, is 622,225 tons.

The weight of the track to be laid this year, 878 miles, is 79,718 "

The weight of old rails to be renewed, 300 miles, is 27,394 "

If we estimate comparative figures from the aggregate miles of railway which were in operation in the United States, December 31, 1855, by the figures accurately obtained and given above, we have the following results:—

Total number of miles of distance between termini..... 21,440 miles.

Miles of sidings and second track..... 3,749 "

Total number of miles of track..... 25,189 "

Extensions, renewals, and additional sidings, to be laid in 1856..... 3,361 "

Renewals of track in 1856..... 1,155 "

Total weight of rails in 25,189 miles of track, 91.3 tons per mile..... 2,299,755 tons.

Weight of rails required for 3,361 miles in 1856..... 306,989 "

Weight of old rails from 1,155 miles..... 105,561 "

We have no satisfactory data by which to judge of the extent of new railways to be opened this year.

STATEMENT

Exhibiting the quantity and value of railroad iron imported into the United States, from the 30th day of June, 1839, to the 30th day of June, 1855:—

Years ending	Value.	Tons.	Cwt.
June 30, Cwt.			
1840.... 581,838	\$1,569,844	29,091	18
1841.... 465,069	1,064,960	23,253	9
1842.... 499,400	1,093,079	24,970	0
1843.... 193,098	368,921	9,654	18
1844.... 811,544	446,782	15,577	4
1845.... 436,249	637,514	21,812	9
1846.... 117,943	281,077	5,897	3
1847.... 270,733	680,438	13,536	13
1848.... 589,789	1,219,185	29,489	9
1849.... 1,383,265	2,252,246	69,163	5
1850.... 2,840,733	3,788,034	142,086	13
1851.... 3,772,516	4,901,452	188,625	16
1852.... 4,912,510	6,228,794	245,625	10
1853.... 5,979,904	10,426,087	298,995	4
1854.... 5,657,339	12,020,309	282,866	19
1855.... 2,550,327	3,993,900	127,516	7

Total, 30,562,257 \$50,912,513 1,528,112 17
Assessed value per ton, and average cost per year:

June 30, 1840.....	\$53 96
" 1841.....	45 80
" 1842.....	43 77
" 1843.....	37 18
" 1844.....	28 68
" 1845.....	29 27
" 1846.....	47 67
" 1847.....	51 01
" 1848.....	41 38
" 1849.....	32 56
" 1850.....	26 82
" 1851.....	26 03
" 1852.....	25 36
" 1853.....	34 87
" 1854.....	42 49
" 1855.....	31 82

Average cost of the whole per ton \$32 66
—Iron Masters' Journal.

There is no doubt that the capacity and make of American rolling mills are very much overrated. The make, the present year, will not, we think, reach 100,000 tons. Our domestic mills are largely engaged in re-rolling.

Since 1847, there have been built in the United States something over 15,000 miles of railroad. There have been imported in the same period about 1,500,000 tons of rails. We have imported, therefore, a quantity very nearly equal to that laid down on new roads.

At the present time, there are laid down upon all our roads not far from 2,500,000 tons of rails. Assuming the wear and tear to be 5 per cent. only, this would annually call for 125,000 tons, a quantity quite up, we are confident, to the capacity of our domestic works. The depreciation, in fact, exceeds our estimate, but as a large proportion of our roads have been recently built, it is not yet felt. In a few years, the depreciation will be likely to average from 7 to 10 per cent. The re-rolling of rails, therefore, with such as are required to replace those worn out, will, probably, for some time to come give the makers on this side of the water all they can do.

The foreign maker has, in his capital, a decided advantage over the American, which enables him to give the long credit which our roads require in the present state of the money market.

The demand for rails for this country is likely to be large for some time to come, though not so great as in 1852, '3 and '4. In addition to numerous lines in progress and to new projects which are constantly springing up in the old States, the recent grants of lands made by Government will secure the speedy construction of two or three thousand miles. In fact, hardly any limit can be placed to the progress of railroads in this country; at any rate, their construction will progress steadily till we have some 10,000 miles added to our present mileage;—carrying the whole up to 32,000 or 33,000 miles.

York and Cumberland Railroad of Maine.

The long pending litigation between this company and the contractors has been terminated by a decision in favor of the latter on all points, and the road has been sold under legal process for \$120,000. We learn that F. O. J. SMITH Esq. was the purchaser.

Important Railroad Decision.

It has been one of the regulations of the Erie Railroad Company to exact ten cents extra from every passenger who got on board the cars without having procured a ticket at the station office. The right to make such charge having been denied, the person refusing to pay was forcibly ejected from the cars. He, therefore, brought a suit against the Company. On the hearing of the case, the judge, before it was tried, decided that the Company were entitled to charge only three cents per mile, and that any extra charge was a violation of the statute, and gave judgment for the plaintiff for \$25 and costs.

Lexington and Big Sandy Railroad.

The annual meeting of the stockholders of this railroad was held at Mt. Sterling on the 21st inst., when the President submitted his report. It appears from it that \$582,000 have been expended for graduation; that the right of way and land for depots had cost \$54,000, that the cost of the preliminary and locating surveys of the road was \$25,000, and the cross-ties had been paid for to the amount of \$11,000, and \$2,500 more were bought at 25 cents each; that the company had near a thousand tons of rails ready to be laid at the east end of the line, which is prepared for track laying; that a fine twenty-four ton locomotive had been purchased, which was en route between Cincinnati and Ashland; that in the course of five months about seven additional miles would be ready for the rails at the east end of the line, and 33 miles, from Lexington to Mt. Sterling, at the west end, making an aggregate of 50 miles, and that to complete the graduation and masonry for the last 33 miles, would cost \$140,000.

The old Board of Directors, with one exception, were re-elected, and R. Apperson, Esq., was subsequently re-elected President.—Maysville Eagle.

Another Railroad Connection with the Illinois River.

The Chicago, Burlington and Quincy Railroad, by its present and prospective connections, is destined to become one of the most important trunk lines of railroad leading out of Chicago. Beside its present connections it is soon to be connected with Warsaw and Keokuk by the completion of the Western Division of the Wabash and Mississippi road, now under contract. We also learn that another branch of this road is now in contemplation with good prospects of success, starting either from Galva or Kewanee, running almost due south through the densely populated counties of Stark and Fulton to the Illinois River at Liverpool. This will give an important connection with the Illinois River, with its inex-

haustible beds of coal, stone and heavy timber, and give a fertile and highly cultivated country immediate and ready access to this city. The people along the line of the proposed road, we are assured, are alive to the project, and sufficient local means are secured to grade, bridge, and tie the road. We understand negotiations are now going on in this city with heavy contractors and capitalists to complete the road at the earliest practical moment.

Railways that Pay and that Don't Pay.

The returns of the different railway companies show but a very small per centage of profit upon their working, and many of the lines now in work are entirely unremunerative. The list of branch lines intended to act as feeders to trunk lines, but which have had precisely the contrary effect—of extensions formed for the purpose of accommodating some land owner, whose opposition was to be bought off—and of small lines where a reckless expenditure of money in engineering purposes has been adopted, include a very large proportion of the existing railways of the country. Of 6,493 miles of railway in the United Kingdom, the returns of which are known, it appears that there are 167 miles in England, and 103 in Scotland, which pay only one-half per cent.; 98 miles in England which pay but one per cent.; 1,682 miles in England, 285 in Scotland, and 61 in Ireland which return 2 per cent.; 1,878 miles in England and 230 in Scotland which yield 3 per cent.; 820 in England, 8 in Scotland, and 99 in Ireland which produce 4 per cent.; while of those which divide 5 per cent. and upwards on their capital, there are 1,311 miles in England, 99 in Scotland, and 412 in Ireland; so that the average rate of dividend upon the whole of this vast quantity of railway communication does not exceed 3 per cent.—*Morning Chronicle*.

Manfield and Sandusky Railroad.

His Honor Judge Fitch held an adjourned term of the Court of Common Pleas yesterday, when the motion to confirm the sale of this road, made on the 22nd inst., was argued, and on full examination of the proceedings the sale was duly confirmed by the Court. The sale on the 22nd was made to Oliver Slate, Jr., and E. T. H. Gibson, of New York, and G. B. Wright, of Newark, who acted as trustees of the compromise adjustment, which has been in progress for the past year; and we understand that the parties to that compromise, and now the purchasers of the road meet today for the purpose of reorganizing upon the new basis. So soon as the organization is perfected the title of the property passes, by virtue of the special law of last winter, and the decree of the Court, to the stockholders.

Hon. Henry Stanberry, in presenting the motion for confirmation, made some interesting statements relative to the history and progress of this new mode of resuscitating a bankrupt railroad corporation, and paid a justly deserved tribute to the extraordinary energy and ability displayed by E. T. H. Gibson, of New York, the agent of the parties for procuring the assent of the Eastern holders of bonds and stock. The labor and tact necessary to carry out such a herculean task, as the resuscitation of this enterprise appeared one year ago, can only be appreciated by those familiar with its history. The number of parties to the agreement is between seven and eight hundred, and the total amount of cost, as represented by debt and stock, was over \$4,000,000, and now reduced, by the almost unanimous consent of the parties interested, to \$2,400,000.

We congratulate the parties in interest upon the happy result of this pioneer railroad compromise, and doubt not that upon the new basis the Company has a successful and prosperous future.

Were our lawyers to take the liberal and manly course pursued by the counsel for the parties in this case, Messrs. Stanberry and Lane, we would have less of "selling out" stockholders and entailing numerous losses to all the early friends of our public improvements.

We learn that the company will proceed to issue

the new bonds and stock in accordance with the terms of agreement as soon certificates can be prepared.

Lake Huron and Ottawa.

\$5,000 it is known was voted last session for the exploration of the valley of the Ottawa. By this exploration will be established the distance between a given point on the Georgian Bay, and another given point on the river Ottawa; the various levels, on the line, the quality of the soil, the nature of the timber, and, in fine, all the advantages resulting from this great road—that is to be.

This work is complete in its object, and will serve for a railroad, for a canal, or for both together; but, as it will be complete in all respects, it may be used for settlement and all public purposes. It will be finished, at the farthest, by the middle of September, and then the different companies ranged on the Lake Huron and Quebec railroad can present themselves to capitalists with official statements, and they will do so without losing a moment. They should be ashamed to fall asleep when they have four million acres of land to throw into the balance, for all the necessary sums of money.

The exploration has been entrusted to Mr. Walter Shanley, a man of integrity, information, and resolution, and an activity and determination which overcome all obstacles. He has gained the public confidence by all these qualities, in addition to the despatch and certainly of his work.—We can, moreover, say that he has made this exploration a matter of choice, and that he enters upon it with all his soul. And besides his action there is that of another party, which our readers know, one which will not stop till the road is completed.—*Journal de Quebec*.

Allentown Railroad Company.

This Company has been organized by the election of the following Board of Directors, viz:—J. F. A. Sanford, Thos. E. Davis, John O. Sargent, Samuel J. Beals, C. H. Booth, O. Deforest Grant, J. F. Butterworth, F. C. Gebhard, William S. Wetmore, New York; C. Danforth, Paterson; Jacob Dillenger, C. Pretz, Pa.

The following is a copy of a circular just issued by the Company to the public.

"The Allentown railroad forms the only unfinished link in the direct east and west railroad route across New Jersey, Pennsylvania, &c., to which the people of New York and of the West have long been looking with anxiety; it extends from the town of Allentown, upon the Lehigh Valley railroad (now in operation), to Auburn, the eastern terminus of the Dauphin and Susquehanna railroad (also in operation), and communicates there with the southern anthracite coal field of Schuylkill County, Pennsylvania, and at Dauphin with the Pennsylvania railroad.

The distance is 88½ miles. The grades, coming towards New York, will not exceed twelve feet to the mile.

This route completes the connection between the railroads now in operation from the City of New York and the Pennsylvania Central railroad, which it joins near the town of Dauphin, eight miles north of Harrisburg, and avails of all the vast connections of that prosperous enterprise. The legislation is all complete, the line has been carefully surveyed and accurately located, and nothing now remains to prevent the immediate commencement of the work.

To construct this railroad with a single track and sidings, will cost \$1,490,000, exclusive of the right of way (a large portion of which will be taken in stock), and of the equipment.

It forms, with its connections, the most direct railroad route that can ever be obtained between the city of New York and the principal commercial emporia of the Western States; much shorter than any other, and a cheaper line of transport across a country, but little obstructed by the win-

ter snows that embarrass so much our northern lines.

This route commences at New York with the Central Railroad of New Jersey, crosses the Delaware river by a substantial bridge near Easton, Pennsylvania, and has an uniform gauge (4 feet 8½ inches) from New York harbor to the city of Pittsburg, at the head of navigation on the Ohio river.

At Pittsburg, the Pennsylvania railroad (which forms an important part of this route) connects with the Pittsburg and Chicago railroad and its great net work of branches, and also joins the Stenbenville line, which forms part of the shortest route to Cincinnati.

At Blairsville, 50 miles east of Pittsburg, we unite with the North-western railroad, which carries the common gauge of 4 feet 8½ inches, by a very direct line, to Cleveland, and thence by the Toledo line, the Southern Michigan, the Rock Island railroad, &c. This usual gauge of the Eastern States will be carried out, unbroken, to the Mississippi river at Rock Island, St. Louis, Alton, Dubuque, Galena, &c., and by railroads now under construction, to a point high up the Missouri, near the border of the Kansas Territory.

The construction of the Allentown railroad will open to the trade of New York City, the means of sending a loaded car loaded with goods, direct from Jersey City, to any railroad point in the States of New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, Iowa, and Minnesota.

The advantage of sending goods at once from the city of New York in a loaded car, without trans-shipment or delay, to almost any point in the western country, needs only to be stated to be appreciated by all business men; and the initiation of this new system of goods traffic requires only the construction of our unfinished link of 88½ miles of railroad to bring it into action in two years' time.

Our railroad also runs through the richest portion of the celebrated Iron Ore deposits of Lehigh County, Pennsylvania, from which at the present moment, twelve anthracite furnaces of the largest class, are supplied.

It penetrates, almost centrally, the rich and populous counties of Lehigh and Berks, in the State of Pennsylvania; passes through or near five flourishing towns or villages, and connects at once, the town of Pottsville, the center of the Anthracite coal trade, with the city of New York, by a line only 140 miles long, and secures from that region, within a five hours' trip, a large and valuable travel which, by the existing route, requires eleven hours' time.

In fact, the Allentown railroad not only promises to aid greatly in the transmission of goods from and to New York, and to facilitate the western travel of that city, but it also possesses within itself, unexampled resources for a heavy local business.

It furnishes too, the only route by which the city of New York can be supplied at all seasons of the year, with the red ash anthracite coal, so highly approved for domestic use, and which is only to be found in quantity, in the Pottsville coal region.

Finally, it may be stated, that the combined line opened to the city of New York by the Allentown railroad, will be shorter than the present traveled routes, as follows:

To Cincinnati, 166 miles shorter than <i>via</i> the New York Central R.R.			
To St. Louis,	187	do.	do.
To Cleveland,	76	do.	do.
To Chicago,	76	do.	do.
To Cincinnati, 123 miles shorter than <i>via</i> the New York & Erie R.R.			
To St. Louis,	183	do.	do.
To Cleveland,	72	do.	do.
To Chicago,	72	do.	do.

Our route, in fact, forms the shortest practicable railway line to all the leading points of the western country, as will be more clearly seen by reference to a map of the United States.

We now annex an estimate of the probable annual business.

ESTIMATE OF REVENUE.

Estimate of the probable annual revenue to be derived from the Auburn, Port Clinton and Allentown railroad, when fully completed and properly equipped, to wit:

Passengers.

Through, 200,000 at two cents a mile,
say 75 cents.....\$150,000
Way, 100,000 at three cents a mile, say
50 cents..... 50,000

Light Freight.

Through, 100,000 tons at say \$1.50..... 150,000
Way, 10,000 tons at say 70 cents..... 7,000

Heavy Freight.*

Coal, 500,000 tons at 60 cents..... 300,000
Lumber, lime, slate, &c., 50,000 tons at
50 cents..... 25,000
Iron ore, 250,000 tons at 40 cents..... 100,000
Mail and Express 10,000

Annual total.....\$792,000
Deduct for expenses, say 50 per cent.... 396,000

Leaves probable revenue 20 per cent. on an investment of \$2,000,000, the probable cost when fully equipped, including our pro rata share of the heavy rolling stock necessary for the coal trade\$396,500

The Manufacture of Paper.

Such has been the increased demand of late years for paper, the supply of rags, the great staple article for its manufacture, has largely failed of a sufficiency. In consequence, various substances have been employed as a substitute. Among these are different kinds of grass, bass-wood and other articles, but experimenters have not yet been successful in discovering a material which would obviate the necessity of relying upon rags. The importance of the subject may be inferred from the fact that the consumption of paper in the United States is about three hundred million pounds annually, which is four times as much as is used in England. This amount would be greatly augmented if paper could be manufactured cheaper. In this country brown papers are extensively used for envelopes, wrapping purposes, &c., and our manufacturers employ substances almost unknown in Europe. Straw, the waste from palm leaf manufactories, wood shavings, and other materials are resorted to. In an article upon this subject, the New York Evening Post gives the following statistics:

"There are in the United States nearly eight hundred paper mills in operation, having three thousand engines, and producing yearly 270,000,000 pounds of paper, which, at ten cents per pound, amounts to \$27,000,000. The quantity of rags required to produce the paper amounts to 405,000,000 pounds. It takes one and a quarter pounds of rags to make one pound of paper. The value of these rags at four cents per pound is \$16,200,000, and the cost of labor at one and three quarters cents per pound, amounts to \$3,375,000. The cost of labor and rags united is \$19,575,000, and the cost of manufacturing, aside from labor and rags, is \$4,050,000, which makes the total cost \$23,625,000 for manufacturing paper.

Besides the rags gathered at home the United States import them from twenty-six different countries. The amount imported in 1853 was 22-

766,000 pounds, worth \$982,887. Italy is the greatest source of supply, and sends us about one-fifth of the whole amount. In 1853 there were imported from England 2,666,005 pounds."

The consumption of paper in the United States, says the Post is equal to that of England and France combined. In France, with 35,000,000 of inhabitants, only 70,000 tons of paper are produced annually, of which one-seventh is for exportation. In Great Britain, with 28,000,000 of inhabitants, only 96,000 tons are produced, while the United States, young, and but little advanced in manufactures, turns out nearly 200,000 tons. The foreign trade of New York in paper is given as follows:

"The imports of paper into New York in the year 1853, amounted to 4,482 packages, valued at \$340,824, while those of 1854 were 3,418 packages, valued at \$251,557. Of stationery, for the year 1853-4, there were imported 5,357 packages, valued at \$860,628. The exports of paper and stationery between July 1, 1853, and June 30, 1854, amounted to \$187,325, and those of books and maps during the same period, to \$191,843."

French Railroads.

The Northern Railroad in France carried, in 1855, no less than 5,500,000 passengers, equal to about one-sixth of the whole population of France. Of this number, 600,000 rode in first-class cars, 1,500,000 in second-class, and 3,400,000 in third-class. The passengers carried in 1850 were only 3,500,000. The amount of freight has quadrupled since that period.

Indiana Central Railroad.

The earnings of the Indiana Central Railroad for the six months ending June 30th, 1856, have been as follows:

January.....	\$26,637 61
February.....	22,356 64
March.....	33,245 19
April.....	33,716 31
May.....	38,547 21
June.....	32,368 76
	\$184,866 72

1855.

January.....	\$24,373 82
February.....	19,693 38
March.....	25,629 43
April.....	26,354 67
May.....	27,111 28
June.....	25,313 49
	148,376 07

Increase.....\$36,490 65

Dividend declared on capital stock, on earnings of last 6 months, 3 per cent.

Manitowoc and Mississippi Railroad.

At the annual meeting of the stockholders of the Manitowoc and Mississippi railroad company, held at the office of the Secretary, on the 7th inst., for the election of Directors, for the ensuing year, the following named gentlemen were duly elected: Charles Cain, Milwaukee; Benjamin Jones, Chicago; Joseph Turner and Charles Doty, Menasha; J. Leips, Jarvis E. Platt, Sylvester A. Wood, Ed. D. Beardsley, and Michael Fellows, Manitowoc. The Directors elect immediately after their election, organized a new Board, by the election of the following persons to the respective offices named:—Charles Cain, President; S. A. Wood, Vice President; Charles Esslinger, Treasurer; A. Ten Eyck, Secretary.

So far as we are able to judge, the result of this election is highly creditable to the stockholders, and satisfactory to a very large majority of the citizens of this and the surrounding community. The Board, we learn, ordered the re-opening of the stock subscription books, at the office of the Secretary, when several thousand dollars were at once subscribed to the capital stock of the company. They are also determined to finish the first eight miles of the road, to "the Branch," so called,

by the first day of November next, and have the locomotive running upon it.

The Secretary was directed to issue a further call to the stockholders, requiring the payment of five per cent. on all the stock subscriptions, every month, commencing on the 20th of September next.

Consolidation of Railroads.

At a meeting of the stockholders of the Central Military Tract railroad company, held in this city on Wednesday, it was voted to consolidate with the Chicago, Burlington and Quincy company.—The terms of the consolidation were ratified by the latter, of which the following is the substance: The name of the consolidated company shall be the "Chicago, Burlington and Quincy railroad company."

Each stockholder in the Central Military Tract railroad company, in exchange for every share of stock he may hold in that company, shall be entitled to one share of stock in the consolidated company.

Each stockholder in this company shall be entitled to one share of stock in the consolidated company for every share held in this, in addition thereto shall be entitled to one share in the consolidated company, for every two shares held in this company; upon payment thereof within one year, of sixty dollars, with interest thereon at the rate of ten per cent. per annum, and in case any stockholder shall be entitled to a fractional or half share, he may receive a whole share, on payment of eighty dollars therefor, and interest as above, or if he elect not to receive said share, he shall be paid twenty dollars for said fraction.

The rolling stock of the Chicago, Burlington and Quincy railroad consists of 27 locomotives; 6 first class passenger cars; 3 second class do.; 51 platform freight do.; and 116 house freight do.

That of the Military Tract road, numbers 19 locomotives; 6 first class passenger cars; 2 baggage do.; 50 coal do.; 51 platform freight do.; and 116 house freight do.

The Military Tract company pay a premium or bonus of 25 per cent. for the stock of the Chicago, Burlington and Quincy company.

We are glad this consolidation has been effected, as it will materially advance the interests of both companies, and facilitate the transaction of their business. If we mistake not the name of the Chicago and Aurora was changed by the last Legislature to the Chicago, Burlington and Quincy railroad. This line extended from the Junction on the Galena road, thirty miles west of the city to Mendota, forty-six miles. The Central Military Tract extended from Mendota to Galesburg, eighty-four miles. The whole length of the line is now, therefore, one hundred and thirty miles. We presume that other consolidations will be effected with the Northern Cross, which extends from Galesburg to Quincy, and the Peoria and Oquawka, which on this route extends from Galesburg to Burlington, by which the entire line would become the property of one company. It would, as it seems to us, be mutually beneficial to all parties. The different roads, or at least those parts of them mentioned above, are all operated by the same company, and so far as the public are concerned, the practical working is the same as if they were consolidated.—Chicago Democrat.

FOR SALE.

2, 20 Ton Locomotives } 4 ft. 8 1/2 in. gauge,
4, 25 do. do. } at a bargain.
6, 24 1/2 do. do.
4, 28 do. do.
Apply to DAVIS & KASSON,
July 24, 1856. 4131 24 BROADWAY.

Freight Cars for Sale—4 ft. 8 1/2 in. Gauge.

EIGHT PLATFORM CARS, thoroughly and well made of seasoned timber, with oak sills and truck frames; axles 4 1/2 inch; Washburn & Co. Brandon wheels and warranted in every respect. These Cars are now ready for delivery and will be sold low for cash or approved paper.

Inquire of WILLIAMS & PAGE,
Railroad Supply and Furnishing Agents,
4128 44 WATER ST., BOSTON, MASS.

* This business is already existing, and it may be truly added, that it is in fact awaiting the completion of our line. With suitable coal region connections, a well built railroad, an ample equipment, a liberal management, and a good coal port on the deep waters of New York harbor, we cannot be prevented from commanding a coal trade of 1,000,000 tons per annum, whenever we are ready to send our locomotives after it.

BROOKLYN WATER WORKS. To Contractors.

SEALED PROPOSALS will be received by the undersigned until the 15th day of August at 12 M. for the construction of the RIVER HILL RESERVOIR, situated near the Jamaica road, about five miles from Brooklyn.

The work consists of earth-work, slope wall and puddling. Specifications and plans of the work will be shown on the ground and at the Engineer's office, Halsey's Building, Brooklyn, from the 6th August.

The right is reserved to reject any or all of the proposals made.

231

H. S. WELLES & CO.,
No. 4 Wall street, New York.

Railroad Iron.

1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by

4131

THEODORE DEHON,
10 Wall st., near Broadway.
New York.

Railroad Iron.

1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from England to New Orleans. For sale by

4131

THEODORE DEHON,
10 Wall st., near Broadway,
New York.

KEROSENE LUBRICATING OIL. SECURED BY PATENTS.

THE effect of this Oil on machinery is found to be perfectly magical. It removes the gum caused by the use of impure oils, wears equal to best Sperm Oil, and does not congeal at a low temperature. It burns magnificently in all the solar, binocular and hand lamps; also in signal and bowsprit lanterns.

The attention of engineers, ship-owners, ship-chandlers, ship supply men and others, is particularly requested to the certificates to be seen at the office of

AUSTENS, AGENTS FOR THE KEROSENE OIL CO., No. 50 BEAVER ST., NEW YORK.

4129

Railroad Iron.

800 TONS best quality Welsh Rails "Erie" pattern, 55 lbs. per yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, July 26th, 1856. 1m30

Railroad Iron.

500 TONS best quality Welsh Rails, 55 lbs. per linear yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, July 26th, 1856. 1m30

FOR SALE.

A GOOD second hand Archambault Steam Engine, about 10 horse power, with tubular boiler complete.

4130

Apply to A. & P. ROBERTS, Philadelphia.

First Class Locomotive

FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8 in. gauge—6 1/2 ft. drivers—cylinders 14 in. by 20 in. stroke. Independent cut off valve motion. Copper tubes and fire sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a first class passenger engine.

For particulars address
ELLIOTT & BOWLES,
115 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1856.

NATHAN LANE & CO., No. 69 Wall Street, and 91 Beaver Street, near Pearl, NEW YORK.

Railroad, Bank, Insurance, and Counting-House

STATIONERS, PRINTERS, LITHOGRAPHERS,

AND ACCOUNT BOOK MANUFACTURERS.

Respectfully invite attention to the different departments of their business, and trust that from their long experience of over 15 years they can execute all orders in the most satisfactory manner, and on as favorable terms as any house in the city.

Having always on hand a large and extensive assortment of all the various kinds and sizes of Blank Books, manufactured in the most substantial manner, and in different styles of binding, of the very best material, they are enabled to supply a single book or complete sets from their own shelves, at short notice.

Blank Books manufactured to any pattern or style,
IN THE BEST MANNER.

RAILROAD COMPANIES

Supplied with all their various BLANKS and BOOKS, after the latest patterns and most approved styles. Tickets, Freight and Way Bills, and the entire series of Blanks and Requisites.

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FOR RAILROAD AND OTHER COMPANIES.
Certificates of Stock, Checks, Drafts, Notes, Bills of Exchange, Letter Headings, in every variety.

Our Specimens of Bonds, Certificates of Stock, and Checks, attracted special attention at the late Fair in the Crystal Palace, being scarcely distinguishable from Steel Plate Engravings; combining all the advantages of steel engraving, with comparatively little cost.

ENGINEERS, ARCHITECTS, and DRAFTSMEN,

Supplied with every article required by the profession.

COAL, IRON, MINING and MANUFACTURING COMPANIES

Fitted out with Books and Stationery, at the lowest rates.

BANKS AND BANKERS

Supplied with every article of BOOKS and STATIONERY requisite for the Counting House, of the very best quality, and at low prices.

Checks printed and bound, Drafts, Bills of Exchange, &c., &c.

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Furnished with Policies, Policy and Street Registers, Renewal Receipts, Surveys, Notices, and all the blanks and forms pertaining to Insurance.

SEAL ENGRAVING AND STAMP CUTTING

EXECUTED AT SHORT NOTICE, ON BRASS, STEEL OR WOOD.

ENVELOPES STAMPED IN VARIOUS COLORS.

COPYING AND NOTARIAL PRESSES,

Of all sizes, and the most approved construction and finish. Presses furnished to Shipping Houses to stamp Bills of Lading, A NEW ARTICLE WHICH IS EQUAL TO PRINTING.

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FOR SALE.

TWO LOCOMOTIVE ENGINES, built by the Taunton Locomotive Manufacturing Company, of the following dimensions:

Gauge, 4 feet 8½ inches.
Boiler, 46 inches in diameter.
Flues, Copper, 134—11 feet 6 inches long, 2 in. diameter.
Fire-box, 50 by 39 inches inside.
Cylinders, 16 inches diameter, 20 in. stroke.
Engines have 4 six-foot drivers, with truck; inside connected with 7 inch crank, V hooks, and variable cut off.
Tenders have double trucks and tanks of 2,000 gallons capacity.

These Engines cost \$9,000 each, and have been used about one year, have been recently fitted up and are in good order. For workmanship and economy in fuel, will compare favorably with any in the country.

We can sell them on terms that would make them a bargain to the purchaser.

Apply to
BRIDGES & BROTHER,
64 Courtlandt st., N. Y.

Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yokes of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.60 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of, that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried either in wagons, or interrupted water ways, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the

facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1866, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., Chicago, Ill.

Philadelphia, Wilmington & Baltimore Railroad. UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	3 00
do do Richmond.....	2 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	10 00
do do Louisville.....	13 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

New York and Erie R. R.

On and after Monday, May 19th, 1866, and until further notice, PASSENGER TRAINS will leave Pier foot of Duane street, as follows, viz:—

DUNKIRK EXPRESS, at 6 a.m. for Dunkirk.
BUFFALO EXPRESS, at 6 a.m., for Buffalo.
MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will connect with Express Trains for Syracuse, Cayuga, Canadawaga, Niagara Falls, and Rochester, and with the Lightning Express Train on Lake Shore Railroad for Cincinnati, Chicago, &c.
ROCKLAND PASSENGER, at 3½ p.m. (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 6 p.m. for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canadawaga and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c.,
D. C. McCALLUM, General Sup't.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO. Office Nos. 8 and 10 Wall st., ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT.

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to bleed utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subscribed, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,
General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPED, Esq., Detroit, Mich.
HON. J. V. C. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph
Company, Boston, Mass.
HON. H. F. FRENCH, Associate Judge, Superior Court,
Exeter, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Port-
land, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SATURDAY, AUGUST 9, 1856.

[WHOLE No. 1,060, VOL. XXIX.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, August 9, 1856.

Penobscot and Kennebec Railroad.

At the annual meeting of the stockholders of this company held at Bangor, Me., July 8th, the following gentlemen were elected Directors for the ensuing year: Samuel Taylor, Jr., William Conner, T. W. Baldwin, Samuel Larabee, John Webber, Jabez True, and Hollis Bowman.

From the report of the President, Samuel Taylor, Jr., Esq., we learn that the company received the road from the contractors (Moore & Dunning) and commenced running it on their own account on the first day of September, 1855; since then the trains have been regularly run every day, with but very slight accident or interruption on account of the snow the past winter or from any other cause.

Only one passenger train and one freight train with a passenger car attached, has been run daily each way over the road, which was found quite sufficient for the accommodation of both the passenger travel and freight business.

The location of the road has been fully demonstrated to be a peculiarly favorable one. Its grades are light, and its excavations and curvatures are less than upon most New England roads. The cost of construction of the road, including the

equipment account, amounted on the 31st day of May, to.....\$1,723,408.61
To which is to be added hereafter, for estimated expenditures.....65,871.00

Total cost.....\$1,789,279.61

This is a larger sum than was estimated before and at the commencement of the building of the road, and has arisen in part from the following expenditures not then anticipated, or largely in advance of the original estimates, viz.:

Allowance to Moor & Dunning, in addition to the contract in company bonds.....	\$100,000
Amount allowed to Moor & Dunning, by referees, more than the contract.....	48,176
Land, depot, wharves and filling in at Bangor.....	110,000
Extra cost of rails, over amount paid by contractors.....	94,000
Excess of land damages.....	18,000
Loss on 93,000 stock, transferred from contractors, and sold.....	70,000
Interest to stockholders.....	34,000
	\$467,176

The amount of floating liabilities is estimated at.....\$219,087.47
The funded debt of the company amounts to.....1,184,000.00
The certificates of stock issued represent 5,128 shares.

The President in concluding his report says:—"The earnings of the road to this time have been quite equal to our expectations. When we consider the excessive dullness of all branches of business, we confidently hope that on a revival of business, the earnings of the road will far exceed what they now are; and we may safely calculate that in a very few years the receipts will more than double."

From the report of the Superintendent, we learn that the distance run by passenger trains has been 25,950 miles; by freight trains, 26,400 miles; by other trains, 8,600—total 60,950 miles, and that no accident has occurred to any passenger or employee upon the road.

The equipment of the road at the time it was opened, and what was received from the contractors soon after, consisted of 5 locomotives, 2 passenger cars, 1 baggage car, 26 box cars, 60 platform cars, 27 gravel cars, and 10 hand cars; and there has since been purchased 3 passenger cars,

1 baggage car, 2 box cars, 2 hand cars, and 2 snow plows. The engines and platform cars received from the contractors required extensive repairs—costing to put them in good running order about \$3,000.

The whole amount received from passengers and freight for nine months ending May 31st was—
From Passengers.....\$54,158.03
" Freight.....24,608.04
" Express.....800.00
" Extra baggage.....180.17
Entitled to receive for mail service.....1,964.71
\$81,703.95

The running expenses for same time have been—
For maintenance of way.....\$12,086.76
" repairs of engines and cars.....4,186.58
Locomotive power and train expenses.....7,194.48
Oil and waste.....1,598.41
Lost and damaged goods and baggage.....104.77
Wood.....13,714.13
Station expenses.....5,859.29
Stationery printing and advertising.....1,455.76
Services of Superintendent, Master of Transportation and Clerk hire.....1,825.00
Miscellaneous expenses.....478.35
\$47,980.62

To which should be added sundry outstanding bills for repairs of engines, cars, etc., amounting to.....1,878.88
\$49,854.40

The superintendent states that more iron will soon be wanted to replace bad rails, of which there are several hundred now in the track that should be taken out as soon as others can be obtained to replace them.

The following vote was passed with regard to payment of the floating debt:

Voted, That the Directors be authorized and requested to offer to the stockholders of the Company, the remaining 2d Mortgage Bonds heretofore issued [amounting to \$100,000] And that they be further instructed to issue and offer bonds payable in stock of the Company, or money, as the purchaser may elect, in fifteen years, with coupons for interest attached, payable semi-annually, sufficient to liquidate the floating debt of the Company, but not exceeding the sum of \$300,000.—To be paid for in the following manner, to wit:—One half in the Stock of the Company at the par value and the remaining half in money.

It was subsequently voted that the directors be instructed not to sell the second mortgage bonds at less than 75 per cent.

The Manufacture and Consumption of Paper in the United States.

The *Evening Post* of the 21st inst., published a paragraph on rags, which contains some curious and interesting statistics. It appears that we imported in 1853 from all countries 22,766,000 lbs., of which we received from England 2,666,005 lbs., and from Italy about one-fifth of the whole. The total importation, as given in the *Post*, corresponds with the official returns for 1853; but there is obviously some mistake in the ratio of importation from Italy relatively to that from all other countries, which, as the subject is unquestionably an interesting and novel one, not often entering into statistical investigations, we will endeavor very briefly to reconcile with such statistics on the rags and paper trade of the United States, Great Britain and France, as are accessible at the moment.

The following tabular statement exhibits the aggregate quantities, values, and price per pound of rags imported into the United States from all countries, distinguishing in a separate column the quantities received from Italy during a period of ten consecutive years, from 1846 to 1855—

Years.	Rags imp't'd from all countries. Pounds.	Rags imp't'd from Italy. Pounds.	Ag'gate values. pound.	Price. Cents.
1846....	9,897,706	8,002,865	385,397	3.89
47....	8,154,886	6,529,234	304,216	3.73
48....	17,014,867	13,803,086	626,607	3.68
49....	14,941,236	11,009,608	524,755	2.51
1850....	20,696,875	15,861,266	748,707	3.61
51....	26,094,701	18,512,673	908,747	3.46
52....	18,288,458	12,220,570	626,729	3.42
53....	22,766,000	14,171,292	982,837	4.31
54....	33,615,753	24,240,999	1,010,443	3.09
55....	40,013,516	23,948,610	1,225,151	3.06

Ag'gate. 206,631,954 148,300,155 \$1,192,865
An average. 20,663,195 2-5 14,830,015 1/2 819,286 1/2

From the preceding table it will be seen that during the decennial period ending with 1855, the aggregate quantity of rags imported into the United States from all countries was 206,631,954 lbs., while the average quantity received from Italy reached as high as 148,300,155 lbs.

The annual average for the period designated will, however, furnish a more statistical basis for ascertaining the relative importance of Italy compared with all other countries as the principal source of supply upon which the United States must rely, with any degree of certainty, for an article, the consumption of which is so rapidly increasing there; even during the last year, an alarming deficiency of the manufactured material was seriously apprehended by the conductors of our periodical and newspaper journals. The average annual quantity imported into the United States, from all countries, during the period designated was 20,663,195 lbs.; the average annual quantity received from Italy was 14,830,015 lbs. Thus it is shown that instead of one-fifth, as stated in the *Post*, Italy actually furnishes nearly two-thirds of all the rags imported into the United States.

The *Post* paragraph further states that the consumption of paper in the United States is equal to that of France and England combined. In other words, that the 25,000,000 inhabitants of the United States consumed as much paper as the 64,000,000 inhabitants of France and England.—This is very nearly correct. The statistics, however, will prove interesting.

According to McCulloch, the number of paper mills in operation in England in 1835 was 750, and the annual value of the paper manufactured reached as high as \$6,000,000. At that period, however, the manufacture of paper was burdened with an excise duty amounting to more than three times as much as the total wages of the hands employed in making it, and the quantity annually produced did not exceed 50,000,000 lbs. of first class and 16,000,000 lbs. of second class paper, requiring a supply of about 100,000,000 lbs. of rags.

Improvements in machinery and mode of manufacture, and the application of steam have reduced the number of mills in Great Britain and Ireland to 380, according to the latest statistical returns; while the quantity of rags annually consumed has risen to 201,600,000 lbs., or over 100 per cent. We have compiled from a recent, tho' in this country a rare Dublin publication on statistics the following tabular statement, showing the quantity of paper manufactured, consumed and exported in Great Britain for a period of nine years, ending with 1854—

COMPARATIVE STATEMENT, showing the quantities of Paper manufactured, consumed and exported in Great Britain from 1846 to 1854.

Year.	Pounds of paper manufactured in Great Britain.	Pounds of paper retained for consumption in Great Britain.	Pounds of paper exported from Great Britain.
1846...	127,412,482	122,805,926*	4,886,556
1847...	121,965,315	116,111,336	5,852,979
1848...	121,820,229	116,639,943	5,180,286
1849...	132,132,660	126,166,341	5,966,319
1850...	141,032,474	133,269,788	7,762,686
1851...	160,903,543	142,597,945	8,305,598
1852...	154,469,211	147,140,825	7,328,886
1853...	177,638,010	164,336,135	13,296,874
1854...	177,896,226	161,784,204	16,112,020

* These two columns comprise the paper manufactured and consumed in Ireland.

France turns into paper annually about 235,200,000 lbs. of rags, producing about 156,800,000 lbs. of paper. In the United States there are 750 paper mills, which work up, each year, about 405,000,000 lbs. of rags. Assuming (the usual estimate) that 1 1/2 lbs. of rags yield one pound of paper, we have the following comparative statement for the United States, and France and Great Britain combined—

	Lbs. of paper annually consumed.	Lbs. of rags annually manuf'd.	Lbs. of paper per capita.
United States...	405,000,000	270,000,000	10.80
Gr. Britain and France comb'd.	436,800,000	291,200,000	4.55

From this statement it appears that the United States consumes 31,800,000 lbs. of rags, and manufactures 21,200,000 lbs. of paper, less than Great Britain and France combined, while the quantity of paper manufactured *per capita* of the population of the former is more than double that assigned to the combined population of the two latter. The quantity of paper imported in Great Britain and France and added to the stock for consumption might vary slightly, but not materially, the above results.

The preceding statement, however, omits the quantities annually imported and exported by each of the countries respectively, items without which no calculation as to consumption can be accurately made.

The importation of paper of all kinds into France, in 1853, did not exceed 337,104 lbs., while the exports amounted to 17,053,657 lbs. This gives an excess of exports over imports to be supplied from the stock of domestic manufacture, of 16,716,553 lbs. Deduct this from 156,800,000 lbs., the quantity manufactured, and we have left for consumption 130,083,447 lbs., or 3.89 lbs. *per capita* of the population.

During the same year there was imported into England, according to the Report on Trade and Navigation, 909,250 lbs. of paper. The report gives this quantity for the last six months of the year only—assuming that the importation during the first six months was equal to that of the last as above given, and the total importation would reach, say 200,000 lbs. The quantity exported, we have seen, was 13,296,874 lbs., leaving an excess of exports over imports, of 13,696,874 lbs., to be deducted from the quantity retained for consumption, and reducing the figures already given in the column under that head to 161,239,261 lbs.; as the actual consumption in Great Britain during the year, or 5.40 lbs. *per capita* of the population.

The United States official returns give the values but not the quantities of paper imported and exported; but as the imports usually exceed the exports, the quantity consumed is seldom if ever less than the quantity manufactured.

We have then for annual consumption in the United States 270,000,000 lbs.—consumption *per capita* 10.80 lbs.

Annual consumption in Great Britain and France combined, 291,322,708 lbs.—consumption *per capita* 4.55 lbs.

Thus, it appears first, that the consumption of paper in the United States, *per capita* of the population, is over 100 per cent more than in England and France combined; and second, that Italy supplies us with nearly two-thirds of the rags annually imported into the United States from all countries. The first fact is susceptible of an easy explanation. This explanation is found in the character of our institutions, in the genius of our government, in the general diffusion of knowledge among the masses of our people, in our cheap literature, in the number of our authors, orators and statesmen. It is also to be traced in the fact that we publish more readable books, periodicals and public journals, than all other nations combined, and are consequently more abundantly supplied with the "raw materials of every kind of science and art, and of all social improvement."

Various causes may be given in explanation of the second fact. It may be because the chief primary raw material of paper, hemp and flax, are among the most abundant natural productions of the different States of Italy, and the high price which Italian rags always command favors the supposition; or, it may be, that in point of fact we are indebted to Turkey and Greece for a large portion of our imports of this article through the ports of Trieste, Genoa, Naples, &c. And who has not heard of the extravagant manufacture of the raw material of paper in these two countries?—"If a sudden tear," says a late English writer, "or a stitch giving way suddenly unfold this garment, (his cotton petticoat,) a Greek, hurrying on, will leave a flag nearly a quarter of a mile long fluttering behind him. Nor is the use of cotton confined to the person: his bed, blankets, furniture, his covering by day and by night is of the same material. But perhaps the true explanation is found in the history and character of the exporting countries; for their statistical returns show that as they advance in the arts of civilization and social progress—as they acquire or revive a taste for letters and unfetter the faculties of the human mind, their exportation of rags diminishes in a ratio proportionate to the increase of books, and, as a necessary consequence, to the diffusion of knowledge. Where freedom of speech and of the press are recognized among the inalienable rights of the citizen, rags are unknown as an article of foreign commerce.

Eastern (Mass.) Railroad.

The 21st annual meeting of the stockholders of this road was recently held in Boston, for the election of Directors, and transaction of other business, John Howe, Esq., President, in the chair. The following gentlemen were chosen Directors for the current year: John Howe, President; S. Hooper, Geo. M. Brown, John C. Lee, Nathan D. Chase, Micajah Hunt, and Henry H. Ladd, Directors.

The report of the Directors was submitted, from which we learn that the earnings of the road for twelve months, to the close of business on the thirty-first day of May, 1856, have been obtained from the following sources, viz:

From 1,151,200 passengers.....	\$509,698.15
102,871 tons of freight.....	132,099.49
Parcel, post and express car....	8,741.70
Extra baggage.....	810.88
U. S. mails.....	9,128.99
Miscellaneous receipts.....	5,104.58

\$665,578.79

Property accounts and territorial division..... \$25,677.28

Total receipts..... \$691,256.07

EXPENSES.

For 15,459 cords wood..... \$87,268.05
Machine shop..... 7,824.76
Maintenance of way..... 79,058.28
Locomotive power..... 56,136.43
Train expenses..... 64,882.97
Office establishment, &c..... 27,649.08
Station expenses..... 42,871.17
Mail expenses..... 1,801.26 866,490.95

Net earnings..... \$324,765.12

Rent of Grand Junction road..... \$11,000.00
Insurance and taxes..... 12,789.73
Interest..... 185,847.65 159,587.38

\$165,177.74

Balance to debit of profit and loss, 1855..... \$107,453.45
Do. 1856..... 1,386.24 108,789.69

Leaves to the credit of profit and loss, May 31, 1856..... \$56,388.05

NOTE.—In the annual report of last year, the following sums made up a part of the income from property, viz:

Cash received dividend of steamer Danl. Webster..... \$1,125.00
Do. from sale of Eastern R. R. ferry-boat..... 10,000.00
Do. teaming establishment..... 5,795.00
Do. gearing of grist mill at Salem..... 600.00
Do. surplus of P. S. and P. road..... 18,186.17

\$85,706.17

We have no such items to include in the report of this year. Deduct therefore for the purpose of comparison merely, the above named sums (not being regular income) from the gross earnings of 1855, say \$653,614.67 per last report: Less \$85,706.17, the total for eleven mos.

is..... \$617,908.50

While the earnings of the present year of twelve mos. are..... 691,256.07

So, too, in the expenses the amount charged was..... \$298,767.56

To which should have been added the renewal fund as similar items are charged to expenses this year..... 51,810.42

Total for eleven mos. \$350,577.98

While the expenses for the present year are..... 866,490.95

FINANCIAL CONDITION OF THE ROAD.

The reports of last year disclosed the fact, that besides the funded debt of the company, there existed a very large floating debt, consisting of bills payable, expense bills overdue, and contingent liabilities for Saugus Branch Extension railroad, which, on the day the new administration took charge of the affairs of the company, amounted to \$781,165.92, and as much of this floating debt was rapidly maturing, it became necessary to provide for its renewal or payment, from time to time.

We take great pleasure in assuring you, that provision has been seasonably made, in all cases, for these payments and at the legal rate of interest, excepting in a few instances, when a small exchange was paid to banks. On no occasion have we made a note to negotiate in the street.

The floating debt, at the close of the business year, May 31st, beyond the means on hand to pay interest, &c., amounted to \$440,254.61; and the funded debt has been reduced by the payment of \$75,000 of the Income Bonds. Thus our liabilities have been reduced in the sum of \$365,911.81, in ten months since the 31st day of July, 1855; and the means by which we have been able to effect this reduction of the debt have been obtained from sales of land, Mr. Tuckerman's assets and the income of the road.

The funded debt, as stated in the appendix, amounts to..... \$2,335,000.00

The floating debt, as stated above, to say nothing of payments for interest, &c., already provided for, amounts to..... 440,254.61
Total debt..... \$2,775,254.61

A portion of the floating debt is not due till the next year, and the money to meet it must be obtained from the sale of land and the net income of the road, after the payment of interest and the annual Income Bonds.

The Interest Account is made up to the close of our business year, the 31st day of May; and the whole amount, accruing to that date, whether due or not, is charged off and deducted from the Income Account of last year. No new obligations, beyond current expenses, have been incurred, except for the purchase of a new engine and seven box cars, and these were necessary for the use of the road.

What has Become of the Precious Metals?

If some ten years ago a statesman or financier had been asked what effects would be produced upon the money markets by a progressive new supply of gold to the amount of £150,000,000 within the short period of seven or eight years, he would probably have treated the question as an Utopian dream undeserving practical consideration; but if pressed to give an opinion, he would with certainty and fair reasoning have enumerated, amongst many other consequences, a vast accumulation of bullion in our monetary reservoirs, the National Banks, and a retrogressive scale in the proportion between the value of gold and silver from the scale of 1:16 to 1:12, 1:10 and, perhaps, even less, as it existed in ancient times, when the production of the two metals was nearly equal.

Facts have, however, shown a very different result as may be seen by the following table giving the amount of bullion in the coffers of the Banks of England and France at the end of December in each year from 1848 to 1855 inclusive, and the price of silver and gold in London and Hamburg in the same years:

Year.	Bullion in the Bank of England.	Bullion in the Bank of France.	Price of Gold in London.	Price of Gold in Hamburg.
1848.....	13,886,000	253,300,000	59 7-16th	486 8-16th
1849.....	16,045,000	442,200,000	59 11-16th	487
1850.....	16,961,000	471,000,000	59 15-16th	488 3/4
1851.....	16,916,000	461,500,000	59 15-16th	488 3/4
1852.....	16,916,000	461,500,000	59 15-16th	488 3/4
1853.....	16,916,000	461,500,000	59 15-16th	488 3/4
1854.....	16,916,000	461,500,000	59 15-16th	488 3/4
1855.....	16,916,000	461,500,000	59 15-16th	488 3/4
1856 (June, 12, 1857, 915)	16,916,000	461,500,000	59 15-16th	488 3/4

It is thus clear that the vast supply of gold has by no means exercised a proportionate effect upon the stocks of bullion in the above banks nor upon the relative values of silver and gold, which have not varied more than 3 per cent.

As these two phenomena are so closely connect-

ed with each other as to act with cause and effect in the strictest sense of the terms, we shall enter more fully into their general bearings.

Previously to 1848, or until the discovery of the new gold mines, there existed both in France and the United States, a double tender by law, but only a silver one in point of fact; it therefore required but the least change in the relative values of the two metals, and but a slight rise in the price of silver above the rate fixed by the mint, to subvert the legalized medium of exchange, and to substitute gold for silver in general traffic. In the United States, where the legal valuation of the two metals was 1:16, and where bank notes supplied to a great extent the place of silver coin the change was rapidly effected. By the subsequent coinage of half-dollar pieces, &c., at a reduced mint standard for home and retail traffic, gold has in reality become the only legal tender in the Union.

In France, however, the monetary revolution is a work of time and slow progress, owing to the legal valuations of the precise metals, which gives a proportion of 1:15 1/2, and also owing to the circulation of vast sums of silver coin, which was estimated in 1848 at not less than 2,500,000 francs, or £100,000,000 sterling. It has several times been argued and proved, that so long as there shall circulate in France large silver money which may be exchanged for the 20 franc pieces at the rate of 1:15 1/2, or bought at a premium of 2 per cent., the value of gold and silver will never fall below the proportion of 1:15 1/2, though in the other States of Europe the continual new arrivals of gold certainly show a tendency to lower the proportion.

In casting a glance at the French coinage during the last eight years, we can no longer be in doubt as to the real cause which has hitherto operated to keep up the value of gold in France, or which will bring about a complete revolution in the monetary affairs of the country as soon as gold shall have entirely supplanted the large silver pieces in circulation. The following is a statement of the amount of coinage issued from the mint at Paris from 1849 to 1855 inclusive, and also the average amounts of gold and silver held by the Bank of France during the same period.

	Gold. Francs.	Silver. Francs.
1849.....	27,100,000	208,500,000
1850.....	85,200,000	86,500,000
1851.....	285,200,000	68,500,000
1852.....	27,000,000	71,700,000
1853.....	330,500,000	20,100,000
1854.....	526,500,000	2,100,000
1855.....	460,000,000	7,000,000
	1,741,500,000	462,400,000
Or.....	£69,660,000	18,496,000
	Amount held by Bank. Gold. Francs.	Silver. Francs.
1849.....	4,060,000	429,270,000
1850.....	11,980,000	446,840,000
1851.....	82,260,000	486,460,000
1852.....	68,936,000	484,994,000
1853.....	103,598,000	214,482,000
1854.....	193,337,000	198,723,000
1855.....	112,500,000	87,500,000

Thus it appears that the gold coinage within the last seven years amounted to about 1,742 millions, while the bullion in the bank in 1855, as compared with that of 1851, shows a diminution of about 400,000 francs in silver!

The large quantities of gold converted into coin by the mints of France, Great Britain, the United States, and other countries, certainly account in a great measure for the employment of the new gold from California and Australia since 1848, yet it does not solve the question, "What has become of the gold coined or not?" Nor "What has become of the silver which gold has supplanted in the markets of France and the United States?"

We can only explain these phenomena by the enormous quantities of silver which have for some time past been re-shipped to Eastern Asia—and also to the vast sums of money sent to the seat of war in the Crimea since 1854, as we shall endeavor to show. The following is a statement of the precious metals exported direct from this country to the East Indies during the last five years:

1851.....	£102,280	£1,716,100	£1,818,380
1852.....	921,789	2,630,238	3,551,977
1853.....	881,202	4,710,665	5,590,866
1854.....	1,174,299	3,182,003	4,356,302
1855.....	947,272	6,409,889	7,356,161

Total. £4,026,792 £18,598,895 £22,625,687

The shipments to India and China from the various ports in the Levant, for three years, were:

	Gold.	Silver.	Total.
1853.....	£93,528	£848,862	£941,890
1854.....	48,456	1,451,014	1,499,470
1855.....	243,289	1,520,240	1,767,479

Total. £385,223 £3,823,616 £4,208,839

Thus about twenty-seven millions sterling of the precious metals, of which about twenty-two millions consisted of silver, have been sent off by the overland mail within the last five years. A portion of the gold may, perhaps, have been destined for Malta and Egypt; but the silver went exclusively to China and the East Indies.

These large remittances of specie may, to a certain extent, have been the result of the so-called "balance of trade," or rather, more correctly speaking, the balance of payments, which for several years has been in favor of the East Indies. The par exchange between the two countries naturally depends on the price of silver, the rupee being a silver coin of 180 11-12 grains standard. When the price of 1 37-40 ounce standard silver is 6s., the par exchange per rupee is 1s. 10 3-10d.; if 5s. 1d. per ounce, the par exchange is 1s. 11d., &c., &c. The remittance from England, including insurance, (per overland mail) costs about 3 1/2 per cent. The following statement shows the average exchange on Calcutta for the company's bills at 60 days' date:

Years.	s.	d.	s.	d.	Total amt drawn upon India.
1848-49.....	1	9	1	10	£1,189,195
1849-50.....	1	10	a	....	2,935,618
1850-51.....	2	1	a	2	3,236,468
1851-52.....	2	1	a	2	2,777,522
1852-53.....	1	10	a	2	3,817,122
1853-54.....	2	1	a	2	3,850,565
1854-55.....	1	11	a	2	3,689,678

We see by these figures that while the price of silver has not varied more than 8 per cent., the remittances have increased from £1,189,000 in 1848, to £3,850,500 in 1853-4, or 224 per cent.—Some persons ascribe these increased remittances partly to railway projects in India, in which English capital is principally embarked, and partly to the higher price which silver realizes in that country, especially since its withdrawal from general circulation in France and the United States. Though these circumstances may not have been without their influence on the money market, yet they hardly suffice to explain satisfactorily the great drains of bullion, particularly silver, which have taken place within the last few years.

The main cause we opine lies in the enormous increase of Chinese exports of silk and tea to England and North America. The quantities of these two articles imported into England during the five years ending 1854, were as follows:

Years.	Tea. Pounds.	Raw Silk. Pounds.
1850.....	50,512,384	1,769,882
1851.....	71,446,421	2,055,082
1852.....	66,360,535	2,118,343
1853.....	70,735,125	2,838,047
1854.....	85,792,032	4,576,709

The declared value of our imports from thence in 1854 are computed at £9,125,000, while our exports thither were only £1,000,000! The North

Americans usually pay for their teas in bills upon London, which serve as remittances for goods exported from England to China and the East Indies. Moreover, the exports from China have decreased in proportion as the imports have increased, and the difference very nearly tallies, with the average amounts of silver sent thither. It is true that a great portion of the silver does not go direct to China, but to the East Indies, and finds its way thence to the former empire, by means of the mercantile relations existing between them. Previously, a considerable portion of the cotton which India now exports to England used to go to China, serving as a part payment for tea. China had, moreover, payments to make in silver to India for opium imported thence. At present these payments are principally made in bills upon England, and India now draws her silver from this country instead, as formerly, from China.

Stonington Railroad.

Giles F. Ward, Esq., President of the N. Haven and New London railroad, has been elected President of the Stonington railroad, in place of Chas. P. Williams, Esq., resigned.

Louisville and Frankfort Railroad.

We have received the 8th Annual Report of this company, from which we learn that the receipts of the road for the fiscal year terminating June 30th, 1856, have been—

For transportation of passengers....	\$125,794 01
" " " freight.....	104,869 01
" " " mails.....	5,287 08
" " " interest, rents, tolls, &c.....	1,107 71

\$237,047 81

And the operating expenses for the same time have been..... 145,089 61

Leaving as net profit for the year the sum of..... \$91,958 20

To which should be added cash on hand, July 1, 1855..... \$12,972 47

Rec'd from city of Louisville..... 2,591 16

15,568 63

\$107,521 88

—which has been appropriated as follows:

Int't on city of Louisville	
Bonds.....	\$16,750 00
Interest on Railroad Bonds.....	20,220 00
City of Louisville Bonds.....	25,000 00
Railroad Bonds.....	18,000 00
Paid for new depot at	
Eminence, fencing, &c.....	4,036 82
Frankfort bridge.....	3,654 52
Bills receivable.....	2,239 65
Post Office department.....	2,025 00
Stock in Nashville R. R.....	330 00
Counterfeit and Broken	
notes and discount.....	161 40
Cash dividends paid.....	190 65
Accounts.....	716 78

87,323 82

Leaving balance of cash on hand, July 1st, 1856, of..... \$20,198 01

The following is a comparative statement of the receipts and expenses from July, 1851, to July, 1856—

	Gross Receipts.	Current Expenses.	Net Receipts.
1851 to 1852.....	\$167,920 25	\$82,534 19	\$85,386 06
1852 " 1853.....	187,229 14	106,889 89	*80,347 25
1853 " 1854.....	267,070 03	153,918 92	113,151 11
1854 " 1855.....	244,017 76	147,112 04	+96,902 72
1855 " 1856.....	237,047 81	145,089 61	91,958 20

* 11 months. † 13 months.

The road is 65 miles in length.

The following statement will show the indebtedness of the company—

Bonds of the company (for \$1,000 each) viz:—

2 Bonds due July 1, 1856..	\$2,000
5 " " " 1857..	5,000
5 " " " 1858..	5,000
22 " " " 1859..	22,000
257 " " " 1860..	257,000
1 " " Jan'y 1, 1863..	1,000
34 " " " 1864..	34,000

\$326,000 00

Bonds of the city of Louisville assumed by the company upon the purchase of city stock, amounting to 6,000 shares which have been retired, viz:

25 Bonds due Jan'y 1, 1857.	\$25,000
25 " " " 1858.	25,000
25 " " " 1859.	25,000
25 " " " 1860.	25,000
25 " " " 1861.	25,000
25 " " " 1862.	25,000
100 " " " 1861.	100,000

250,000 00

In all 256 bonds of \$1,000 each bearing 6 per cent. interest, payable half-yearly..... \$576,000 00

To State of Kentucky for right of way, &c., on perpetual credit at 6 per cent. interest..... 74,519 50

To Jos. Ridd for purchase of depot grounds, payable Jan'y 1st, 1858, at 6 per cent. interest..... 28,096 87

Total debt..... \$678,616 37

Amount of stock issued and to be issued to July 1, 1856..... 789,919 40

Total amount of stock and debts..... \$1,418,535 77

The total cost of the road up to July 1, 1856, has been \$1,543,651 07—showing that \$125,115 30 of its earnings has been applied to its construction, and its debts.

As the larger portion of the indebtedness falls due at and previous to Jan'y 1, 1860, the President recommends the application of all the receipts until that time, which together with the sale of bonds to the amount of \$220,000, he estimates will be sufficient for that purpose. After that the net annual receipts will be sufficient to pay interest, provide a sinking fund to meet the indebtedness of the company as it matures, and for an annual cash dividend of 4 per cent. till Jan'y, 1864, and after that 6 per cent. upon the present stock of the company. If at that time it should be deemed advisable to continue the application of all the resources to the redemption of the debt, in July, 1865, only 100 city bonds of \$1,000 each, due in 1881, and the debt to the State of Kentucky, \$74,519 50, would remain. The net receipts would then be sufficient to pay the interest on the city bonds, and the State debt, provide a sinking fund to meet the city debt, and pay a cash dividend of 5 per cent. semi-annually.

At the last session of the Legislature, an act was passed authorizing the company to sell bonds with which to renew those outstanding, provided, that in the event of the sale of any bonds, under that authority, there should be provision made out of the net annual earnings, for the payment of the interest on the debt, and provide a sinking fund to pay the principal, before declaring any cash dividends to the stockholders.

The present equipment of the road consists of 13 locomotives, 10 first class passenger cars, 1 second do., 2 baggage cars, 40 box cars, 69 stock and platform cars, 10 4-wheel dump and ballast cars, 14 hand repair cars and 22 lever hand cars.

The company have recently erected a new and substantial brick depot at Eminence.

A contract has been entered into for the construction of a wooden truss-bridge at Frankfort, at a cost of about \$35,000, to replace the suspension bridge, the safety of which was considered doubtful. This work is progressing, and it is expected to be completed by January next.

The officers of the company are—

EDWARD E. HOBBS, President.

EDW. CRAWFORD, Secretary and Treasurer.

SAMUEL GILL, Superintendent.

Directors—R. G. Courtenay, Thornton Merriweather, W. C. Williams, W. E. Culver, John Gill, and John Ferguson, jr.

Dr. Boucherie's Patent Process for Preserving Wood from Decay.

[Extract from the Report of the Jury of the French Exposition, and other Official Documents.]

This patent is for an important improvement in the process of preparing timber, so as to preserve it from decay.

It is the invention of the eminent French chemist, Dr. Boucherie, who has devoted nearly twenty years in bringing it to perfection.

The system of Dr. Boucherie accomplishes two objects: first, that of expelling the sap; and, secondly, filling the pores of the timber with a preservative solution.

The manner in which this is effected is by applying the preserving fluid under pressure, so as to cause it to pass longitudinally along the fibres.—The preserving fluid thus forces the sap out before it, and occupies its place.

The advantages which would result from expelling the sap, and replacing it with an antiseptic fluid, have been long known, and the idea of effecting it by applying the fluid under pressure at the end of a piece of timber is not new, having been suggested and patented many years ago by Mr. Bethel. But the means then used did not accomplish the object in such a manner as to admit of its commercial application.

Hence the more expensive process of creosoting has been adopted—where the timber is totally immersed in the oil under pressure—which does not permit the sap to escape.

Dr. Boucherie's process has been attended with complete success. The apparatus employed is of a very inexpensive character, and may be erected in a few days; it is capable of application on the most extended scale; and it is, in fact, very extensively employed at this time in preparing sleepers and telegraph posts for the French railways.

When the timber is under operation, the sap runs out from the ends in a clear stream, showing the amazing quantity of this fluid which is contained, and exhibiting the tubular structure of the wood in the most striking manner; in fact, the preserving fluid will traverse a tree, twelve feet in length, with less pressure than is required to force it latterly through a plank three-quarters of an inch in thickness. When the sap is forced out the preservative fluid follows it, and its presence at the ends of the wood is ascertained by a chemical test.

Thus the sap and fermenting juices become completely expelled, and the timber becomes saturated throughout its length with the preserving fluid.

Important advantages arise in the employment of this process in this country. First, it may be applied successfully to Scotch fir, beech, elm, and other home-grown timber; secondly, it is not necessary that the wood should be dried or seasoned before being prepared, but, on the contrary, the operation is best effected within a few weeks after the tree has been cut down; thirdly, any cheap antiseptic fluids, such as solutions of sulphate of copper, or chloride of zinc become perfect preservatives when applied in this manner; fourthly, no heat is required, and the wood is not rendered inflammable.

The result is a saving in first cost of about one

shilling per sleeper as compared with Baltic lumber creosoted; while the durability thus attained has been fully ascertained by the extensive trials already made in France, which will be further described.

Success of the System in France—The first report upon this process was made in the year 1841, by a committee of the French Academy of Science, M. Arago being chairman, upon the occasion of a pamphlet on the subject by Dr. Boucherie being read before that distinguished body, and which was consequently ordered to be inserted in the "Receuil des Savants Etrangers," and copies to be forwarded to the Ministers of Agriculture, Commerce, Public Works, Marine, Finance, and War.

In the year 1850, the French government appointed a commission of distinguished engineers of the Ponts et Chaussées, and again in 1852, the principal officers of Genie, to minutely investigate and report upon the merits of this invention, and which they accordingly did; the reports on both occasions being favorable to Dr. Boucherie's invention; while at the close of the recent Exposition, the French government marked its sense of the public benefit derivable from it by awarding to its inventor, the rare distinction of the large gold medal of honor, of which there were only four conferred on the representatives of the whole of France.

Duration of Sleepers prepared by this Process.—In the year 1846, 80,000 sleepers thus prepared, were authorized to be laid down upon the Northern railway of France, together with a certain quantity of unprepared sleepers.

In this instance, the company chose wood that decays easily, and which, on that account, had been rejected for durable works. They employed beech, pine, alder, elm, and birch.

These sleepers were inspected every year, and each time were found in a perfect state of preservation. In May, 1855, Dr. Boucherie being desirous of exhibiting in the Exposition some wood prepared by this process, had a few of each kind of these sleepers taken up, and they were found in every instance to be in as perfect a state as when first laid down; the bark was unaltered, exhibiting two letters, the initial mark of the contractor, as clear and visible as when first impressed, while those sleepers which had been laid down unprepared had long since been reduced to decay.—Upon these results being established, the greatest French railway companies, such as the Northern, Eastern, Nantes, &c., came forward, and required the immediate application of this process to the timber used upon their lines.

The following is an extract of a report upon the subject addressed to the jury of the late Exposition, by the administrators of the Northern railway of France:

"The sleepers prepared by Dr. Boucherie's process are preserved in an absolute manner, it being impossible to foresee a limit to their duration, seeing the present perfect state of preservation exhibited by those sleepers laid down eight years ago. The Northern railway company has adopted this process in preference to all others.

"Since the year 1853, the Northern company has ordered more than 800,000 sleepers prepared by this system, and further orders would have been given, if they had found contractors disposed to deliver upon the same terms; however, at the present time tenders are required for more than 200,000 of these sleepers."—Sept. 1855.

Telegraph Posts.—The principle, as applied to the use of telegraphic posts, has been attended with equally favorable results, both as regards durability and economy. In the year 1846, the French government substituted white pine posts prepared by this process, for the usual oak posts, for telegraph wires on the Rouen line, and they are at the present time in as perfect a condition as when first erected.

This proves, and it is of importance to know, that timber thus prepared is equally efficacious when buried in dry or damp earth, and this is also exemplified daily by the telegraphic posts placed all over the French territory. Mr. Alexander, in-

spector of telegraphic lines in France, officially reported the costs of the two kinds of posts employed on that line as follows:

Prepared Pine Telegraph Posts.	Unprepared Oak Telegraph Posts.
Ordinary posts 5½ ft. (4s.5d.)..	ag't 16fr. (12s.9d.)
Winding posts 9 ft. (7s.3d.)..	ag't 40fr. (£1 12s.)
Crossing posts 16 ft. (12s.0d.)..	ag't 70fr. (£2 16s.)

The following letter on the subject is from the administration of telegraphic lines in France:

"Paris, August 14, 1855.

SIR:—All the telegraph posts in the French empire have been prepared by your process.

The administration had 200,000 on the 1st of January last, and since that time have caused 32,000 additional posts to be prepared.

The preservation of the posts thus injected with sulphate of copper is rendered complete, although the first were prepared and laid down in the year 1846.

It is with pleasure, doctor, that I am enabled to give you this information, in order that you may communicate it to the members of the jury of the Universal Exposition.

(Signed,)

H. DE VOUÏ,

Chief Administrator of Telegraphic Line, Minister of the Interior.

To DR. BOUCHERIE."

Chicago, Alton and St. Louis Railroad.

Judge Breese of Illinois has refused an injunction prayed for by Robert Chrystie, Jr., and others, on the lease granted by the Directors of the Chicago, Alton and St. Louis Railroad Company to Hamilton Spencer. Judge Breese says:

"I regard the lease—so called on the argument—and the deed of trust as having been made for honest purposes, with an honest intent, and in the exercise of an undoubted power vested in the Chicago, Alton and St. Louis Railroad Company, acting by its Board of Directors. I find nothing having the appearance of illegality or fraud in the transaction. Moreover, they have been ratified and confirmed by the vote of a majority of the stockholders at a public meeting convened after full notice."

Montreal Railroad.

A meeting of the bondholders of the Plattsburg and Montreal railroad company was convened to-day at the office of Morris Ketchum. A majority of the holders of the first mortgage bonds were present, and it was resolved to direct the Trustees to proceed to the foreclosure of the first mortgage.

Milwaukee and Mississippi Railroad.

The regular trains are now running to Masconine, 22 miles west of Madison. The laying of the track is progressing with all possible speed, and is now beyond Arena, making over 80 miles in all. Four miles further will bring the track to the Wisconsin river, the bridge over which is already finished. The second bridge across the Wisconsin, a little above Richland City, is rapidly approaching completion, and will not delay the track-layers in the least. Eight miles from the second crossing of the river, brings the road to Muscoda, the most important point on the Wisconsin. The grading is all completed to this thriving little town, and fifteen miles beyond it.—The Prairie du Chien is twenty-four miles more, and as that is by far the heaviest portion of the work, comprising deep rock cuts, a large amount of masonry, filling, &c., the road is considerably more than half graded—that the steam pile-drivers are busy on the lower bridge, across the Wisconsin—250 graders are actively employed, besides a large number of masons, bridge builders, &c.—the contractors expect to have an additional hundred laborers in a few days. At Prairie du Chien itself, the erection of the requisite buildings has been let to an experienced contractor from Madison, and a considerable number of men and teams are already employed upon them. A depot 100 feet long, and a round-house to accommodate 12 locomotives, constitute the first instalment of the company's improvements.—*Milwaukee Sentinel.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	110,247	none	65	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---
Androscog. & Kennebec.	58	538,042	1,822,905	2,210,947	209,476	110,247	none	14	South Western.	92	1,097,496	466,500	1,624,920	253,306	---	---	---
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	---	---	---	88	Tennessee and Alabama.	30	246,436	---	676,906	In progr.	---	---	---
Portl., Saco, & Portsmouth.	51	1,507,000	119,287	1,486,327	270,214	112,491	none	8	Tennessee and Mississ.	---	170,931	---	176,340	In progr.	---	---	---
Boston, Concord, & Montreal.	98	1,686,082	1,059,512	2,771,310	233,234	120,834	---	17	Memphis and Charleston.	217	2,179,440	2,127,002	4,028,798	811,631	189,572	---	---
Cheshire.	58	2,086,925	899,313	3,179,687	380,221	143,566	---	42	Mobile and Ohio.	153	2,568,555	1,802,921	4,536,412	199,932	109,236	---	---
Concord.	35	1,506,000	8,242	1,412,576	335,459	136,454	---	17	Miss. Central.	188	642,534	---	628,308	In progr.	---	---	---
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	42 1/2	N.O., Opelousas & G.W.	55	2,930,425	671,645	2,657,565	In progr.	---	---	---
Conn't & Passumps. Riv.	61	1,048,146	787,608	1,790,062	162,687	56,173	none	4	Vicksburg, Shreveport & Tex.	111	1,117,760	---	1,507,895	In progr.	---	---	---
Rutland & Burlington.	120	2,238,346	2,662,396	5,378,426	394,971	---	---	1 1/2	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Vermont Central.	117	5,000,000	3,560,236	8,563,366	820,110	214,793	none	1 1/2	East Tennessee and Va.	10	626,428	938,563	1,033,781	In progr.	---	---	---
Boston and Lowell.	27	1,830,000	325,635	2,155,635	489,764	140,377	6	63 1/2	Nash. and Chattanooga.	151	2,319,330	1,497,081	3,852,694	316,090	112,177	none	---
Boston and Maine.	74	2,240,300	1,518,671	3,463,181	59,917	8,740	none	6 1/2	Covington & Lexington.	29	1,302,504	2,235,939	3,738,753	264,973	138,694	---	18
Boston and N.Y. Central.	55	4,100,000	359,132	4,677,164	558,671	219,589	none	82 1/2	Lexington and Frankfort.	98	430,058	158,099	637,071	85,263	43,635	6	---
Boston and Providence.	68	1,500,000	655,428	2,155,428	1,008,004	404,461	6 1/2	83	Lexington and Danville.	66	694,444	52,734	747,178	In progr.	---	---	---
Boston and Worcester.	47	681,600	280,598	997,252	119,221	65,527	3	49 1/2	Louisville and Frankfort.	65	998,238	699,061	1,598,596	244,014	90,902	6	---
Cape Cod.	52	1,691,110	273,241	1,802,244	286,503	108,767	5 1/2	45	Atlantic & Gt. Western.	254	866,939	77,294	613,281	In progr.	---	---	---
Connecticut River.	60	2,483,400	2,947,737	4,821,016	647,281	805,998	---	40	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,852,662	296,293	140,823	none	30
Eastern, Mass.	167	3,640,000	153,700	3,765,968	681,183	225,071	6 1/2	68 1/2	Clev., Col., and Cin.	141	4,647,020	122,867	4,618,722	1,290,295	732,066	9	102
Fitchburg.	30	800,242	225,686	998,521	In progr.	---	---	---	Cleveland and Toledo.	200	2,676,425	2,689,301	5,124,629	736,272	390,986	10	76
Norfolk Eastern.	21	500,000	none	533,953	198,491	56,533	6 1/2	---	Clev. and Mahoning.	103	---	---	628,533	In progr.	---	---	---
N. Bedford and Taunton.	37	3,016,100	292,650	3,862,949	686,499	206,738	---	8 1/2	Clev. and Pittsburg.	133	2,780,744	3,043,992	5,537,496	581,877	309,518	---	59
Old Colony and Fall River.	77	2,232,641	1,033,670	3,209,727	288,726	87,313	none	7 1/2	Cin., Hamilton & Dayton.	90	2,153,900	1,521,213	2,967,767	508,271	278,012	---	65
Vermont and Mass.	155	5,150,000	5,966,420	10,495,905	1,666,673	633,013	7	89 1/2	Cin., Wilm. & Zanesville.	131	1,120,450	1,131,265	2,326,459	In progr.	---	---	12
Western, Mass.	46	1,141,000	206,565	1,361,271	294,780	75,760	2	40	Columbus and Xenia.	56	1,484,560	149,000	1,481,733	356,564	187,518	10	82
Worcester and Nashua.	43	1,510,020	335,461	1,806,699	311,490	138,067	---	70	Dayton, Xen. & Belpre.	68	457,538	422,658	860,496	In progr.	---	---	---
Providence and Worcester.	72	2,350,000	939,000	3,313,932	713,032	252,799	10	23 1/2	Dayton and Michigan.	140	1,076,602	393,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven.	122	2,008,110	2,030,665	4,000,869	258,685	119,611	---	---	Dayton and Western.	35	310,000	509,000	733,769	In progr.	---	---	17
Hart'd, Prov. and Fishkill.	110	2,000,000	414,240	2,481,773	339,196	71,427	none	---	Easton and Hamilton.	42	454,690	904,439	1,158,135	171,929	65,000	---	20
Housatonic.	57	1,031,800	524,244	1,580,723	220,459	98,768	---	---	Little Miami.	65	2,063,921	1,771,785	3,648,172	681,562	336,708	---	80
N. York and N. Haven.	50	738,268	738,165	1,450,318	88,007	30,318	---	---	Mad River and L. Erie.	205	2,451,050	2,672,932	4,446,661	In progr.	---	---	15
N. Haven and N. London.	60	609,200	1,073,673	1,682,873	124,044	66,490	none	---	Central Ohio.	138	1,620,927	3,436,076	4,283,443	Recently opened.	---	---	---
N. London, W. & Palmer.	66	2,122,300	873,489	2,995,789	304,236	88,458	2 1/2	30	Ohio and Penn.	187	2,451,700	3,219,000	6,070,700	1,111,626	662,117	9	---
Norwich and Worcester.	32	439,005	1,625,098	1,940,695	117,718	9,904	---	---	Pittsburg, Mayv. & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---
Albany Northern.	35	643,300	371,859	974,323	In progr.	---	---	---	Sand'y, Mansf. & Newk.	127	1,360,000	2,906,357	3,562,367	323,958	164,479	none	---
Black River and Utica.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none	---	Scioto & Hocking Valley.	135	408,976	508,050	888,868	In progr.	---	---	---
Buffalo, Conn. and N. Y.	92	798,439	2,597,849	3,401,868	288,392	31,896	none	---	Spring Mt. Vernon & P.	113	1,000,000	960,000	---	In progr.	---	---	---
Buffalo and N. Y. City.	99	1,300,000	1,040,000	2,404,364	679,760	356,763	10	---	Tol. Wabash & St. Louis.	242	2,500,000	4,530,000	---	In progr.	---	---	---
Buffalo and St. Line.	47	434,111	922,393	1,275,796	174,089	69,606	---	---	Cin., Log. and Chicago.	255	4,199,679	1,004,125	2,080,433	In progr.	---	---	---
Canandaigua and Elmira.	89	1,315,000	2,279,854	3,495,832	---	---	---	---	Evansville & Crawfordsv.	199	706,948	1,177,596	1,846,641	127,400	64,552	---	---
Canandaigua & Niagara F.	85	687,000	506,689	1,187,662	135,435	48,649	none	---	Ind. and Cincinnati.	68	1,213,723	1,442,869	2,178,461	356,012	193,142	7	60
Cayuga & Susquehanna.	144	3,758,466	9,250,362	12,737,998	1,012,087	603,946	none	30 1/2	Indiana Central.	66	611,400	1,261,179	1,970,911	550,176	134,375	---	50
Hudson River.	95	1,875,148	668,949	2,565,988	301,793	116,462	none	27	Ind., Clev. & Pittsburg.	88	826,824	1,096,400	1,831,226	226,658	93,010	none	---
Long Island.	524	14,462,860	14,462,742	28,523,913	653,581	3,162,120	8	86 1/2	Jeffersonville.	66	1,014,262	694,000	---	200,644	94,318	none	---
New York Central.	464	10,023,958	25,126,630	33,439,431	6,488,908	2,627,118	none	61	Madison and Indianapolis.	87	1,647,700	1,336,816	1,205,000	286,148	112,880	---	---
New York and Erie.	133	5,717,000	4,069,769	9,786,769	1,636,577	624,120	none	16 1/2	New Albany and Salem.	238	2,635,121	5,281,448	6,433,189	645,827	371,402	none	---
New York and Harlem.	118	1,633,022	4,406,874	6,470,714	120,163	135,754	none	1 1/2	Peru and Indianapolis.	73	---	858,814	---	150,000	90,000	none	16 1/2
Northern, N. Y.	35	399,000	1,261,681	723,683	126,540	59,982	3 1/2	---	Terre Haute and Ind.	73	974,800	604,356	1,502,166	287,512	189,702	10	---
Oswego and Syracuse.	29	467,200	294,189	749,683	In progr.	---	---	---	Chicago and Rock Is'd.	182	3,141,400	2,387,156	5,214,152	In progr.	---	---	93
Potomac and Watertown.	25	610,000	140,000	750,000	241,149	82,600	7	---	Chicago and St. Louis.	220	---	---	1,077,312	In progr.	---	---	---
Rensselaer & Saratoga.	48	600,000	396,600	719,000	71,900	21,089	none	---	Chicago, Burl. and Quincy.	59	1,439,100	1,694,736	2,864,622	722,880	379,921	20	---
Saratoga and Whitehall.	40	768,369	1,578,804	2,272,777	169,494	22,503	none	---	Central Military Tract.	88	1,202,500	1,133,050	2,920,241	471,399	219,688	---	---
Syracuse & Bingham's.	27	437,330	737,079	1,109,822	166,363	55,184	---	---	Cin., St. Paul & F'd du Lac.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Troy and Boston.	97	1,370,378	700,979	2,068,063	404,374	172,474	8 1/2	---	Galena and Chicago.	259	5,441,500	3,318,039	7,442,614	2,316,786	1,192,042	22	108
Watertown and Rome.	64	1,000,000	1,619,000	2,619,000	161,355	75,634	none	---	Illinois Central.	627	2,271,060	10,416,392	20,374,446	1,532,118	527,952	---	107
Belvidere Delaware.	94	8,000,000	11,407,200	6,636,523	2,017,127	961,941	12	125	Peoria and Oquawka.	93	599,889	818,454	1,338,342	In progr.	---	---	---
Camden and Amboy.	60	369,320	1,622,131	1,729,642	122,417	50,080	none	---	Ohio & Miss. (West Div.).	147	1,790,296	2,292,408	4,370,586	Recently opened.	---	---	---
Camden and Atlantic.	30	3,482,850	690,000	4,101,011	601,514	600,747	10	118 1/2	Terre Haute and Alton.	173	2,281,420	1,256,000	3,537,424	In progr.	---	---	---
New Jersey Central.	63	2,000,000	2,296,178	3,683,149	393,728	171,603	---	---	Detroit and Milwaukee.	186	838,000	1,123,964	1,966,909	In progr.	---	---	---
Morris and Essex.	53	1,187,805	775,000	1,636,550	229,341	96,267	6	---	Mich. Central.	282	6,032,444	6,994,013	10,668,155	2,215,283	879,656	10	91 1/2
Allegheny Valley.	44	1,637,867	342,564	1,988,317	219,253	152,450	---	---	Mich. South'n & N. Ind.	476	9,298,900	6,319,224	11,645,200	2,416,000	875,000	10	91
Oataw. Wil. & Erie.	56	1,099,500	12,211	1,191,331	64,981	66,994	---	---	Green Bay, Mil. & Ch.	155	764,074	442,726	1,193,768	In progr.	---	---	---
Cumberland Valley.	109	3,051,622	3,884,702	6,022,667	128,911	259,263	6	---	Milwaukee and Miss.	109	1,826,428	2,467,899	3,578,757	691,643	417,443	17	78
Del. Lark & Western.	20	600,000	150,000	750,000	---	---	---	---	Milwaukee & Water'n.	72	544,861	132,000	---	---	---	---	---
Erie and North East.	33	600,000	1,200,000	1,348,812	89,535	53,335	---	---	Milwaukee and Horicon.	15	544,200	---	354,109	In progr.	---	---	---
Philad. & Sunbury.	28	2,606,100	646,222	3,407,651													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	82½
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	97½	97½
Bellefontaine and Indiana	200,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	85	85
Central Ohio	1,250,000	1st mort. conv. east sec.	7	March, Sept.	"	1861-64	82	82
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	71	72
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1867	86	86
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72½	77½
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	76	78
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	80	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	7	April, October	"	1862	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	85	85
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	80	80
East Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	94½	95½
Gaucha and Chicago	2,000,000	Do. conv. till 1863	7	Jan'y, August	"	1875	88	89
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1868	87	90
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1863	95	95
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	75	75
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	90	90
Indiana Central	600,000	Do. convertible	7	Jan'y, Novemb.	"	1866	80	80
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	85	85
Indianapolis & Cincinnati (for Lawb. & T. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	82½	85
Indiana & Cincinnati	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	80	80
La Crosse and Milwaukee	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	75
Lake Erie, Wabash, and St. Louis	1,500,000	Do. inconv.	6½	2 May, 2 Nov.	"	1863	80	81
Little Miami	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	101	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	102½	102½
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	95	96½
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	88	89
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88	89
New Albany and Salem	600,000	Do. 1st section	10	April, October	"	1868-62	85	85
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	95	95
Northern Cross	1,200,000	1st mortgage, convertible	7	Feb'y, August	"	1867	90	90
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1866-66	95	96
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866	77½	80
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	98½	98½
Pennsylvania (Central)	6,000,000	1st mortgage, conv. till 1860	8	Jan'y, July	Phila.	1860	85	85
Racine and Mississippi	680,000	Do. conv. sink'g fund	8	Feb'y, August	N.Y.	1876	80	80
Scioto and Hooking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Stoughtonville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	90	100
Terra Haute and Indianapolis	1,000,000	Do. do.	7	March, Sept.	"	1866	78	79
Terra Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	74	75
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	74	75

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,600,000	Mortgage	6	April, October	Balt.	1885	85	85½
Do. do.	1,125,500	Do. do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	93	94
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104½	106½
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	98	98½
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	98½	99½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	93½	94½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	87½	88
Hudson River	3,500,000	Convertible	7	Jan'y, July	"	1862	93½	95
Do. do.	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	100
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	88½	89½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	88	89
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	92½	92½
Do. (Free Land)	3,000,000	Mortgage 345,000 acres—priv. 7 shar's	7	March, Sept.	"	1860	100	101
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	95	98
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	83	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1859-60	81	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	80	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	84½	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89½	90
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102½	103
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	99	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	99	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88	88
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88	88
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	85½	86

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	Divers	85
Do. 5 do. 1858-60	May,	95	96½	New Orleans, 6 per ct. ep. R.R. X	Do.	Do.	74
Do. 5 do. 1870-75	August, and	94	96	N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	81	84
Do. 5 do. 1890	November,	94½	96	Philadelphia, 6 per ct. 1876-98	Jan'y, July	91½	92
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	97	100	Pittsburgh, 6 per ct. coup.	X	Divers	75
Alleghany, 6 per ct. coup. 1871-81 X	Jan'y, July	76	78	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	85	86
Baltimore, 6 per ct. 1879-90	Quarterly	97½	98	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	85
Boston, 6 per ct. coup. 1879-90	April, October	97	99	Rochester, 6 per cent. coup. X	Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	100	St. Louis, 6 per ct. coup. Long X	Do.	78½	79
Clev. P'd, 7 per ct. ep. W.W. 1879	Do. do.	102	102	Do. do. Municipal. X	Do.	79½	80½
Cincinnati, 6 per ct. coup. X	Divers	89½	90	Sacramento, 10 per ct. ep. 1862-74 X	Do.	70	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89½	90	S. Francisco, 7 p. ep. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100½	Do. 10 p. ct. ep. 1871 X	Do. do.	95	95
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August	100	103	Do. 10 do. pay. N.Y. X	Jan'y, July	52	55
Elmhurst, 8 per ct. ep. Long X	March, Sept.	91	105	Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	52	55
Jersey City, 6 p. ep. W.W. 1877 X	Jan'y, July	91	96	Wheeling, 6 per ct. coup. X	Divers	87½	87½
Louisville, 6 per ct. ep. 1880-88 X	Divers	78½	78½	Do. 6 p. ep. Munc. 1874 X	March, Sept.	81	81
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	70	70	Zanesville, 7 do. X	April, October	97½	97½

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending July 30th, 1866.

BONDS.	
\$5,000 Fayette Co., Ky., 6 per cent.	70
2,000 Little Miami, 6 per cent., 1st Mortg.	80 (4 int.)
1,000 Hillsboro' and Cin., 7 per cent. 1st Mort.	44
7,000 Cov. and Lex., 6 per cent. Income.	35
2,000 Indianap. & Cin. 7 per cent. 2nd Mortgage.	80
3,000 Ohio and Misa., 7 per cent., 1st Mortg.	65
500 Col. Piqua & Ind., 7 per cent. Income.	4½
\$1,900 Columbus & Xenia, Dividend, 7 per cent.	85
10 years.	85
450 Little Miami, Dividend Scrip, Dec. '66, iss.	82
STOCKS.	
50 Shares Little Miami	90
162 " Cin. & Chicago	3
250 " Ohio & Mississippi	6
40 " " "	6½
120 " Covington and Lexington	18
12 " Cin. Ham. and Dayton	66
20 " Cin. Harrison and Indianap.	9½
44 " Peru and Indianap.	14
100 " Junction (Ind.)	6½
13 " Indianapolis and Cincinnati	60
164-5 " Cin. Lebanon & Springfield, Turnpike	8
4 " Cincinnati and Harrison do.	22
19 " Cin. Col. and Wooster do.	40
6 " Clev. Col. and Cincinnati	102

By KIRK & CHEEVER.

For the week ending July 20th, 1866.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2nd Mort. 7 per ct.	65	
Ohio & Mississippi, 2nd Mort. 7 per ct.	60	
Indianap. & Cin. 2nd Mort. 7 per ct.	60	
Cin. Ham. and Dayton, 2nd Mort. 7 per ct.	60	
Hillsboro' and Cin., 7 per cent. 1st Mortg.	60	
Covington & Lexington, 10 per cent. Income	60	
Indianapolis and Cincinnati Dividend	67	
Columbus and Xenia Dividend, due Jan'y 1, 1861	67½	
Do. do. do. due July 1, 1866	66	
Cin. Hamilton and Dayton, Divid. Scrip. due 1857, stat.	103	
Little Miami, Dividend Scrip, issued June, 1866	79	
STOCKS.		
Bellefontaine and Indiana, 30—Cin. Ham. and Dayton, 67½.		
—Col. and Xenia, 82—Cincinnati, 80—Covington & Lexington, 20—Dayton & Western, 17—Eaton and Hamilton, 20—Indiana Central, 50—Indianapolis and Cincinnati, 60—Little Miami, 80—Mad. River & Lake Erie, 15—Marietta and Cincinnati, 15—Ohio and Mississippi, 6½—Hillsboro' and Cincinnati, 15—Peru and Indianapolis, 15—Cincinnati, Wilm. and Zanesville, 15.		

Marie & Kan's Money Circular for the European Steamer of the 6th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, Aug. 5, 1866.

Since our circular of the 28th of July, nothing of importance, either commercial or political, has transpired to operate upon our market. The absence from the city of many speculators and capitalists, and the small amount of orders received by the last mail from Europe, account for the extreme inactivity which our market has exhibited during the whole week. The fluctuations have been very insignificant, the principle speculative stocks close weak, while dividend paying Western Stocks, with very few exceptions, are firm at a slight improvement. Investment Securities are also well sustained. Money remains in fair supply, though the applications from the trade for discount are increasing. State Stocks remain firm with a fair domestic demand. Virginia advanced $\frac{1}{2}$; Missouri, $\frac{3}{4}$; Tennessee 6s and California 7s, 1875, sold at former prices. City and County Bonds—The are no sales of any importance to notice.—Railroad Bonds—The transactions have been very light, only Illinois Central Construction Bonds have shown some activity, closing at an advance of $\frac{1}{4}$. Freeland Bonds sold at 100 with and at 93 without privilege. Erie 1871 Bonds advanced $\frac{1}{4}$, and New York Central 6s $\frac{1}{4}$. Some Michigan Southern Sinking Fund Bonds were taken at 88. Erie Bonds are in demand and looking up; a large lot of 1883 Bonds was bought for Europe at 99. Railroad Shares—We have to report a very moderate business with the following changes: Erie advanced $\frac{1}{4}$; Cleveland and Toledo, $\frac{1}{4}$; Cleveland and Pittsburgh, $\frac{1}{4}$; Chicago and Rock Island, $\frac{1}{4}$; Reading declined $\frac{1}{2}$; New York Central, $\frac{3}{4}$; Panama, $\frac{1}{4}$. Money—Loans on call continue at 6½ per cent., mostly at the latter figure; rates of discount are a fraction higher, say 7½ for first-class paper; 8½ for names less known.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 6th inst.

[TRANSLATED.]

New York, Tuesday, Aug. 5, 1856.

The great dullness noticed in our last week's advices of July 28 has continued to prevail during the week without any cessation. The most apparent cause of this state of things, is the absence from town of a large portion of the capitalists and Stock speculators during the season of intense heat. Excepting some little movement in three or four of the principal Railroad shares, transactions have been most limited. In the midst of this absence of animation, prices are well maintained, and our compared quotations show generally a trifling rise over last week's prices. State Stocks—A limited amount of Virginia 6s and Missouri 6s were done at a rise of $\frac{1}{4}$ per cent. Ohio 6s, 1875, are in demand at 1 per cent. advance. A few California 7s, 1875, changed hands at 70.—City and County Bonds remain neglected. Railroad Bonds—A fair demand for Illinois Central Construction has occasioned a rise of $\frac{1}{4}$. Erie 7s, 1888, are up 2 per cent., with pretty large sales. We quote Erie 7s, 1871 and 1875, and Hudson 1st mortgage, ex-interest 1st August. Except a few sales of Lake Erie, Wabash and St. Louis 1st mortgage, and La Crosse and Milwaukee 1st mortgage, we have no transactions of any moment to notice either at the Stock Exchange or private sale. Railroad Shares—Erie shares have still been pretty animated and close at a rise of $\frac{1}{4}$, and moderate transactions have taken place in Reading and Cleveland and Toledo, at a trifling change of price, and in Panama and New York Central at a decline of $\frac{1}{16}$. The latter are quoted ex-dividend. Money easy and without any change in rates. Exchanges on Europe less offered—moderate transactions. Principal business; London, 109 $\frac{1}{2}$ to 109 $\frac{3}{4}$; Paris, 5.15a 5.16 $\frac{1}{4}$. DE COPPET & CO.

American Railroad Journal.

Saturday, August 9, 1856.

Water in Brooklyn.

The city of Brooklyn bids fair to be soon supplied with water through the Agency of the Nassau Water Company. This company is chartered by the State Legislature, with a capital stock of \$3,000,000, with the privilege of increasing it to \$6,000,000, the city being authorized to subscribe \$1,800,000. This company have contracted with H. S. Welles & Co. to prepare the reservoirs and aqueducts, build engine houses, lay down 120 miles of pipe through the city, set 800 hydrants, &c., in consideration of the payment of \$4,200,000. The contract guarantees the delivery, for consumption, of 10,000,000 gallons of water per day within two years, and 10,000,000 additional one year after. The capacity of the works now to be commenced is equal to 40,000,000 gallons, with the exception of the steam power, which is designed for the delivery of just one-half that amount, which is probably as much as will be required for the next twenty years. The plan is to construct works on a scale amply sufficient for the present time, yet capable of being enlarged to any desired extent, as the demands of the city shall increase. The supplies of water available for this purpose are said to be abundant. The present sources of supply are four ponds, all located within a distance of nineteen miles from Brooklyn, supplied by springs, and capable of furnishing 25,000,000 gallons daily. It is only necessary to extend the canal, or means of conducting the water, to procure additional quanti-

ties. The quantity necessary for the supply of New York is only 17,000,000 per day. The principal reservoir, of a capacity equal to 150,000,000 gallons, will be about six miles from Brooklyn, near the Cypress Hill Cemetery, where there is already a natural basin, covering 48 acres of ground, elevated 150 feet above the level of the sea. From this point to Boileys's Pond, six miles further from the city, the water will be conveyed in a covered aqueduct; and beyond the pond by means of an open canal. From the reservoir to the city, iron pipe will be used. A second reservoir, holding 20,000,000 gallons, will be located on Flatbush Hill, 175 feet above tide-water, for the supply of the high ground in that neighborhood. The most important feature in the whole work is the steam apparatus employed in raising the water to the great reservoir on Cypress Hills. The power will be furnished by a large Cornish engine; similar to those employed in the English mines, and which will be capable of raising 10,000,000 gallons every sixteen hours. The engine house will be located directly under the hill.

THE MECHANICAL PRINCIPLES OF ENGINEERING AND ARCHITECTURE. By HENRY MOSELEY, M. A. F. R. S. With additions by D. H. MAHAN, LL. D.; WILEY & HALSTED, 361 Broadway, New York.

This work is published in 1 vol. large 8vo. and contains 700 pages. It is divided into six parts—with an appendix. Part first treats of those portions of the science of *Statics*, which have their application in the theory of machines, and of construction. Part second, of the science of *Dynamics*, and of that union of a continued pressure with a continued motion, which has received from English writers the various names of "dynamical effect," "efficiency," "work done," "laboring force," etc.; and from French writers, "moment d'activite," "quantite d'action," "puissance mecanique," "travail," etc. The determination of the particular moduli of those elements of machinery which are most commonly in use, is the subject of the third part. The greater portion of the discussions in this part is believed to be new to science. The fourth part treats of the *theory of the stability of structures*, referring to its conditions, so far as they are dependent upon the rotation of the parts of a structure upon one another, to the properties of a certain line which may be conceived to traverse every structure, passing through those points in it where its surfaces of contact are intersected by the resultant pressures upon them. The fifth part of the work treats of the *strength of materials*, and applies a new method to the determination of the deflexion of a beam under given pressures. The sixth and last part of this exceedingly useful and deeply interesting work treats on *impact*; and the Appendix includes, together with tables of the mechanical properties of the materials of construction, the angles of rupture and the thrusts of arches, and complete elliptic functions, a demonstration of the admirable theorem of M. Poncelet for determining an approximate value of the square root of the sum or difference of two squares.

This work is a standard one of its kind. It is fully and elegantly illustrated, and in its particular range is a complete manual for the Engineer and Architect.

Southern Railroad Association.

A convention of officers connected with the different railroads and steamboat lines between Baltimore and New Orleans was held on the 8th and 9th of July last, at Ashland, 17 miles north of Richmond.

The Association was called to order by the President, R. R. Cuyler Esq., of Georgia. The minutes of the previous meeting were then read by the Secretary, S. G. Jones Esq.

The following list of members present, with the roads represented, was read by the Secretary:

Richmond, Fredericksburg and Potomac railroad was represented by Edwin Robinson, Pres't, C. W. McMurdo, Treasurer, Wm. Bragg, Superintendent.

Richmond and Petersburg railroad, by P. V. Daniel, jr., President, Thos. Dodamead, Sup't.

South Side railroad, by Wm. Pannill.

Virginia and Tennessee railroad, by E. H. Gill, Superintendent.

Petersburg railroad, by W. T. Joyner, President, C. O. Sanford, Superintendent.

Wilmington and Weldon railroad, by Hon. Wm. S. Ashe, President, S. L. Fremont, Superintendent.

Seaboard and Roanoke railroad, by Alex. Warral, Superintendent.

Wilmington and Manchester railroad, by J. Eli Grigg, President, L. J. Fleming, Superintendent.

Greenville and Columbia railroad, by E. F. Raworth, Superintendent.

Georgia railroad, by J. P. King, President, and Geo. Yonge, Superintendent.

Central Georgia railroad, by R. R. Cuyler, Pres't, and Wm. M. Wadley, Superintendent.

Macon and Western railroad, by E. Foot, Sup't.

South-western railroad, by R. R. Cuyler, Pres't, and G. W. Adams, Superintendent.

Muscogee railroad, by J. S. Martain, Sup't.

Atlanta and La Grange railroad, by J. P. King, President.

Western and Atlantic railroad, by Jas. F. Cooper.

Richmond and Danville railroad, by V. Witcher, President, and C. Campbell, Superintendent.

Montgomery and West Point railroad, by S. G. Jones, Sup't.

Steamers between Mobile and New Orleans, steamers on Alabama river, and stage line between Montgomery and Mobile, by Capt. Grant.

Baltimore Steam Packet Company between Norfolk and Baltimore, Washington and Baltimore railroad, Board of Public Works of Maryland, by M. N. Falls.

Memphis and Charleston railroad, by F. O. Arms, Superintendent.

The object of the meeting was the adoption of regulations for greater speed, certainty and cheapness in travel. A committee was appointed to report upon a mode of regulating the time of the clocks used by the railroad companies between Washington and New Orleans, by a uniform standard.

Mr. Adams, of the Southwestern railroad, from the committee appointed at the last meeting to draught a series of by-laws, made a report, which was discussed, amended and adopted, as follows:

1. This association shall be called and continued by the name of the Southern Railroad Association, and its members shall consist of all the presidents and superintendents of each railroad in the Southern States, and the presidents or heads of steamer lines and of stage lines running in connection with any Southern railroad as may attend its meetings.

2. A president and secretary of this association shall be elected by a vote of a majority of members present, at the next annual meeting, to be held on the Thursday after the first Monday in December, 1856, at Augusta, Ga., and annually thereafter at the same time.

3. There shall be one regular meeting of this

Association in each year, which shall be held on the Thursday after the first Monday in July, at Augusta, Ga., and at Richmond, Va., alternately, the next annual meeting to be held at Augusta. The President shall have authority to call extra meetings at such times and places as he may think the interests of the Association demand.

Mr. Fremont offered the following preamble and resolution, which were adopted:

Whereas, It is of vital importance to the roads represented in this association that a uniform and efficient system of management and control be established; and whereas, a thorough diffusion of knowledge as to the systems now in use is of the highest importance to Southern railroad interests—therefore be it

Resolved, That a committee of nine members be selected to prepare a report upon the best system of railroad management, as adapted to the Southern States especially, to include the following subjects: 1st. Defining the best system of control for directors and presidents. 2d. The duties of superintendents in full, with a general view of the duties of other principal officers of the road. 3d. The best manner of appointing subordinate officers. 4th. The best system of tariff of freights, with the average weight per ton per mile for classes. 5th. The average rate per mile for passengers, to produce the highest revenue.

Messrs. Pollard, Ashe, Caldwell, Robinson, Fremont, Wadley, Jones, Dodamead and Cuyler were appointed a committee.

On motion of Mr. Wadley, it was resolved that a committee be appointed and requested to take into consideration the best form of rail, the best mode of laying track and securing the joints, and the best mode of ventilating the cars and excluding therefrom sparks and dust, and all other improvements upon roads and their equipments—the whole having in view the object of securing the greatest degree of comfort to the passenger, and of attracting travel to the railroad lines—and to report the facts and reasons pertaining to the subject to the next meeting of the association.

Mr. Fleming offered a series of resolutions, which were adopted, and a committee appointed to collect information upon the most feasible plan for the construction of a Southern railroad to the Pacific, and to inquire into the practicability of the construction of a road on which the greatest possible expedition between the Atlantic and the Pacific can be attained.

The price of the through tickets from Washington to New Orleans was fixed at \$48, instead of \$53, the former price. It was stated that the Postmaster General had agreed to permit such companies as desired it to omit one mail on Sunday, if the other was carried regularly.

A committee on the equalization of speed, reported a schedule for running between Wilmington and Richmond, and a committee was appointed to devise a more perfect schedule between the city of Washington and Montgomery, Alabama, than now exists; and the committee was instructed to inquire into the propriety of fixing a through fast mail and passenger schedule from Montgomery and Washington at a speed of about twenty miles per hour, with no unnecessary detentions—the second train to be run as an accommodation train, but to make as close connections as possible. A resolution was adopted fixing the rate of speed on the roads, exclusive of stoppages at twenty miles per hour.

Various matters of detail, not of interest to the public, were agreed upon, and the association adjourned to meet on the Thursday after the first Monday in May next at Augusta, Georgia.

The Convention was handsomely entertained on the first night of the session by a supper, given by a portion of the citizens of Richmond, at Ashland.

Brooklyn Water Works—Ridge Hill Reservoir.

It will be seen by the advertisement of Messrs. H. S. WELLES & Co. in another column, that the time for receiving proposals for the construction of the above work has been postponed to the 20th inst., and that the plans and specifications of the same will not be ready until the 12th, instead of the 6th inst., as advertised in our last issue.

They also invite proposals for the construction of two pumping engines for the above works, of capacity to raise ten million gallons daily, 170 feet high, with three boilers each, to be built and erected on the stone foundations prepared for them. The time for receiving the proposals (which must be accompanied by drawings, defining the style and character of the engines, etc.,) is limited to the 1st of October next.

To Bridge Builders.

Attention is invited to the advertisement of BYRON KILBOURN, Esq., President of the La Crosse and Milwaukee Railroad Company, requesting proposals, to be accompanied by plans and specifications, for the building of a Bridge over the Wisconsin river, at Kilbourn City, Wisconsin. The company reserve the right to award the contract to any parties on any plan furnished, they paying to the person furnishing such plan the sum of \$500 in full for the same.

Armory Rolling Mills.

The attention of railroad companies and others is invited to the advertisement of Messrs. R. A. ACHER & Co. of Richmond, Va., in another part of the *Journal*. Among the articles mentioned in their card, we find Railroad Chairs and Spikes, Car Axles, Bridge Bolts, Bar Iron of all sizes; Rounds and Squares, Flats, Angle and T Iron. They promise strict attention both to quality and finish of their Iron and punctuality in filling orders—two important considerations, which we hope our friends will not underrate.

We learn that Messrs. DANFORTH, COOK & Co., of Paterson, N. J., have recently made some additions to their Locomotive Works. Among these is a new water wheel, eighteen feet diameter and eleven feet breast. The arms are of cast iron, and the buckets of wrought iron plate. They are also erecting some new buildings to be connected with the locomotive shop. We understand that Messrs. D., C. & Co., have orders for several engines for the Western and Atlantic and Mobile and Ohio railroads. They have also recently received a large order for cotton machinery for a factory in Parras, Mexico.

New Locomotive.

Below we give the dimensions of the new locomotive "Gov. Pennington," recently built at the ROGERS' WORKS, Paterson, N. J., for the New Jersey Railroad. Cylinder 16 in. diameter, and 22 in. stroke; 5½ feet driving wheels; inside and outside bearings; link motion; cross pumps and air chambers; two domes on boiler; she has 158 copper flues, 11 ft. 3 in. long, and 2 in. diameter.

The domes, cylinder and boiler, as also the working cylinders and steam chests, are covered with brass. The engine was in every respect finished in the highest style.

A Lake Superior Diamond.

We had been well aware that this country was very rich in minerals and some kinds of precious stones, but we had not expected to see a Lake Superior diamond, yet such is the case. We were shown one yesterday that would measure three-

fourth of an inch in length and at least one-fourth of an inch in thickness. It is a regular formed octagon, and all who have seen it pronounce it diamond, but of what exact value it is yet uncertain, it being in the rough state. It cuts glass like a knife, and shows all the brilliancy of a diamond of the first water, which, if it should prove to be, will make its value not less than two thousand dollars.—*Lake Superior Journal*.

Raleigh and Gaston Railroad.

At the fifth annual meeting of the stockholders of this company, held at Raleigh, N. C., on the first of November last, the following gentlemen were chosen directors on the part of the company, for the ensuing year, viz: Geo. W. Mordecai, Thos. Miller, Robert A. Hamilton, and Dr. Wm. J. Hawkins. The following gentlemen were appointed by the President of the Board of Internal Improvement, directors, on the part of the State, viz: Gaston H. Wilder, John-G. King, and Allen C. Perry. At a subsequent meeting of the directors, Robert A. Hamilton Esq. was elected President.

From the report submitted by the President we learn that not a single accident worth reporting has occurred upon the road during the past year, and that uniform success has attended the operations of the company. The business of the road is gradually and steadily increasing, the receipts the past year, on freights particularly, exceeding those of the previous year by nearly 25 per cent. This is due to the greatly improved condition and growing prosperity of the country through which the road passes—the source to which the company must continue to look for their future profits, and which may be still further increased by extending such facilities as they are enabled to do for the greater development of the agricultural resources of that part of the State through which the road runs and which is dependent upon it as a means of transporting its productions and consumptions. To this end a decided reduction in freights upon all fertilizers is recommended, as it is believed that the company will be doubly compensated by the increased productions of the country consequent upon their use. At the same time the receipts from passengers have considerably diminished—this was owing to the total suspension of business for several months with the Seaboard and Roanoke Railroad and with Norfolk and Portsmouth, the receipts from which connection usually amounted to from four to five thousand dollars per month.

The receipts from transportation for the year have been—

For Freight	\$122,027 26
For Passengers	61,122 59
For Mail	9,990 00

\$193,139 85

Ordinary and current expenses..... 91,994 52

Leaving a profit on the year's operations of \$101,145 33

Although this is more than 10 per cent. on the capital stock of the company, yet in the present condition of the road. Many repairs being needed, and a large expenditure of money required to keep it in good working order, it was not deemed advisable to declare a larger dividend than 6 per cent.

The following is a statement of receipts and expenditures of the Raleigh and Gaston R. R. Co., for the year ending September 30, 1855.

Balance from last year.....	\$78,708 24
Receipts—	
Freight	\$122,027 26
Passengers	61,122 59
Mail	9,990 00
Capital Stock	1,931 50
Iron sold	36,147 94
Interest on Sinking Fund.....	330 75
Roanoke Valley R. R. Co.....	4,229 75
	\$314,488 03

By Transportation—Train wages, Ag'ts and labor at depots, Wood, Oil and Waste, Damages and Losses	\$40,854 46
By Road Repairs—Ordinary:	
Overseers, laborers and timber.....	21,566 79
Construction	26,480 74
By Road Repairs—Extraordinary:	
Buildings	2,742 52
Dividend No. 1	545 00
Culverts, bridges and ditching.....	6,943 19
By Sinking Fund	5,000 00
By Engines and Cars—Ordinary: Shop labor, materials, coal, wheels and axles	24,925 04
By Engines and Cars—Extraordinary:	
New machinery and cars	7,710 25
By Stock in R. V. R. R. Co.	7,700 00
By salaries and contingencies	4,648 23
By connection N. C. Railroad	272 76
By Dividend No. 2	60,791 00
By Profit and Loss	892 04
By Interest on Loan	6,030 00
By Bills payable—Bank debt in full..	20,000 00
Balance	77,584 01
	\$314,488 03

The following table shows the receipts from transportation for the year, compared with the three years previous.

	Freight.	Passengers.	Total.	Freight.	Passengers.	Total.
	1854-'55	1853-'52		1853-'52	1852-'51	
Oct..	\$9,894	\$8,994	\$18,888	\$8,117	\$6,262	\$14,379
Nov..	6,563	5,318	11,872	7,009	4,616	11,626
Dec..	5,019	5,225	10,245	4,823	4,442	9,265
Jan'y	7,853	4,461	12,315	4,183	4,679	8,863
Feb'y	8,868	3,099	11,968	4,584	3,461	8,046
March	11,279	4,222	15,501	10,401	4,722	15,123
April	10,852	3,958	14,810	7,345	4,498	11,843
May	9,398	4,591	13,989	8,418	5,242	13,661
June	11,054	5,281	16,335	7,890	6,207	14,098
July	8,547	5,478	14,026	8,178	6,540	14,719
Aug..	9,694	4,396	13,990	8,833	5,817	14,650
Sept. 23, 110	6,094	29,205	20,920	7,104	28,025	
	\$122,027	61,122	183,149	100,707	68,595	164,308
Transporting Mail.....	9,990		9,920			
	\$193,139		\$173,928			

	Freight.	Passengers.	Total.	Freight.	Passengers.	Total.
	1852-'53	1851-'52		1851-'52	1850-'49	
Oct..	\$5,285	\$3,021	\$8,257	\$1,592	\$2,164	\$3,758
Nov..	4,985	2,549	7,535	1,371	1,562	2,933
Dec..	2,498	3,236	5,734	1,289	1,850	2,940
Jan'y	3,159	2,866	6,025	701	1,595	2,297
Feb'y	4,237	1,997	6,234	1,535	1,894	2,930
March	7,252	3,711	10,963	2,548	2,462	5,011
April	5,288	2,650	7,939	2,937	1,590	4,533
May..	6,164	3,739	9,904	3,122	1,590	4,713
June	4,831	4,808	9,640	4,065	2,415	6,521
July	5,091	6,806	10,897	4,413	2,327	6,741
Aug..	6,678	5,615	12,293	5,478	2,951	8,427
Sept..	9,203	6,231	15,434	6,823	4,075	10,898
	\$64,626	46,235	110,861	35,879	25,827	61,707
Transporting Mail..	8,223		8,770			
	\$119,084		\$65,477			

General Exhibit of the Raleigh and Gaston Railroad Co., on the 30th September, 1855.

To Capital Stock	\$978,300 00
To Coupon Bonds, applied to re-construction, due in 1862	100,000 00
To General Profits, applied to re-construction	88,907 85
	\$1,162,207 85
To Interest on Sinking Fund, to be invested	330 75
To Roanoke Valley R. R. Co., for their portion of receipts	4,229 75
To Dividend not called for:	
No. 1	\$228 00
No. 2	532 00
	760 00
To Net Profits, as follows:	
Amount invested in State Bonds	\$8,000 00
Do. Roanoke V. Stock	7,700 00
Am't unappropriated	74,296 25
	89,996 25
	\$1,257,524 10
By cost of road from Raleigh to Gaston	\$400,000 00
By cost of re-construction	571,660 97
By cost of connection from Gaston to Weldon	175,000 00
By cost of connection with N. C. road	15,546 88
	\$1,162,207 85
By Stock acc't, amount still due....	2,082 74
By Stock in the Roanoke V. R. R. Company	7,700 00
By Sinking Fund, amount invested..	8,000 00
By Bank of the State of N. C.	\$24,126 14
By Agents in transitu	7,728 22
By Bills receivable	983 52
By Post Office Department, am't due	2,294 49
By Petersburg R. R. Co.	23,226 12
By Seaboard and Roan. R. R. Co.	4,326 85
By North Carolina R. R. Co.	9,224 05
By Roanoke Valley R. R. Company	5,470 60
By O. A. Norris	64 00
By Cape Fear and D. R. Nav. Company	140 00
	77,584 01
	\$1,257,524 10

Important Trial for Injuries Sustained on a Railroad.

The following is a brief abstract of proceedings recently had before the Supreme Court of this State, in the Courtland District in which the plaintiff, one John Vaughn sought to recover from the Central Railroad Company damages for injuries sustained on the road. The fact will sufficiently appear in the statement of the case.

It appeared that by the carelessness of the defendants' agent there was a collision at the Oneida depot in September, 1853; that a freight train ran into the passenger train, in which the plaintiff, a young Irishman, of about twenty years, was a passenger, and that both of his legs were so badly broken that it was two years before he could be removed from the depot building to his home in Courtland county.

The collision happened about daylight on the morning of the 15th of September; on the morning of the 19th the defendants proved by their Superintendent that he had, by direction of the company, settled with the plaintiff for \$800 and an agreement to pay the expenses of his sickness. This alleged settlement was the principal issue and most interesting feature in the cause.

The defendants produced the receipt of the plaintiff for the \$800 in full of the injury, signed

by the mark of the plaintiff, and witnessed by a Mr. Kavan, a Catholic clergyman, a stranger to the plaintiff. It appeared that on the 17th the Superintendent made an arrangement with the clergyman to meet him at the plaintiff's room on the morning of the 19th; that they met there accordingly; the nurse was sent out of the room, contrary to the directions of the physician; and the Superintendent testified that the plaintiff, while perfectly competent to do business, agreed to accept the \$800 and payment of expenses in full satisfaction of his injury; that he put \$800 in bank notes into his right hand in packages; that plaintiff did not count it, but held it a few minutes, and gave it to the clergyman to take care of, and signed the receipt by his mark, and it was witnessed by the clergyman.

It was proved that the plaintiff wrote a ready and fair hand. The nurse who was sent out of the room was a medical student of three years. He testified that at the time the plaintiff was considered so dangerous that his death was hourly expected; that visitors had been excluded, the room darkened, and that he was so completely under the influence of opiates given to quiet his pain, as to be unconscious from drowsiness and stupification for most of the time, and that he had not sufficient mind and memory to transact business requiring thought and reflection.

Other physicians who attended him, expressed the same opinion, and others still thought he was at or about the time capable of doing business when roused. The Catholic clergyman died in March last. The plaintiff's nurses never saw a dollar of the \$800 pledged to have been paid, nor was there any trace of it given except by the Superintendent as before stated, though the plaintiff was poor.

The defendants proved they had paid for the plaintiff's expenses for two years of illness while confined at the depot, about \$3,000 besides the \$800.

The judge charged the jury that if they found for the plaintiff they should allow to the defendants and deduct from their verdict the \$3,000 thus paid. That if they found that the plaintiff was competent to transact business at the time he gave the receipt he was bound by it. But if they found that the receipt was obtained from him when he was incompetent, it was void, and the plaintiff was entitled to a verdict. The jury returned a verdict for plaintiff for ten thousand dollars.

Sunbury and Erie Railroad.

This day, at Erie city, the ground is to be broken upon the Western division of the Sunbury and Erie railroad, which extends eastward from the lake, eighty-two miles, to the bituminous coal mines of McKean county. This action is in accordance with the resolution passed by the Board of Managers on the 28th of June, authorizing the road committee to commence the western division of the Sunbury and Erie railroad.

For this auspicious and gladdening event, Erie city has long waited with anxious solicitude; and now that it has arrived, we do not wonder that its coming is to be celebrated with the imposing ceremonies of a grand inauguration; for while Erie city is deeply interested in the Sunbury and Erie railroad, as a through trunk line, of which her own harbor is to be the lake terminus, she is especially and vitally concerned in the western division, because, while that division will open to her an important local trade with a region abounding in coal, lumber, and other underground and surface products, it fixes absolutely and forever the termination of the road at Erie city!

And herein is ample reason for exuberant felicitation on the part of her citizens, to whom is well known the existence of other schemes whose advocates would prefer that the Sunbury and Erie road should terminate on Ridgway, or some other point east of Erie city, and thereby become a division in an east and west route, in lieu of a trunk line to the lakes.

By the commencement of the western division

of the road, the quietus is given to all such proposed diversions of the Sunbury and Erie road from its original purpose, Erie city is made its lake terminus, and one and all of the projected roads leading to it from Ohio, become tributaries and feeders.

The Sunbury and Erie railroad, therefore, again looms in visible outline, throughout its whole length, distinct and bold at its extremities, and though faint, without obscurity, in its forest centre.

The middle division of the Sunbury and Erie railroad might receive financial aid from the State in a way mutually advantageous to the company and the commonwealth. The country traversed by the line of this division of the road is comparatively a wilderness; the assessed valuation of taxable property is small in amount, and yields to the State Treasury no surplus over the sum appropriated by the State for the support of the local public schools among the sparse population; with the facilities which only a railroad can furnish, settlers would occupy and cultivate this region; lands would be cleared and improved; mines would be opened; villages and towns would grow up and become centres of business and of population; and thus, with each triennial assessment, the value of taxable property would be augmented by millions of dollars, yielding to the treasury of the State surplus thousands, equalling in number the thousands paid by counties in other parts of the commonwealth, more favored with avenues of communication to and from the large markets.

How this aid may be most safely rendered and most justly secured, will, doubtless be made to appear with convincing perspicuity; meanwhile, without such aid from the State, the work will progress towards the centre, making narrower the gap of the middle division. And then, with the evidences of Philadelphia's contributions to the great work on one side and of Erie city and the corporation, on the other side, the commonwealth may respond to a call for the execution of her part, and by adding to complete the connection, she may win the crowning honor of the enterprise, and be blest with its results.—*Penn. Railroad and Mining Register.*

Iowa Railroads—Action of the Legislature.

The following is a synopsis of the action of the Legislature of Iowa, resulting from the grant of lands recently made by Congress to that State for railroad purposes.

The bill confers the lands, rights, power and privileges granted to the State by Congress to the following named roads: The Burlington and Missouri railroad company, from Burlington to a point on the Missouri river, near the mouth of the Platte river; the Mississippi and Missouri railroad company, from Davenport via Iowa City and Fort Des Moines to Council Bluffs; the Iowa Central Air Line railroad company, from Lyons City northwesterly to a point of intersection with the main line of the Iowa Central Air Line railroad near Maquoketa, thence on said main line running as near as practicable to the 43d parallel across the State to the Missouri river and to the Dubuque and Pacific railroad company, from Dubuque to a point on the Missouri river, at or near Sioux City, with a branch from the mouth of the Tete Des Morts to the nearest point on said roads. The lines of the several roads to be fixed and located before the first of April next. Maps showing the lines of location to be filed in the office of the Governor and Secretary of State. Such lines of location are not considered final, farther than it may be considered necessary to fix the limit the boundary within which lands may be selected by the said railroad companies.

The bill compels the said companies respectively to complete and equip 75 miles within three years from the first of December next, 80 miles in addition yearly thereafter for five years, and the remainder, on or before the first of December, 1856, under a forfeiture of "all rights to the lands, &c., &c., hereby granted and remaining undispos-

ed of by the company so failing to have the length of road completed in manner and time as aforesaid."

The roads to be constructed on a gauge of four feet eight and a half inches, to afford to other roads that may hereafter be constructed all necessary turn-outs, sidings, switches, &c., and all necessary convenience for the transit of freight and passengers at rates not exceeding the regular tariff of charges on such roads so accommodated.

The bill protects the settler who held valid claims by actual occupation and improvement at the time the grant was made requiring them to file their claim with the County Judge, where the land claimed may be situated, within two months of the passage of the act, but he shall not be entitled to more than 320 acres, at the rate of two dollars and fifty cents per acre.

The Pittsburgh, Fort Wayne and Chicago Railroad Company.

The first step under the consolidation of the Ohio and Pennsylvania, Ohio and Indiana and Fort Wayne and Chicago railroad companies, was made yesterday in the election of a Board of Directors of the consolidated road. As individualities these companies have ceased to exist, and are now merged in one grand corporation, constituting the largest railroad organization in the Union. The election took place at the Board of Trade Rooms, on Wednesday, July 30. The number of stockholders in attendance was very large, and the election very spirited, as there was a variety of tickets in the field. The following are the names of the directors:—

George W. Cass, President Ohio and Pennsylvania R. R.; J. Edgar Thompson, President Pennsylvania R. R.; Gen. Wm. Robinson, jr., Major Wm. Wade, Robert M'Kelly, President Ohio and Indiana R. R.; Gen. John Larwell, C. T. Sherman, C. M. Russell, J. K. Edgerton, President Fort Wayne and Chicago R. R., Hon. Samuel Hanna, A. L. Wheeler, Wm. Williams, Hon. W. B. Ogden, Dr. John L. Evans, Theo. T. Moran, of Moran Brothers, New York.

The advantages which will accrue to Pittsburgh and to Pennsylvania from this consolidation are too apparent to require much argument. The Pittsburgh, Fort Wayne and Chicago Railroad will extend on the most direct and eligible route a distance of 465 miles. The three roads that compose the consolidated road, are the Ohio and Pennsylvania road from Pittsburgh to Crestline, Ohio, a distance of 187 miles; the Ohio and Indiana road, from Crestline to Fort Wayne, Indiana, a distance of 181 miles; and the Fort Wayne and Chicago road, from Fort Wayne to Chicago, a distance of 147 miles. All these roads are of uniform gauge, 4 ft. 10 in., and 388 miles of the 465 are completed, and in operation, leaving 127 miles of the Fort Wayne and Chicago road to be finished. The united line occupies a position rich in all the elements of a great local business, and in grades and alignment, and facilities for speed, safety and economy of operation, it is not excelled, if equalled, by any line or corresponding interest in this country.

Of the important points through which the line passes we may enumerate Beaver, Rochester and New Brighton, in Pennsylvania; Salem, Alliance, Canton, Massillon, Wooster, Mansfield, Crestline, Bucyrus, Forest, Lima, Upper Sandusky, Delphos, and Van Wert, in Ohio; and Fort Wayne, Columbus, Warsaw, Plymouth and Valparaiso, in Indiana—thirteen of which are only county seats—are all important and thriving towns, and respectively centres of trade for the section of country surrounding them—thus insuring to the road an immense local business.

The consolidated road is highly favored in its intersections, which are as follows:—The Cleveland and Pittsburgh road, at Alliance; the Cleveland, Zanesville and Cincinnati road, at Orrville; the Springfield, Mount Vernon and Pittsburgh road, at Lakerville; the Sandusky, Mansfield and Newark road, at Mansfield; the Cleveland, Columbus and Cincinnati road, and Bellefontaine and Indiana

road, at Crestline; the Mad river and Lake Erie road, at Forest; the Dayton and Michigan road, at Lima; the Lake Erie, Wabash and St. Louis road, at Fort Wayne; the Cincinnati, Peru and Chicago road, at Plymouth, and the New Albany and Salem road, and the Joliet Cut-off of the Chicago and Rock Island road, between Plymouth and the State line of Indiana and Illinois.

The consummation of the consolidation ensures a unity of interest and policy in the operations of the entire line of railroad from Philadelphia to Chicago, a distance of 818 miles. There will be but one break of gauge on the whole line, viz: at Pittsburgh, and all its practical inconveniences will be removed as soon as the Alleghany bridge is completed, which will be at an early day.

Chicago, it cannot be denied, is the great railroad centre of the West. In the address to the stockholders, made in May last, it is remarked that it would be difficult to indicate two railroad termini capable of developing more valuable business relations with each other than Pittsburgh and Chicago, and Philadelphia, from its position, will be a sharer in the mutual advantage.

The consolidation consummated, we shall look for an early completion of the line, and consequent results, the value and importance of which will, we trust, prove greater than the most sanguine now anticipate.—*Pittsburg Chronicle*, July 31,

Locomotives for Pennsylvania and Virginia.

We noticed yesterday, in passing the extensive establishment of Mr. Ross Winans, near the Mount Clare Depot, an unusual activity, and, upon inquiry, learned that there had just been completed for the Lackawanna and Delaware Railroad Company five first-class anthracite coal burning locomotives; three of which had already been shipped. One was there on the track, to be taken to Locust Point, and the fifth was in the ship receiving the finishing touches. These locomotives, each weigh, in running order, thirty-five tons, or seventy thousand pounds, and are as large and powerful as any heretofore built in the United States. There are six powerful driving wheels, each 48 inches in diameter, connected, and the gauge is six feet. The boiler flues are fourteen feet long, with a fire surface of one thousand square feet, and grate surface of thirty-six square feet. The cylinders are twenty-two inches in diameter, with twenty-two inches stroke of piston. In the construction of the cylinders an important improvement has been adopted, by which breakage is entirely prevented, at a considerable saving of time and labor. In the head are covered apertures opposite the screws of the follower, so that, when the packing becomes loose, it is only necessary for the engineer to tighten the screws without the trouble of taking off the head, and the leak is at once stopped, thus saving considerable time, and especially so if the engine is on the road.

There is also an improvement in the pump arrangement, which avoids all straining, and avoids the liability of that important part of the machinery getting out of order. The engineer's house is elevated above the boiler, and immediately behind the smoke-pipe, which gives him the chance to see the whole of his train at any time, without waiting, as under the old plan of passing a curve, to see that his train is all right. The principle feeding of the fire is done through a hopper which passes into the top of the furnace, which is deemed much better than the old plan of feeding altogether through the lower or draught door. In the tender there is also a valuable improvement. Those constructed after the former style have on each side a water-tank, with room in the centre for carrying the fuel. These are so arranged that the water-tank occupies the whole of the rear, and with an inclined surface towards the engine, and comprise an upper platform, or stay, on which about two-thirds of the whole fuel is deposited, and all sufficiently near to the hopper of the furnace to avoid the labor of handling more than once, as is the case with those heretofore built.—The lower floor receives about one-third of the

fuel, which is all that is necessary to feed through the lower door. These locomotives are beautifully constructed and much admired by those who have examined them.

Besides the above there are ten of the camel back engines in process of construction for the Northwestern Virginia Railroad Company, all of which are to be delivered by the first of December next. Several of them are in a forward state of progress, and will be completed in a few weeks. They contain all the improvements of those above mentioned, and will weigh each about thirty tons or 60,000 pounds. They will be retained as the property of Mr. Winans, the company paying an annual hire for their use. It is gratifying to see this evidence of prosperity, and there is no doubt but these locomotives will sustain the enviable reputation which for a long time has attached to the manufactures of this establishment.—*Balt. American.*

Mobile and Ohio Railroad.

Judge Hopkins, the President of the above road, and Capt. Childe, Chief Engineer, have been in this city, and obtained State bonds for the purchase of the iron for the first thirty miles, beginning at the northern boundary of the State, in Obion county. It appears by a report of the company made in February last, that it is 19 miles from Columbus to the State line, that 10 miles of these were ready for the iron, and that the remaining 9 miles would be ready by the first day of the present month, June. The report says "the steady purpose of the company has been to get the road from Columbus to Jackson, Tenn., believing that this portion will pay for itself."

The application for bonds was sustained by the affidavits of Hopkins, Childe, Col. Taliferro, of Trenton, Tenn., Treasurer of the West Tennessee Division of the road, and of the Hon. Milton Brown, Director. These were endorsed by the report of Commissioner Payne.

From their documents we gather the following facts in regard to this road: That the *bona fide* subscriptions for the capital stock of said company for the Tennessee division, exclusive of insolvent subscriptions, amount to a sum sufficient to grade, bridge and prepare for the rails the whole extent of the main line proposed to be constructed through the State of Tennessee, from the Kentucky to the Mississippi line; that the means of the company amount to \$887,466 while the estimated cost of the work, preparatory to laying the rails, is \$776,000; that 30 miles of said road, beginning at the Kentucky line, in Obion county, and running southwardly through Obion and a part of Gibson counties, had been graded and bridged, except such portion as was provided for by the bridge laws of the last session of the legislature, and that cross-ties were delivered along the line; that the entire length of the line from Mobile to the Ohio river, opposite Cairo, is 492 miles, of which 197½ were in operation from Mobile to Macon, running northward; that only 42 miles remain to be graded, including the Tennessee division, to complete the whole line from Mobile, Ala., to Columbus, Ky.; that the company have expended \$5,000,000 on the line, and have in reserve 1,120,000 acres of land as a sinking fund, for the benefit of the stockholders of the entire line; that 47 miles more of the road, in Tennessee will be ready for the rails, a part in August and a part in October; that 8,000 tons of iron have been purchased for the Tennessee division, half of which is at New Orleans, and the other half to be forwarded during the autumn of the present year; that the rails used by the company are of the most approved pattern, and weigh 108 tons to the mile, 8 tons heavier than the law of Tennessee requires, and that the intention is to build said road substantially, and at a greater first cost than is usual—as best adapting it to the interests of the company and the State.

Our readers of the Western division of the State will doubtless be gratified at the prospect of an early completion of this magnificent enterprise.—This road is intended to connect with the Illinois

Central railroad at Cairo, which with the Mobile road will form the longest continuous line (with the exception of the break at Cairo) in the world, stretching from the lakes to the Gulf of Mexico.

The citizens of Mobile are entitled to the highest degree of credit for their exertions to establish this great line of connection, and our citizens of West Tennessee no less for their liberal outlays displayed in the construction of the Tennessee division.

The fact that Tennessee is the first provision State north of the cotton States; that her citizens will have the advantage of the earlier maturity of their crops and a shorter distance to transport products, will give them greater advantage in supplying those States with provisions, and in supplying the summer markets of Mobile and New Orleans.

The early establishment of this connection is, therefore, of great importance to a considerable portion of West Tennessee.—*Nashville Union.*

Warsaw and Rockford Railway.

At a meeting of the Directors of the Warsaw and Rockford Railroad at Oquawka, on the 18th inst., S. S. Phelps was elected President, and John E. Johnson, Vice President. The best feeling pervaded; the work on the first division is progressing finely. The contractors on the second division from Appanoose to the junction of the Burlington Road are increasing their forces. Dr. Bacon, the agent, informs us that 15 per cent. of the private stock will be called for on the 1st of July. It is necessary for stockholders to be prompt in their payments, that the work may go on. Negotiations will soon open for iron, rolling stock, etc.—*Fl. Madison Plain Dealer.*

Steamers to Liverpool.

A line of steamers between Liverpool and Portland, touching at Halifax and St. John's, Newfoundland, is one of the substantial enterprises of the times. We are glad to know that it is in a fair way of being successfully accomplished. By reference to our advertising columns, it will be seen that the first steamship in the line is to sail from Liverpool for Portland August 28d, and make her return voyage on the 23d September following.

The line will connect at Portland with the Grand Trunk Railway, so that goods can be taken up at Liverpool, Manchester, Birmingham, or elsewhere, and laid down in St. John's, Halifax, Portland, Montreal, Quebec, Kingston, Ottawa, Toronto, Detroit and Chicago, under one check, without any change of responsibility, and *vice versa*. Produce of other goods for Nova Scotia, Newfoundland or Liverpool, will in the same way and by the same means be sent forward from the lake ports or the Atlantic cities to their place of destination.

The Cleopatra is a fine boat, known in our harbor, and she will be followed by others of still greater capacity and speed, and we have no doubt of the full success of the line.

In our estimation, the establishment of this line will eventually lead to a complete revolution in ocean steam navigation. By making St. John's a port of call, the Atlantic voyage is reduced one-third, or to about 1,700 miles, and the coaling required for the ships on this route may be diminished one-third also, thereby enhancing the speed and giving more space for stowage of goods. Besides this, the line of telegraph connecting St. John's and New York, soon to be completed, will induce the employment of the swiftest boats possible for "the Atlantic Ferry." We already have lines of steamers to New York, Boston, Bangor, and St. John's, N. B.

We are likely to realize the predictions of former years, which have pointed to Portland, as the leading American packet station for Europe. What can prevent Portland from becoming at some future day "the Liverpool of America?"—*State of Maine.*

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appearances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.
H. S. WELLES & CO.,
No. 4 WALL ST., New York.

8132

No. 4 WALL ST., New York.

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural rocks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The Company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't La C. & Mil. R. R. Co.
MILWAUKEE, August 1st, 1856. 10132

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.

NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

Railroad Chairs and Spikes.

ORDERS taken at fixed sterling prices for Wrought Iron Chairs of any pattern, and Spikes, to be manufactured in England.

NAYLOR & CO.,
99 and 101 JOHN ST., New York City.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 66 Walnut st., PHILADELPHIA, Penna. 324

ARMORY ROLLING MILLS, RICHMOND, VA.

R. ARCHER & CO., Proprietors.

R. ARCHER. R. S. ARCHER.
A. D. TOWNES. F. T. GLASGOW.

Bar Iron, all sizes, Manufactured from the best Charcoal Pig Metal.	Angle and T Iron.
Plates, up to 7 inches.	Car Axles.
Rounds and Squares, up to 5 inches.	Railroad Spikes.
	Do. Chairs.
	Bridge Bolts, Screwed and Tapped.

Strict attention paid to the quality and finish of our IRON, and all orders promptly filled.
August, 9, 1856. 3m

FOR SALE.

2, 20 Ton Locomotives	} 4 ft. 8½ in. gauge, at a bargain.
4, 25 do. do.	
6, 24½ do. do.	
4, 26 do. do.	

Apply to DAVIS & KASSON,
July 24, 1856. 4131 24 BROADWAY.

FOR SALE.

A GOOD second hand Archambault Steam Engine, about 10 horse power, with tubular boiler complete.
4130 Apply to A. & P. ROBERTS, Philadelphia.

BROOKLYN WATER WORKS. To Contractors.

SEALED PROPOSALS will be received by the undersigned until the 15th day of August at 12 m. for the construction of the **RIDGE HILL RESERVOIR**, situated near the Jamaica road, about five miles from Brooklyn.

The work consists of earth-work, slope wall and piling. Specifications and plans of the work will be shown on the ground and at the Engineer's office, Halsey's Building, Brooklyn, from the 6th August.

The right is reserved to reject any or all of the proposals made.
H. S. WELLES & CO.,
No. 4 Wall street, New York.

The above is postponed as follows:
Plans, Specifications, etc., will be ready on the 12th, and propositions received until the 20th, at 12 m.

331 H. S. WELLES & CO.

Railroad Iron.

1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by
THEODORE DEHON,
10 Wall st., near Broadway.

4131 New York.

Railroad Iron.

1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from England to New Orleans. For sale by
THEODORE DEHON,
10 Wall st., near Broadway.

4131 New York.

KEROSENE LUBRICATING OIL. SECURED BY PATENTS.

THE effect of this Oil on machinery is found to be perfectly magical. It removes the gum caused by the use of impure oils, wears equal to best Sperm Oil, and does not congeal at a low temperature. It burns magnificently in all the solar, bi-nucle and hand lamps; also in signal and bowsprit lanterns.

The attention of engineers, ship-owners, ship-chandlers, ship supply men and others, is particularly requested to the certificates to be seen at the office of

AUSTENS,
AGENTS FOR THE
KEROSENE OIL CO.,
No. 50 BEAVER ST.,
NEW YORK.

Railroad Iron.

800 TONS best quality Welsh Rails "Erie" pattern, 55 lbs. per yard, now on the way from Great Britain, for sale by
YOSE, LIVINGSTON & CO.,
9 South William st.

New York, July 26th, 1856. Im30

Railroad Iron.

500 TONS best quality Welsh Rails, 55 lbs. per linear yard, now on the way from Great Britain, for sale by
YOSE, LIVINGSTON & CO.,
9 South William st.

New York, July 26th, 1856. Im30

First Class Locomotive FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and flue sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a first class passenger engine.

For particulars address
ELLIOTT & BOWLES,
113 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above. 25ft

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. BRANSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address **JAMES W. HILTON,**
New York City, N. Y.
July 24th, 1856. Sm

NATHAN LANE & CO., NEW YORK,

No. 69 Wall Street, and 91 Beaver Street, near Pearl,

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PRINTERS, LITHOGRAPHERS,
AND ACCOUNT BOOK MANUFACTURERS,

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Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of, that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the lands of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried either in wagons, or interrupted water conveyances, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the

facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual installments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT.

PER ANNUM.

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It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will, probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., Chicago, Ill.

Philadelphia, Wilmington & Baltimore Railroad.

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From New York to Wilmington.....	\$15 50
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GEORGE A. PARKER, Supt.

New York and Erie R. R.

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These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Coraon; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

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Office Nos. 8 and 10 Wall st.,
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MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,
AND TO
RAILROAD COMPANIES
AND OTHERS INTERESTED:

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

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3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

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\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

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All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS,

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CHARLES MONROE, Esq., {
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HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SATURDAY, AUGUST 16, 1856.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, August 16, 1856.

Pacific Railroad.

Below we give the report of the Special Committee of the House of Representatives on the subject of the Pacific railroad—having already given the minority report of Mr. Wood.

The Select Committee to whom was referred the bill to provide for the establishment of a railroad and telegraph communication between the Atlantic States and the Pacific Ocean, and for other purposes, beg leave to make the following report:

The necessity which exists for constructing lines of railroad and telegraph communication between the Atlantic and Pacific coasts, is no longer a question for argument. It is conceded by every one, that in order to maintain our present position on the Pacific, we must have some more speedy and direct means of intercourse than is at present afforded by the route through the possessions of a foreign power.

The importance of our Pacific possessions is felt in every pursuit and in every relation of life. The gold of California has furnished the merchant and trader with a capital by which enterprises have been undertaken and accomplished which were before deemed impracticable. Our commercial marine has been nearly doubled since 1848; internal improvements have been pushed forward with astonishing rapidity; the value of every kind of property has been doubled, and the evid-

ence of prosperity and thrift are everywhere to be seen. The security and protection of that country from whence have been emanated nearly all these satisfactory results, is of the greatest importance; and that can be accomplished only by direct and easy communication through our own territories. Railroads will effect this. At present we are forced to resort to a very circuitous route by sea, through the tropics and across the continent at a most sickly point in the torrid zone. Should a war break out between our country and any other maritime power, or should a difficulty arise with one of the petty Spanish American States through which these routes lie, our communications would be interrupted and the unity of our confederacy actually broken up.

Looking to these facts alone to secure the construction of these lines of communication, has given them such an importance as never attached to any work of internal improvement since the time when, during President Jefferson's administration it was thought necessary to connect the States lying on the Atlantic seaboard with the States lying in the valley of the Mississippi by means of roads across the Alleghany mountains. Insignificant as the undertaking of the building of a wagon road across the Alleghanies may appear now, the proposition was then deemed exceedingly difficult, and occupied quite as much of the public attention as the Pacific railroad does at the present time. The States were then separated only by the mountain range of the Alleghanies, but the western country was so remote, and access to it so difficult, that the construction of a road was considered absolutely necessary, and sufficient to authorise the earnest attention of Congress. The people of the western frontier were at that time exposed to frequent incursions of the Indians. The country was exceedingly fertile, but the markets were so distant that the production was rather an incumbrance than a profit to the farmer, and vast tracts of rich agricultural land were suffered to remain an unbroken waste. The action of the Government attracted public attention and awakened private enterprise. Canals were projected, and then followed railroads, until every part of that country which was but a few years ago called the "Far West" has been brought within three or four days' communication with the cities on the seaboard, giving a new impulse to commerce, increasing the value of property, and relieving the frontiers from all the dangers of a hostile foe. No better example can be given of the benefits resulting from the construction of railroads to both public and private property, than that of the Illinois Central railroad. On the line of that road the public lands had been offered for sale for many years without finding a purchaser, and were at last reduced to the lowest minimum price, 12½ cents per acre. Even this

reduction was not sufficient to induce their sale; but when the Government had given away one-half to assist in building the road, the other half was very readily sold for \$2.50 per acre. Similar results have followed the building of nearly every railroad in the country, although in many instances, as in this, the roads came in direct competition with river and canal transportation.

A railroad across the continent would open up a vast extent of country to settlement, and much of what is now believed to be sterile and barren will, no doubt, (as in California,) be found to yield bountifully to the agriculturist.

These lands are now totally without value, no matter how fertile they may be, and to the Government worthless. By giving away one-half for the construction of the proposed roads, the Government will thereby attach a value to the remainder, and whatever that value may be will be the amount the Government is gainer by the transaction. Your committee have not thought proper to step aside from the long established system of the Government, in granting lands to aid in the construction of the railroads under consideration, except incidentally in the payment for transportation of troops, munitions of war, &c., and for carrying the mails; at the same time, they have endeavored to extend to every portion of the country an equal share of the benefits to be derived from it. Every part of the country, extending from Lake Superior to the Gulf of Mexico, is brought in direct contact with one or the other of the proposed roads, and from the western frontiers of the States lying west of the Mississippi, connections are easily made with roads already completed to the cities on the Atlantic seaboard.

By thus combining all the great interests of the country, an effort has been made to allay sectional jealousies and to bind together more firmly every part of the country.

The policy of granting lands, or the proceeds of the sales thereof, for the purposes of internal improvement, and to increase the value of public property, was early adopted by our Government. By the act of April 30, 1802, one-twentieth of the net proceeds from the sales of the public lands lying within the State of Ohio, was set apart to "be applied to the laying out and making public roads leading from the navigable waters emptying into the Atlantic to the Ohio, to the said State and through the same," such roads to be laid out under the authority of Congress "with the consent of the several States through which the road shall pass." By the act of May 1, 1802, it is provided that it shall and may be lawful for the Secretary of the Treasury to cause to be viewed, marked and opened, such roads within the territory northwest of Ohio, as in his opinion may best serve to promote the sales of the public lands in future. Both these acts were approved by Mr.

Jefferson, and form the basis on which all similar acts have been predicated. Every Executive since that time have approved of similar acts, and the only change made was in the manner of making the grant, the lands having been given instead of the net proceeds of the sales thereof. The plan thus proposed precludes the necessity of entering into an estimate of the expenses to be incurred in constructing any of the proposed roads. Nor does it matter how many of the roads are thus authorized to be constructed. If built, they will open up a vast extent of country to settlement, and thus the Government and the people will be mutually benefited. If the roads should not be built within the time specified, the lands revert to the Government, and the parties take nothing by the grant. Nothing is given without a corresponding benefit to accrue. As a means of military defense, the Secretary of War, in his last annual report, has placed this measure in such a strong point that your committee have thought proper to make the following extract. Alluding to our Pacific possessions, he says:

This Territory is not more remote from the principal European States, than from those parts of our own country whence it would derive its military supplies, and some of those States have colonies and possessions on the Pacific, which would greatly facilitate their operations against it. With these advantages, and those which the attacking force always has of choice of time and place, an enemy possessing a considerable military marine could, with comparatively little cost to himself, subject us to enormous expenses, in giving to our Pacific frontier that protection which it is the duty of the General Government to afford.

In the first years of a war with any great maritime power, the communication by sea could not be relied upon for the transportation of supplies from the Atlantic to the Pacific States. Our naval peace establishment would not furnish adequate convoys for the number of storeships which it would be necessary to employ; and storeships alone, laden with supplies, could not undertake a voyage of twenty thousand miles, passing numerous neutral ports, where an enemy's armed vessels, even of the smallest size, might lie in wait to intercept them.

The only line of communication, then, would be overland; and by this it would be impracticable, with any means heretofore used, to furnish the amount of supplies required for the defense of the Pacific frontier. At the present prices over the best part of this route, the expense of land transportation alone, for the annual supplies of provisions, clothing, camp equipment and ammunition for such an army as it would be necessary to maintain there, would exceed \$20,000,000; and to maintain troops and carry on defensive operations under those circumstances, the expense per man would be six times greater than it is now; the land transportation of each field twelve pounder, with a due supply of ammunition for one year, would cost \$3,500; of each twenty-four pounder and ammunition \$9,000, and of a sea-coast gun and ammunition \$12,000. The transportation of ammunition for a year for 1,000 sea coast guns would cost \$10,000,000. But the expense of transportation would be vastly increased by a war; and at the rates that were paid on the northern frontier during the last war with Great Britain, the above estimates would be trebled. The time required for the overland journey would be from four to six months. In point of fact, however, supplies for such an army could not be transported across the continent. On the arid and barren belts to be crossed, the limited quantities of water and grass would soon be exhausted by the numerous draught animals required for heavy trains, and over such distances forage could not be carried for their subsistence.

On the other hand, the enemy would send out his supplies at from one-seventh to one-twentieth the above rates, and in less time—perhaps one-fourth the time—if he should obtain command of the Isthmus routes.

Any reliance, therefore, upon furnishing that

part of our frontier with means of defense from the Atlantic and Interior States, after the commencement of hostilities, would be vain, and the next resource would be to accumulate there such amount of stores and supplies as would suffice during the continuance of the contest, or until we could obtain command of the sea. Assigning but a moderate limit to this period, the expense would yet be enormous. The fortifications, depots and storehouses would necessarily be on the largest scale, and the cost of placing supplies there for 5 years would amount to nearly 5 millions of dollars.

In many respects, the cost during peace would be equivalent to that during war. The perishable character of many articles would render it, perhaps, impracticable to put provisions in depots for such a length of time; and in any case there would be deterioration amounting to some millions of dollars per year.

These considerations, and others of a strictly military character, cause the Department to examine with interest all projects promising the accomplishment of a railroad communication between the navigable waters of the Mississippi and those of the Pacific Ocean. As military operations depend in a greater degree upon rapidity and certainty of movement than upon any other circumstances, the introduction of railway transportation has greatly improved the means of defending our Atlantic and inland frontier; and to give us a sense of security from attack upon the most exposed portion of our territory, it is requisite that the facility of railroad transportation should be extended to the Pacific coast. Were such a road completed, our Pacific coast, instead of being further removed in time, and less accessible to us than to any enemy, would be brought within a few days of easy communication, and the cost of supplying an army there, instead of being many times greater to us than to him, would be about equal. We would be relieved of the necessity of accumulating large supplies on that coast, to waste, perhaps, through long years of peace; and we could feel entire confidence that, let war come when and with whom it may, before a hostile expedition could reach that exposed frontier, an ample force could be placed there to repel any attempt at invasion.

From the results of the surveys authorized by Congress, we derive at least the assurance that the work is practicable; and may dismiss the apprehensions which, previously, we could not but entertain as to the possibility of defending our Pacific territory through a long war with a powerful maritime enemy.

The judgment which may be formed as to the prospect of its completion must control our future plans for the military defense of that frontier, and any plan for the purpose which should leave that consideration out of view, would be as imperfect as if it should disregard all those other resources with which commerce and art aid the operations of armies.

Whether we shall depend on private capital and enterprise alone for the early establishment of railroad communication, or shall promote its construction by such aid as the General Government can constitutionally give; whether we shall rely on the continuance of peace until the increase of the population and resources of the Pacific States shall render them independent of aid from those of the Atlantic slope and Mississippi valley, or whether we shall adopt the extensive system of defense above referred to, are questions of public policy which belong to Congress to decide.

Beyond the direct employment of such a road for military purposes, it has other relations to all the great interests of our confederacy, political, commercial and social, the prosperity of which essentially contributes to the common defense. Of these it is not my purpose to treat, further than to point to the additional resources which it would develop, and the increase of population which must attend upon giving such facility of communication to a country so tempting to enterprise, much of which having most valuable products, is beyond the reach of market.

Some of the considerations which bear upon the questions submitted to the committee have been briefly suggested, but we do not deem it necessary to enter upon an extended argument to show either the constitutional power of Congress to aid the construction of the proposed roads, or its duty to exercise power.

The public mind has already formed its judgment on both these points. The public press, popular assemblies and legislative resolutions have spoken with a concurring voice; and recent representative conventions of the democratic party at Cincinnati, and the republican party at Philadelphia, have, with most remarkable unanimity and emphasis, declared the will of the people on this subject, in resolutions intended for our instruction.

The committee have deemed it their duty to give effect to this general wish, and have examined with much care the various plans which have from time to time been proposed. They have thought proper to change the provisions of the bill referred to them very materially preferring to make the grant directly to those companies whose interests and well established ability give assurance that they will press the work forward to completion at the earliest day possible.

Public Works of Tennessee.

Below we give the Report of the Railroad Commissioner for the State of Tennessee, in which the railroads, and the railroad system of that State, are fully described.

We have previously published a portion of the report but its importance now leads us to give it entire.

NASHVILLE, TENN., Jan'y 28, 1856.

TO ANDREW JOHNSON, Governor of Tennessee.

Sir:—In compliance with your request, I herewith submit my report of the condition, progress, and probable future prospects of the railroads in this State, entitled to State aid, under the provisions of the General Internal Improvement Law, passed 11th February, 1852, and the amendments thereto, showing the number of roads that have applied for State bonds—the amount of bonds issued—the amount of bonds yet to be issued—together with the capital stock subscribed to each of said roads, and the estimated cost of road way in the State, as well as the amount of finished road upon these lines, and also the amount within the limits of the State.

I have also made an estimate of all the roads in the State (except the Memphis, Clarksville and Louisville, and Junction roads, whose ultimate purposes I could not learn,) that have taken steps to secure the benefits of the Internal Improvement Law, so as to show an approximate of the ultimate liability of the State, should they all be completed.

Of the basis of this liability, or the State's lien for the loan of her credit, I need not speak, as the law itself shows the conditions upon which the bonds are to be issued.

It has been my object at all times, to see that the law was faithfully and substantially complied with, before recommending the issuance of bonds, and I am free to say, I have found all the companies applying for bonds striving to, and in most instances had, substantially complied with the letter and spirit of the law, before I was called on to examine their respective roads.

I have in every instance found the officers of the various companies disposed to open their books to my inspection, and to give me all the aid in their power, to facilitate my examinations as to their financial conditions. The character of the work on the various roads I have examined, I think, is such as was contemplated by the law; and the roads and their equipments will compare favorably with any others in the Union.

The following table will exhibit such facts as I have been able to get, in relation to the subject matter of the Report:

WEST TENNESSEE.									
Railroads in Tennessee entitled to State aid, which are building, or will probably be built.	Whole Length of Road, including Branches.	Length of Road in Tennessee.	Estimated Cost of Roadway in Tennessee.	Available Assets applicable to Roadway in Tenn.	Whole Length of Finished Road.	Length of Finished Road in Tenn., incl. Branches.	Maximum Grade of Road, in feet, per mile.	Whole Am't of State Aid granted by Tennessee.	Amount of State Aid actually received.
† Memphis and Charleston— Memphis to Stevenson ...	287	87	\$906,000	\$1,117,900	216	88	47	\$370,000	\$700,000
Bridge aid granted.....	..	..	..	..	..	..	..	100,000	60,000
† Mississippi and Tennessee— Memphis to Grenada	96	9.8	75,000	768,000	15	9.8	..	98,000	98,000
† Memphis & Ohio—Memphis to Paris.....	180	180	910,000	921,000	40	40	40	1,800,000	400,000
Bridge aid granted.....	..	..	..	..	..	..	..	100,000	60,000
† Mobile and Ohio—Mobile to Cairo	527	118.5	763,832	841,200	160	..	..	1,185,000	.....
† Mississippi Central and Tennessee— Canton, Miss., to Jackson, Tenn.	48	..	..	..	..	..	..	480,000	.....
Bridge aid granted.....	..	..	..	..	..	..	..	100,000	.....
† North-west road, West Tenn. —Nashville to Hickman... 171	77	To Union City	..	..	..	68	..	770,000	.....
Bridge aid granted.....	..	..	..	..	..	..	..	100,000	.....
	470.8				481	137.8		\$5,103,000	\$1,318,000
MIDDLE TENNESSEE.									
* Nashville and Chattanooga— Nashville to Chattanooga. (In operation).....	151	151	.....	.....	151	151	106	\$1,500,000	\$1,500,000
† Tennessee and Alabama— Nashville to Hamburg.... 185	135	135	\$933,000	\$956,000	27	27	49	1,350,000	300,000
† McMinnville and Manchester— Manchester to Tullahoma. (All graded).....	34.5	34.5	138,313	161,000	..	..	..	345,000	300,000
§ Central Southern—Columbia to Decatur.....	..	43.5	.....	.....	..	..	..	485,000	.....
† Louisville and Nashville— Nashville to Louisville.... 184	46.5	..	.....	.....	..	..	..	455,000	.....
Bridge aid granted.....	..	..	.....	.....	..	..	..	100,000	.....
§ Edgely and Kentucky— Nashville to Henderson.... 144	48	..	.....	.....	..	..	..	480,000	.....
§ South-western—McMinnville to Danville.....	..	85	.....	.....	..	..	..	850,000	.....
† Winchester and Alabama— Dechard's to Gunter'sville. 67	23	..	.....	.....	..	..	..	230,000	.....
† Nashville and North-western —In Middle Tennessee.... 171	81	..	.....	.....	..	..	..	810,000	.....
	651.5				178	178		\$6,605,000	\$2,100,000
EAST TENNESSEE.									
* East Tenn. & Ga.—Knoxville to Dalton (incl. a fraction in Georgia)..... 110	110	..	.....	.....	110	110	37	\$770,000	\$770,000
Bridge aid granted.....	..	..	.....	.....	..	..	..	100,000	100,000
† East Tennessee and Virginia —Knoxville to Bristol.... 130	130	130	\$835,853	\$856,215	26	26	68	1,800,000	469,000
Bridge aid granted.....	..	..	.....	.....	..	..	..	300,000	300,000
† Knoxville to Charleston— Knoxville to State Line... 55	55	..	.....	.....	..	..	..	550,000	.....
Bridge aid granted.....	..	..	.....	.....	..	..	..	300,000	.....
† Knoxville and Kentucky— Knoxville to Danville.... 60	60	..	.....	.....	..	..	..	600,000	.....
Bridge aid granted.....	..	..	.....	.....	..	..	..	100,000	.....
§ Western and Charleston— Athens to Blue Ridge road... 30	30	..	.....	.....	..	..	..	300,000	.....
§ Cleveland and Chattanooga— Cleveland to Chattanooga... 30	30	..	.....	.....	..	..	..	300,000	.....
† Cincinnati, Cumberland Gap & Charleston—Paint Rock and Cumberland Gap..... 94	94	..	.....	.....	..	..	..	940,000	.....
Bridge aid granted.....	..	..	.....	.....	..	..	..	200,000	.....
	509				136	136		\$5,760,000	\$1,639,000
RECAPITULATION.									
West Tennessee.....	470.8				137.8			\$5,103,000	\$1,318,000
Middle Tennessee.....	651.5				178			6,605,000	2,100,000
East Tennessee.....	509				136			5,760,000	1,639,000
	1,630.8				451.8			\$17,468,000	\$5,057,000

NOTE A.—Roads marked thus (*) are finished. Roads marked thus (†) are in an active state of construction, and progressing rapidly to completion. Roads marked thus (‡) have portions of their lines under contract, and some work going on. Roads marked thus (§) have organized with a determination to go on to completion, but have not let their work to contract.

NOTE B.—In the estimate of finished roads, the Nashville and Chattanooga lateral to Shelbyville, of eight miles, was inadvertently omitted. This error corrected, will make the finished roads in Tennessee, 459.8 miles—the whole length of the Nashville and Chattanooga road and branch, being 159 miles. The State aid per mile granted to, and received by this road, is \$9,438.

In addition to the roads marked as finished and in operation, many of the companies, particularly those marked with a (†), have large portions of their lines graded, and will lay the track upon them during the present year. But I have no means of ascertaining the exact amount of graded road on each, as I have made a personal examination only of those lines making application for State Bonds.

Part of the Nashville and Chattanooga road, in Alabama, is placed as being in Tennessee.

I have placed in the above estimate such roads as have taken some steps to avail themselves of State aid, (with the two exceptions referred to,) so far as I have been able to ascertain, and left out those that have taken none, as the time has now nearly elapsed, under the general law, for them to have completed the first thirty miles of their respective roads. I have doubtless placed several roads in the list, expected to receive State aid, that may not comply with the law, or that will be materially shortened by making other connections than those originally contemplated, consequently reducing the State aid that much; while it may be possible that I have omitted some roads that may yet organize, and go to work and secure the State aid. But the estimate made is large, and it is thought will fully cover any possible contingency, as I feel assured that more of the roads that are placed in the estimate will never comply with the law, than there will be of those that are left out of the estimate that will yet come in, and comply with it. The whole estimate is, however, approximate, and is based upon the best information I have been able to obtain; but is believed to be very near what the actual results will prove.

It will be seen that the aggregate length of roads, as given, is sixteen hundred and thirty and eight-tenths miles, which, it may be safely assumed, will require for their completion an expenditure of over \$35,000,000; the State will have incurred a liability in this outlay of \$17,468,000, taking as her security, a lien upon the whole investment.

I beg leave to remark, that our railroads, so far as they now operate, must do mostly a local business, until they shall have established their various connections. One road is dependant upon another; and neither can exhibit its capacity in developing resources, giving energy and increase to trade, or rendering compensating dividends to its owners, until it shall fall into and become a part of the systems of other States.

The Tennessee system is yet in its infancy, and its importance can only be appreciated by contemplating our lines of road in their ultimate and varied connections with other roads of the State.—In this point of view, I beg leave to submit a few remarks, which I trust will not be considered out of place.

Commencing then, with the Mobile and Ohio road, (nearly graded through our State,) this is the second longest road in the Union, being only excelled by the Illinois Central, with which it is intended to connect at Cairo. The two united, from the Northern and Southern line, passing through West Tennessee, and will bring into close contact the Northern and Southern extremes of the Mississippi valley. This road in its progress from Mobile, intersects in Mississippi the line of

roads from New Orleans; crosses the Memphis and Charleston road about ninety miles from Memphis; at Jackson, Tennessee, it intersects the Mississippi Central and Tennessee road, which is but an extension of the New Orleans road; crosses the line of the Memphis and Ohio road at or near Trenton, in Gibson county, and from its northern terminus to that point, will aid in establishing another important line of southern travel, by way of Memphis and Grenada to New Orleans. North of the Memphis and Ohio intersection, at Union City, in Obion county, the main line of this road crosses the Nashville and North-Western road, (now in rapid progress); from this point it also throws off its Paducah lateral—the main stem passing on to its northern terminus at the mouth of the Ohio river. Falling back to McNairy county Tennessee, this road, so remarkable for its geographical relations and adaptations to the other roads in our system, sends off another lateral of sixteen and a half miles, (now under contract,) and is designed to connect with the Tennessee and Alabama railroad, at Hamburg. Thus by a slight divergence, it falls into the main Northern and Southern trunk lines, passing through Middle Tennessee, and aiding to establish another through line from New Orleans and Mobile to Louisville, Kentucky, and to Henderson on the Ohio river, at which points these Northern roads are intended to complete the connections, and will fall into the network system of roads in the North-western States, placing Nashville in direct connection with the great railroad centres of that important region.

The Edgefield and Kentucky road, passing through the coal regions of Kentucky, will establish a direct connection between Nashville and Chicago, while from its northern terminus, towards the south, it falls into line with the roads now projected or in progress, leading from Nashville, via Decatur, Alabama, to the southern portions of Alabama.

The Louisville and Nashville road, now placed under the most favorable auspices, will give an important outlet from the South to the North-eastern cities, via Louisville, Cincinnati, and other great central points.

The Alabama Legislature lately granted "material aid, to a central line of roads, leading from the Tennessee valley to the waters of Mobile Bay, which insures their speedy construction. This fact gives additional importance to the proposed Central Southern road, which would aid in establishing a direct line from Nashville along these routes, through the centre of Alabama.

The movement just adverted to on the part of Alabama, will present also a strong argument in favor of the construction of the Winchester and Alabama, and the South-western railroads, which, if carried to the respective connections contemplated by the friends of these enterprises, will give a line of road leading from Cincinnati to South Alabama.

Passing, however, to the Eastern portion of our system of improvements, I remark that the Knoxville and Kentucky, and the Knoxville and Charleston roads, when completed, will establish an important communication between Cincinnati and Charleston, and thus open up a highway between the Ohio valley and the South-Atlantic seaboard. Cincinnati and Charleston, (the Queen Cities of their respective States,) upon the completion of these projects, will have been for the first time locked in a lasting embrace!—"a consummation most devoutly to be wished." The line of roads from Knoxville, designed to connect that place with Charleston, is made up of four companies, to wit: The Knoxville and Charleston railroad company in Tennessee; the Tennessee River railroad company, in North Carolina; the Blue Ridge railroad company in Georgia; and Blue Ridge railroad company in South Carolina. These four companies together have a capital of nearly \$5,000,000. The enterprise contemplates the construction of two hundred miles of road, from Knoxville to Anderson Court-house, in South Carolina, which, if constructed, will place Knoxville one

hundred and twenty miles nearer to Charleston than by the present railway route. About fifty miles of the road in South Carolina was graded in September last, and about seven hundred hands were then engaged upon that part of the line.

A reference to the map will show the importance of the connection intended to be established by the proposed Western and Charleston railroad.

The Cincinnati, Cumberland Gap, and Charleston road is the Tennessee link in a line of roads from Cincinnati to Charleston, which is designed to enter the State on the North at Cumberland Gap, and passing out of it into North Carolina, by way of French Broad River, at Paint Rock. To complete this line of road, there is yet to be finished (besides the Tennessee part) one hundred and twenty-eight miles from Lexington, Kentucky, to Cumberland Gap, and, on the South, about one hundred miles from Paint Rock to Spartanburg, South Carolina. The Legislature of North Carolina has appropriated, as I believe, five millions of dollars to extend her Central road from Salisbury (the point at which it is completed) to Paint Rock. The North Carolina Central is intended to form a part of the trunk of said line of roads. The termini of the North Carolina Central are Paint Rock, on the French Broad, and Beaufort, on the Atlantic, with a lateral to Spartanburg.—This line of roads, if completed, will form nearly an air line through upper East Tennessee, from Cincinnati to Charleston. The only material divergence (of about thirty miles) is in approaching the Cumberland Mountain.

Returning to Memphis as a starting point, there is now rapidly forming another line of roads, destined to take an important position in our system of improvements. It may be properly called the North-Eastern and South-Western line. From Memphis, as a point of divergence, this line will be made up on the South-West of the roads projected and in progress, by the way of Little Rock and Fulton, in Arkansas, Shreveport, in Louisiana, and thence into the interior of Texas, there pointing to more western connections to be formed in that interesting State.

From Memphis, this line takes up its north-easterly course along the Memphis and Charleston, eastern end of the Nashville and Chattanooga, Chattanooga and Cleveland, East Tennessee and Georgia, East Tennessee and Virginia, Virginia and Tennessee, and Orange and Alexandria roads, to Alexandria in the District of Columbia; from which point it again takes up its air line course, by means of its more northern connections, to Boston, by way of Baltimore, Philadelphia and New York.

The completion of the New Orleans and Mobile lines of roads, will perfect the South-western connections in the direction of the two cities to which they respectfully lead. From Memphis to Alexandria, D. C., little is needed to perfect the line.—The Memphis and Charleston road will be finished early in 1857. The Orange and Alexandria is pressing its extension from Gordonsville to Lynchburg, a distance of about seventy-five miles. The Virginia and Tennessee road is now nearly finished. The shortened distance from Chattanooga, it is hoped, will be soon placed under contract, and the East Tennessee and Virginia company, struggling under a thousand difficulties, unfelt by their more favored neighbors, are steadily and certainly pushing their works to completion.—When these gaps shall have been filled up, East Tennessee will be relieved from her position of isolation, and, for the first time, will have a chance to develop her immense agricultural and mineral resources. This line of road is over three hundred miles nearer to Washington, from Memphis, and over one hundred and ten miles nearer from Atlanta, the railroad centre of Georgia, than by the way of Augusta and Wilmington. It escapes the frigid cold, and other vexatious incidents; of more Northern lines, on the one hand, and the sultry heats, uninteresting scenery, and sterile regions of the Southern line upon the other. In its course, it pierces the three great mountain ranges of the South—presenting, every hour, magnificent

scenery, fertile valleys, and cultivated regions to the eye of the traveler. Nature itself has decreed this line of roads to be one of the great arteries of trade, commerce and travel.

The Nashville and Chattanooga road, while at its eastern end it aids in forming the line just referred to, falls directly into connection with the Nashville and North-western road, now in progress, which will, upon its completion, cross our Northern and Southern routes, and give us a South-eastern and North-western trunk, directly connecting, by the way of Nashville, the system of roads actively progressing in Missouri with those of Georgia and South Carolina, and leading to their important seaports.

The Nashville and North-western, and Mississippi Central, contemplate a connection at Huntingdon, which, when consummated, will open up another outlet to New Orleans. The Mississippi Central road, from the State line to Jackson, Tennessee, it is understood, will have its roadway completed by April. The gap between Jackson and Huntingdon is under forty miles.

Permit me to remark, that the system of improvements, as designed by our Legislature, was marked with imperfections. Enterprises of inferior merit were, in some instances, dignified with the tender of State aid. This feature, almost inseparable from such a scheme, has, to a great extent, been corrected by the abandonment of such enterprises; and thus, the errors of legislation have been obviated by the foresight of our citizens. The general policy now being carried out is believed to be wise and prudent, and every wish of the heart is in favor of its consummation.

Should no new enterprises of doubtful utility be nursed into existence to mar the beauty of our system, and it continue to progress as it now does, Tennessee, by the liberality of her Legislature and the enterprise of her people, will soon have the satisfaction of seeing that she has contributed her full share towards weaving the great national web now spreading over the whole country; which, while it stimulates our commerce and develops our untold resources, will perform the more sacred office of holding the great sisterhood of States in a lasting and durable embrace.

A few suggestions, as to our Internal Improvement Laws, and I shall close.

No certain provisions for the adequate preparation of a sinking fund, for the redemption of the State Bonds, has yet been made. Instead of requiring companies to set apart a portion of their earnings for this purpose, five years from the completion of their road, as is now the case, it ought to commence within a certain specified period from the issuance of the Bonds.

Our Bonds are now placed in the hands of the officers of the different companies, to be negotiated by them. In many instances, they have no experience in the money markets of the United States and Europe. The effect cannot be otherwise than injurious to the interests of the State, as well as the companies. Several States have been forced to abandon this policy, and to appoint special agents, at the great centres of capital, to negotiate their Bonds. The plan has worked well; and I submit, that something of the sort should be done in Tennessee.

At present, we have no law regulating the grade of roads. It is comparatively easy to build a railroad that shall conform to the inequalities of the surface over which it passes; but, when constructed, its capacity for usefulness is, in a great measure, destroyed, and its ability to meet the demands upon it may be well questioned. A prudent and reasonable restriction in this matter, is believed to be important.

At present, there is no direct relation established between the Road Commissioner and the Legislative Department. I would suggest, that the immense interest which the State has embarked in her railroad enterprises would seem to require that this officer, in addition to his other duties, should, at each meeting of the Legislature, submit a full report of the condition, prospects and

working of the different railroads now receiving the aid of the State.

Respectfully submitted,

R. G. PAYNE, Road Commissioner.

TABLE

Showing the distances from most of the principal commercial cities of the Union, and their connection with the Tennessee system of Internal Improvements.

Nashville to New York, via Louisville, Pittsburg and Philad....	1,091 miles.
" to New York, via Cincinnati, New York and Erie R.R.	1,146 "
" to New York, via Knoxville and Washington City....	983 "
" to New York, via Augusta, Branchville & Wash'ton City.....	1,340 "
" to Charleston, S. C., via Augusta, Ga.	597 "
" to Charl'ton, via Rabun Gap R. R.....	602 "
" to Richmond, Va., via Augusta, Ga.	991 "
" to Richmond, via Knoxville.	740 "
" to Savannah, via Atlanta & Macon	581 "
" to Chicago, via Henderson..	503 "
" to New Orleans, via Jackson, Tenn.....	585 "
" to New Orleans, via Columbia and Hamburg, Tenn.	514 "
" to Memphis, via Brownsville, Tenn.....	225 "
Memphis to New Orleans, via Grenada	360 "
" to New York, via Knoxville and Washington City....	1,150 "
" to New York, via Chattanooga and Augusta	1,504 "
" to Charleston, via Chattanooga and Augusta....	758 "
" to Charleston, via Athens, Tenn., and Rabun Gap R. R.....	763 "
" to Richmond, Va., via Knoxville, Tenn.	904 "
" to Richmond, via Augusta, Ga.	1,155 "
Mobile to Chicago, via Jackson, Tenn.	858 "
New Orleans to Chicago, via Jackson, Tenn.....	885 "
" to Chicago, via Memphis....	887 "
" to Louisville, via Nashville..	700 "
" to New York, via Knoxville.	1,318 "
" to New York, via Atlanta & Augusta	1,632 "
Cincinnati to Charleston, via Knoxville and Aikin	663 "
" to Savannah, via Knoxville.	652 "
" to Charleston, via Cumberland Gap and Paint Rock R. R.....	650 "

NOTE.—The roads projected, or in progress, in Alabama, will place Knoxville in a direct line of travel between Mobile and Cincinnati.

Pittsburg and Steubenville Railroad.

In regard to the Pittsburg and Steubenville road the *Chronicle* says:

"The Steubenville road is at last emerging from the clouds and thick darkness that have so long obscured its prospects. The gentlemen who now hold the road under contract have arrived upon the ground, and we understand that the work will be commenced in a few days with a strong force of men. It is expected that the road, except the bridging, will be completed before the termination of the present year. The Board of Directors held a meeting on Wednesday, when Isaac Jones, Esq., according to previous arrangement, resigned the Presidency of the company, to take effect on the first of October. R. W. Latham, Esq., of New York, was unanimously chosen to fill the vacancy. Mr. Latham is a gentleman of tried financial ability, and has been largely instrumental in consummating the contract by which the road is to be

completed. We have the satisfaction of knowing that this important road is in a fair way to attain a condition of final prosperity."

Chicago and Burlington Railroad.

Earnings for 1856:

	May.	June.	July.
Freight....	\$86,580.83	\$109,966.59	\$129,458.34
Passengers.	54,684.14	53,096.29	45,210.71
Miscel's ...	1,783.10	1,515.36	1,613.94

Total.....\$143,048.07 \$164,578.24 \$176,282.99

	May.	June.	July.
Freight....	\$81,197.84	\$109,125.44	\$90,006.22
Passengers.	44,164.06	43,863.13	36,198.18
Miscel's ...	1,889.29	1,389.29	1,889.29

Total.....\$126,751.19 \$157,377.86 \$127,593.69

Railroad Car Springs.

If there is any one thing that annoys a traveler on a railroad, more than another, it is a bad spring. To be pitched and tossed about without mercy, without feeling, is a condition that is certainly anything but enviable. We can stand a rough road, but a combination of rough roads and bad springs is most unbearable. Feeling that this is too often the case, we have taken some pains to ascertain if there was not something, new or old, in this line, that could supplant those now in use. In our investigation we have found many kinds, and we trust we shall not be considered as intrusive if we should detail some of our observations.

Metal, it has been pretty generally ascertained, makes the best spring, and attention is generally directed towards springs of this class.

Of the kinds that we have seen, there are but two that deserve much attention; and of these two, but one, we think, will ever be found to answer the desired purpose. To be sure there are many that are apparently well adapted to the purpose—but when the test comes, the failure comes also. Much has been said with regard to a spring made in England, known as Bailie's Spring; but, although a very good one, it will answer for one purpose only—that is, carrying locomotives; the weight never varying more than two or three hundred pounds, of course any spring that can stand the pressure of the locomotive, without setting, will answer; but for passenger or freight cars, where the weight is varied continually, they have not been found to answer the purpose. They are too rigid when of sufficient power; besides, there is too much friction. It has been argued that friction improves a spring. This we have never been able to believe. The Gardiner's Conical Volute Spring is the only one which, to our fancy, overcomes the difficulties and objections that have been urged to those now in use and the Bailie Spring. Its construction is certainly the most simple, its appearance the most unique of any made; it is light, cheap, to all appearances the most durable, and withal most powerful of any we have seen. The motion, when under the car, is soft and delicate; there is no rude jar, no unequal, sudden motion; but it rides, as a spring should ride; and this spring has no friction. Mr. Gardiner in this has certainly, by the most simple means, accomplished a great object—outdistanced all competitors. Many have striven to attain this point, but failed; and when the failure came, said that friction was necessary. Believe us, it is injurious.

We have seen the most severe tests inflicted upon the Gardiner Spring, but in all cases it was triumphant. We understand that for the past eight months they have been in use on one of our City Railroad Cars, and at this present day are as good as at first. They were put under an iron car, where, in the same length of time, three sets of India rubber had been rendered useless. We look forward to this invention as one that will eventually supplant all other springs in use. A company has been formed, we believe, of wealthy gentlemen, who intend to manufacture them on an extensive scale. Mr. Charles Minot, late Super-

tendent of the New York and Erie Railroad is their President. The fact that this gentleman has consented to the use of his name in connection with an article of this kind, is a sufficient guarantee of the estimation in which it is held by railroad men. We have confidence in Mr. Minot's opinion.—*Am. Railway Guide.*

More Iron.

Over six hundred tons of iron, for the Tennessee and Mississippi railroad, was landed at our wharf yesterday. The freight bill amounted to the snug little sum of \$3,024.

Texas Statistics.

The report of the State Treasurer of Texas shows the number of acres of land, upon which taxes were assessed, to be 45,893,869, and the assessed value, \$58,671,126. The number of town lots assessed was 40,136, at a value of \$10,108,638. The number of negroes is stated at 105,603, value, \$53,873,924; number of horses, 171,814, at \$7,943,878; head of cattle, 1,433,792, at \$8,922,545. The total value of assessed property in the State was \$149,521,451. The whole tax raised upon this property was but \$225,270.40, which, added to the poll tax, makes the whole amount raised by taxation \$246,252.90.

Milwaukee and Watertown Railroad.

We learn that the work on the extension of this road is progressing rapidly, and that the grading is nearly completed to Lowell, ten miles from Watertown, the present terminus of the road.—The work of driving the piles across "Mud Lake," is being pushed at the rate of 100 to 150 feet per day, and that the contractors have arranged for another "driving machine," which will be put on the work immediately, and which will secure the completion of the work within thirty days. The iron is ready, and the track-laying is to be commenced on the first day of August. The officers of the road are pushing the work with great vigor and confidentially expect to reach Lowell station by the first day of September next. From Lowell to Columbus, nine miles, there is a strong force on the line, to which the contractors are making large additions, the grading is so far advanced that, with the large force which will be concentrated on that portion of the work as soon as the east end is completed, will without doubt be sufficient to complete that portion of the grading as fast as the iron can be put down.

There is no bridging or piling west of Lowell, and the heaviest portion of the work is nearly done. On the 1st of November next the Directors confidentially expect to open the road to Columbus, a distance of 64 miles from Milwaukee, and on an air-line toward Portage City, and less than 27 miles from that point.

When this route is completed to Columbus, there can be no doubt it will be one of the best paying routes in the west. The county of Columbia is one of the richest farming counties in the State, perhaps in some respects the best, its rolling prairies on the south and west, with abundance of running waters, with the splendid opening on the north and east, with plenty of timber, and water power in abundance, render this portion of the State capable of furnishing an immense amount of business for this road.

Although the enterprise has encountered much opposition and many difficulties which have prevented its completion as early as its friends desired, it has been managed with integrity and in a manner which has in an eminent degree secured the confidence of the stockholders and capitalists who have most heartily embarked in the project, and although it would have been desirable to have completed the work at an earlier day, they have the fullest confidence in the directors, and have the satisfaction of knowing that its direction is composed of gentlemen of large means, of great energy, and who are bound to carry forward this useful work with prudence and economy, and who are determined to bring it to a successful consummation at an early day.—*Daily Wisconsin.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,538,100	2,978,700	6,019,929	470,647	110,247	6	65	
Androscog. & Kennebec.....	56	588,042	1,622,905	2,210,947	209,476	110,247	none	14	
Kennebec & Portland.....	56	1,114,725	1,661,236	2,775,961	232,214	122,491	6	85	
Port. & Saco, & Portland.....	51	1,367,000	119,237	1,486,237	270,214	122,491	6	85	
Boston, Concord & Montreal.....	93	1,808,063	1,069,512	2,877,575	333,224	143,568	2	17	
Cheshire.....	53	2,085,926	899,813	3,175,739	336,921	138,454	2	17	
Concord.....	35	1,500,000	8,242	1,508,242	370,629	138,299	2	41	
Northern, N. H.....	82	2,768,400	none	3,016,635	372,077	55,173	none	4	
Con't & Passumps. Riv.....	61	1,048,146	787,608	1,780,062	152,077	55,173	none	4	
Rutland & Burlington.....	120	2,233,376	2,662,396	5,378,426	394,971	214,783	none	1	
Vermont Central.....	117	5,000,000	3,560,236	8,465,366	320,119	214,783	none	1	
Boston and Lowell.....	27	1,830,000	325,635	2,155,635	499,764	149,877	6	62	
Boston and Maine.....	83	4,076,974	160,000	4,179,685	854,423	339,060	6	77	
Boston and N. Y. Central.....	74	2,240,300	1,518,671	3,468,181	69,917	219,689	none	6	
Boston and Providence.....	56	3,160,000	350,132	3,677,154	558,671	404,461	6	83	
Boston and Worcester.....	68	4,600,000	655,428	4,865,428	1,008,006	65,627	6	49	
Cape Cod.....	47	881,690	280,506	1,162,196	119,221	86,639	6	47	
Connecticut River.....	52	1,691,110	273,241	1,864,351	286,653	103,968	6	40	
Eastern, Mass.....	60	2,583,400	2,947,737	4,621,137	647,281	305,968	6	65	
Fitchburg.....	67	3,540,000	163,700	3,703,700	681,163	226,071	6	65	
North-Eastern.....	30	800,202	225,585	988,621	191,693	54,633	6	83	
N. Bedford and Taunton.....	21	500,000	none	500,000	198,491	54,633	6	83	
Old Colony and Fall River.....	67	3,015,100	292,650	3,307,750	363,499	296,738	6	83	
Vermont and Mass.....	77	2,232,641	1,033,670	3,266,311	266,726	87,313	none	7	
Western, Mass.....	155	5,160,000	6,968,420	12,128,420	1,869,678	638,013	7	85	
Worcester and Nashua.....	48	1,141,000	200,565	1,341,565	211,780	75,760	2	40	
Providence and Worcester.....	43	1,510,020	335,461	1,845,481	314,430	138,057	2	70	
Hartford and N. Haven.....	72	2,356,000	989,000	3,345,000	730,012	252,799	10	23	
Hartford, Prov. and Fishkill.....	123	2,008,110	2,060,686	4,068,796	258,686	119,611	none	23	
Housatonic.....	110	2,000,000	414,240	2,414,240	339,196	174,227	none	23	
Naugatuck.....	57	1,031,800	524,244	1,556,044	220,459	93,768	none	23	
N. York and N. Haven.....	62	3,000,000	2,876,808	5,876,808	884,806	338,877	none	23	
N. Haven and N. London.....	50	734,258	736,165	1,470,423	88,007	30,318	none	23	
N. London, W. & Palmer.....	68	609,200	1,073,673	1,682,873	134,044	64,840	none	23	
Norwich and Worcester.....	66	2,122,300	373,489	2,495,789	304,236	88,458	2	25	
Albany Northern.....	32	439,005	1,025,098	1,464,103	117,716	9,904	none	25	
Black River and Utica.....	35	643,330	371,859	1,015,189	974,823	68,333	none	25	
Buffalo, Conn. and N. Y.....	100	1,487,871	1,601,153	3,089,024	172,479	68,333	none	25	
Buffalo and N. Y. City.....	92	738,439	2,597,849	3,336,288	238,892	31,896	none	25	
Buffalo and St. Line.....	69	1,300,000	1,040,000	2,340,000	679,750	35,763	10	25	
Canandaigua and Elmira.....	47	434,111	1,022,393	1,456,504	174,089	69,506	none	25	
Canandaigua & Niagara Falls.....	98	1,515,000	2,279,854	3,494,854	1,812,087	48,649	none	25	
Cayuga & Susquehanna.....	35	687,000	504,689	1,191,689	301,793	116,462	none	25	
Hudson River.....	144	3,768,466	9,250,362	13,018,828	1,812,087	48,649	none	25	
Long Island.....	95	1,876,148	686,949	2,563,097	301,793	116,462	none	25	
New York Central.....	534	24,154,860	14,462,742	38,617,602	6,563,561	2,162,126	10	118	
New York and Erie.....	404	10,022,958	12,286,669	22,309,627	4,488,992	2,027,118	10	118	
New York and Harlem.....	134	5,717,100	4,069,769	9,786,869	1,635,577	234,126	10	118	
Northern, N. Y.....	118	1,635,022	4,404,874	6,039,896	1,200,153	135,754	10	118	
Oswego and Syracuse.....	35	399,000	218,681	617,681	120,640	59,982	3	118	
Potomac and Watertown.....	29	467,200	294,159	761,359	740,683	21,909	none	118	
Rensselaer & Saratoga.....	25	610,000	140,000	750,000	806,423	241,149	82,600	7	
Saratoga and Whitehall.....	48	500,000	396,000	896,000	71,909	21,089	none	118	
Saratoga & Binghamton.....	80	768,399	1,578,804	2,347,203	169,484	22,503	none	118	
Troy and Boston.....	27	437,530	737,079	1,174,609	166,363	55,184	none	118	
Watertown and Rome.....	97	1,070,378	700,979	1,771,357	404,374	172,474	5	118	
Belvidere Delaware.....	64	1,000,000	1,019,000	2,019,000	101,355	76,334	none	118	
Camden and Amboy.....	94	3,000,000	11,407,200	14,407,200	2,017,127	961,941	12	125	
Camden and Atlantic.....	60	369,320	1,622,131	1,991,451	122,417	60,080	none	118	
New Jersey.....	30	3,492,350	690,000	4,182,350	861,514	500,747	10	118	
New Jersey Central.....	63	2,000,000	2,266,178	4,266,178	893,728	171,603	6	118	
Morris and Essex.....	53	1,167,965	376,000	1,543,965	229,841	96,267	6	118	
Albany Valley.....	44	1,367,867	324,664	1,692,531	1,988,377	Recently opened.	none	118	
Catskill, W. & Erie.....	33	1,700,000	1,940,000	3,640,000	219,253	52,450	none	118	
Cumberland Valley.....	56	1,099,500	12,211	1,111,711	146,881	66,994	none	118	
Del. Lack. & Western.....	109	3,061,622	3,884,702	6,946,324	648,911	259,263	6	118	
Erie and North East.....	20	600,000	150,000	750,000	750,000	100,000	10	118	
Phila. & Sunbury.....	33	600,000	1,200,000	1,800,000	89,636	53,335	none	118	
Little Schuylkill.....	28	2,606,100	846,222	3,452,322	383,301	255,930	9	118	
Northern Penn.....	19	2,530,555	731,492	3,262,047	648,911	259,263	6	118	
Pennsylvania.....	216	12,356,625	7,619,008	19,975,633	3,533,333	1,829,277	6	98	
Phil. and Reading.....	96	11,030,309	7,438,800	18,469,109	4,321,798	2,093,916	10	84	
Phil. W. & Baltimore.....	96	6,312,806	3,083,003	9,395,809	942,449	371,124	10	84	
Phil. Germ. & Norristown.....	38	899,350	376,800	1,276,150	206,981	113,443	9	59	
Pittsburg and Erie.....	147	1,339,681	111,493	1,451,174	1,389,630	1,389,630	10	84	
Williamsport and Elmira.....	289	2,093,740	262,880	2,356,620	1,075,650	503,500	10	84	
Baltimore and Ohio.....	382	13,106,000	9,070,491	22,176,491	3,711,463	1,601,900	3	64	
Washington Branch.....	41	1,655,000	25,000	1,680,000	386,229	124,981	6	64	
Northern Central, Md.....	84	1,860,000	2,630,000	4,490,000	5,544,733	5,544,733	282,182	10	84
North-Western Va.....	165	418,633	4,316,073	4,734,706	1,729,666	1,729,666	10	84	
Orange and Alexandria.....	97	1,457,500	638,622	2,096,122	211,505	111,363	10	84	
South Side.....	123	1,371,700	1,480,012	2,851,712	123,466	69,710	none	84	
Pittsburg & Steubenville.....	32	1,221,277	250,000	1,471,277	914,696	379,366	10	84	
Virginia Central.....	138	2,800,666	1,061,248	3,861,914	1,184,616	1,184,616	10	84	
Virginia and Tennessee.....	149	2,500,000	2,969,780	5,469,780	265,920	126,329	10	84	
Richmond and Danville.....	127	2,000,000	1,200,000	3,200,000	516,309	144,662	10	84	
Richmond & Petersburg.....	22	789,100	26,648	815,748	151,947	73,234	none	84	
Rich'd, Fred. & Potomac.....	130	1,000,000	730,500	1,730,500	232,172	120,212	7	84	
Petersburg & Roanoke.....	63	769,000	158,502	927,502	263,374	123,661	4	84	
North Carolina.....	228	4,000,000	4,235,000	8,235,000	1,235,000	1,235,000	10	84	
Wilmington & Manchester.....	171	1,070,775	1,373,999	2,444,774	339,800	151,064	none	84	
Raleigh and Gaston.....	97	973,300	120,673	1,093,973	173,923	103,392	2	84	
Charlotte & S. Carol.....	109	1,201,000	380,000	1,581,000	291,210	138,875	6	84	
Greenville & Columbia.....	165	1,283,404	988,800	2,272,204	214,305	306,774	7	84	
South Carolina.....	203	4,189,020	2,731,545	6,920,565	1,585,991	883,402	7	84	
Atlanta and La Grange.....	87	719,842	223,000	942,842	1,092,222	181,193	7	84	
Georgia.....	211	4,168,000	260,991	4,428,991	1,098,202	550,350	7	84	
Georgia Central.....	191	3,833,140	none	3,833,140	1,280,670	645,774	9	84	
Memphis and Western.....	102	1,233,560	167,712	1,401,272	360,892	96,104	10	100	
Montgomery & W. Point.....	116	1,274,000	664,816	1,938,816	1,929,416	118,824	8	100	
Brunswick and Florida, Ga.....	30	300,000	300,000	600,000	560,000	253,306	8	100	
South Western.....	92	1,067,466	465,500	1,532,966	579,906	253,306	8	100	
Tennessee and Alabama.....	30	246,486	170,980	417,466	176,440	81,631	159,672	100	
Tennessee and Mississippi.....	217	2,179,440	2,127,002	4,306,442	4,636,412	199,932	109,236	100	
Mobile and Charleston.....	163	2,668,556	1,802,921	4,471,477	628,303	284,973	43,636	100	
Miss. Central.....	158	642,634	none	642,634	1,559,660	244,014	96,902	100	
N.O., Opelousa & G.W.....	55	2,930,426	671,645	3,602,071	2,057,666	107,896	100	100	
Vicksburg, Shreveport & Tex.....	111	1,117,750	1,000,000	2,117,750	2,000,000	107,750	100	100	
East Tennessee and Ga.....	111	1,000,000	1,600,000	2,600,000	2,500,000	100,000	100	100	
East Tennessee and Va.....	19	625,426	938,693	1,564,119	1,033,781	112,177	100	100	
Nash. and Chattanooga.....	151	2,319,330	1,497,081	3,816,411	3,843,694	316,080	100	100	
Covington & Lexington.....	98	1,302,804	2,285,939	3,588,743	3,738,763	284,973	128,664	100	
Lexington and Frankfort.....	29	430,656	158,099	588,755	637,071	93,268	43,636	100	
Lexington and Danville.....	65	694,444	622,734	1,317,178	1,559,660	244,014	96,902	100	
Louisville and Frankfort.....	65	698,236	669,061	1,367,297	1,559,660	244,014	96,902	100	
Atlantic & Gt. Western.....	254	866,939	77,294	944,233	1,185,626	171,929	65,000	100	
Bellevue and Ind.....	118	1,861,636	2,025,925	3,887,561	2,586,652	236,285	140,823	100	
Cin., Col. and Cincin.....	141	4,847,020	122,857	4,969,877	4,613,722	782,0			

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	1,000,000	Do. inconvertible	7	April, October	"	1866	85	85
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	82	88
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	70	72
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1869	86	86
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72 1/2	77 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	78
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87	87
Cleveland and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	65	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	87	88 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	81
Indianapolis & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	82 1/2	86
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	75
Little Miami	1,600,000	Do. inconvertible	6	2 May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	101 1/2	101 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	102 1/2	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	95	96 1/2
Do. do.	650,000	Do. 2d do. do.	8	April, October	"	1863	95	96
Do. do.	1,250,000	Do. 3d do. do.	8	June, Decemb.	"	1877	88	88
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	85	85
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	85	85
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	95	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	80	80
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	98	98
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	80	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1867-72	78	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	72	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	86 1/2	86 1/2
Do. do.	1,125,000	Do.	6	Jan'y, July	Balt.	1875	87	88 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	92 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104 1/2	104 1/2
Do. do.	6,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	98	98 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	99 1/2	100
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	93	94
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	87 1/2	88
Hudson River	3,500,000	Convertible	7	Jan'y, July	"	1862	91 1/2	92 1/2
Do. do.	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	10 June, 10 Dec.	"	1860	87 1/2	88 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	67	68
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	91 1/2	91 1/2
Do. (Free Land)	3,000,000	Mfge 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	100 1/2	101 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	95	98
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-73	83	85
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	81	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	92	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	89	90
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1866	84 1/2	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	59	59 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-69	7	15 June, 15 Dec.	"	1864	102 1/2	103
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	100	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	100	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	85	85
Do. do. 1844, '45, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	85	85
Do. do. 1849	2,400,000	Do. inconvertible	6	April, October	"	1870	86	87

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York, 7 per ct. 1857	Feb'y	100	100	Milwaukee, 7 per ct. coup.	X	Divers	85
Do. 5 do. 1858-60	May	85	87	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	74
Do. 5 do. 1870-75	August	95 1/2	96 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	81	84
Do. 5 do. 1880	November	94 1/2	96	Philadelphia, 6 per ct. 1878-98	Jan'y, July	91 1/2	92
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August	97 1/2	97 1/2	Pittsburgh, 6 per ct. coup.	X	Divers	74
Allegheny, 6 per ct. coup.	Jan'y, July	76	76	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	85
Baltimore, 6 per ct. 1879-90	Quarterly	97	98	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 6 per ct. coup.	April, October	97	99	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	100 1/2	St. Louis, 6 per ct. coup. Long X	Do.	Do.	77 1/2
Clev'rd, 7 per ct. cp. W.W. 1879 X	Do. do.	101	102	Do. do. Municipal.	Do.	Do.	79 1/2
Cincinnati, 6 per ct. coup.	X	Divers	89	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	Do.	72
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89	90	S.F. disco, 7 p. ct. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871 X	Do.	Do.	95
Detroit, 7 per ct. cp. W.W. 1877 X	Feb'y, August	100	102 1/2	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	85	85
Union, 8 per ct. cp. Long X	March, Sept.	101	105	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	52 1/2	55
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	94	96	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. cp. 1880-83 X	Divers	78	81	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	81	81
Memphis, 6 per ct. coup. 1883 X	Jan'y, July	67	70	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending August 6th, 1866.

BONDS.		
\$5,000 Little Miami, 6 per ct., 1st Mortg.	80	(& int.)
10,000 Cin. Wilm. and Zanesv. 7 per ct. 2nd Mortg.	45	"
2,000 Hillsboro' and Cin., 7 per ct. 1st Mortg.	45	"
1,000 Indiana Central, 10 per ct. Income	95	"
3,000 Marietta & Cin., 7 per ct. Domestic	39	"
1,000 City of Wheeling 6 per cent.	65	"
2,000 City of Allegheny, 6 per cent.	73	"
1,500 Columbus & Xenia, Dividend, 7 per cent.	90	"
5 years	90	"
6,000 Cov. and Lex., 10 per ct. Income	50	"
873 08 Little Miami, Dividend Scrip.	80	"
STOCKS.		
35 Shares Little Miami	90	"
150 " Ohio & Mississippi	6	"
20 " Covington and Lexington	16	"
118 " Marietta and Cincinnati	16	"
3 " Cin. Ham. and Dayton	65 1/2	"
40 " " "	65	"
200 " Cin. & Chicago	3	"
80 " Indianapolis and Cincinnati	88	"
74 " Columbus and Xenia	82	"
202 " Peru and Indianapolis	11	"

By KIRK & CHEEVER.

For the week ending August 5th, 1866.

BONDS.		Per ct.
Little Miami, 6 per ct. Mortg.	80	
Covington & Lexington, 2nd Mortg. 7 per ct.	65	
Ohio & Mississippi, 2nd Mortg. 7 per ct.	49	
Indianap. & Cin., 2nd Mortg. 7 per ct.	80	
Cin. Ham. and Dayton, 2nd Mortg. 7 per ct.	64	
Hillsboro' and Cin., 7 per cent. 1st Mortg.	49	
Covington & Lexington, 10 per ct. Income	55	
Indianapolis and Cincinnati Dividend	70	
Columbus and Xenia Dividend, due Jan'y 1, 1861	67 1/2	
Do. do. due July 1, 1864	85	
Little Miami, Dividend Scrip, issued June, 1856	79	
STOCKS.		
Bellefontaine and Indiana, 25.—Cin., Ham. and Dayton, 67.		
—Col. and Xenia, 82.—Cincinnati, and Chic., 3.—Covington & Lexington, 15.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 58.—Little Miami, 80.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 16.—Ohio and Mississippi, 8 1/2.—Hillsboro' and Cincinnati, 16.—Peru and Indianapolis, 15.—Cincinnati, Wilm. and Zanesville, 14.		

Marie & Kane's Money Circular for the
European Steamer of the 13th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Aug. 11, 1866.

Our last report was dated Aug. 5. Since, the stock market has been more active, but almost universally at declining prices. The greater demand for money, already noticed in our last, has rather increased than otherwise, and many stocks—almost exclusively the speculative ones—have been forced on the market in anticipation of a greater activity in money. The orders for our stocks from Europe by the last mail were to a very fair extent, but still not sufficient to check the general downward tendency of our market. State Stocks.—The sales have been small this week, with very few fluctuations. Virginia declined 3/4; California 7/8, 1870 sold at a decline of 3 per cent., but those of 1875 brought again 70; Missouri rose 1/2. City and County Bonds.—There has been some demand for St. Louis City and County Bonds at better prices,—the supply of these securities becoming very limited. The transactions in other bonds have been small. Railroad Bonds.—The sales of Illinois Central bonds have again been extensive; they close at a decline of 1/2.—Freeland bonds, with privilege, sold at 3/4; and Erie 1883 bonds at 1 per cent. advance. N. Y. Central, 1869, fell off 1, and Erie 1871 bonds 3/4. Several lots of Michigan Central 1863 bonds were also bought for Europe at 102 1/2; also, some La Crosse and Milwaukee, Racine and Mississippi, Milwaukee and Mississippi, and Galena and Chicago 1st mortgage bonds. Railroad Shares.—The whole lot shows a decline, varying from 1/2 to 2 1/2 per cent., except Illinois Central, which sold at an advance of 1/2 per cent. Erie declined 1 1/2; Reading, 1 1/2; N. Y. Central, 1; Michigan Central, 1; Michigan Southern, 1 1/2; Cleveland and Toledo, 2 1/2; Chicago and Rock Island, 1 1/2; Cleveland and Pittsburgh, 1 1/2; Milwaukee and Mississippi, 1 1/2; Harlem, 1 1/2; Panama, 2 1/2. The transactions have been pretty lively in almost all stocks, but in Erie and Reading more particularly so. Money.—The demand has been more active than for the past week. Loans on call, 7 per cent. discount; 7 1/2 for first class bills; 9 1/2 for names

less known; stock contracts, 102½ per cent. Exchanges.—Very little doing, with hardly any alteration in rates. London, 109¾; Paris, 5.17½. MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 12th inst.

[TRANSLATED.]

NEW YORK, Monday, Aug. 11, 1856.

There is no very striking alteration to notice in our stock market since our advices of 5th instant. Specie shipment, which, without being on an increased scale, continues steadily, does somewhat attract attention. Money, although easy to procure, is nevertheless in more active demand. This has brought about more freedom in transactions, especially in the more speculative stocks, but with heaviness in prices, which are generally lower than by last week's quotations, if we except three or four of the bonds, for which there was some foreign demand. On the whole, owing both to a desire to realize on speculative shares and to the execution of some European orders, there has been less dullness than the previous week. Besides these regular transactions, the negotiations which we notice below would indicate that, spite of the general indisposition to buy new issues of Western railroad securities, when some of them are presented which appear undoubtedly well based, they still find takers. State Stock.—There was a fair demand for Virginia 6s, Indiana 5s, and particularly for Missouri 6s, the two former at ¾ and ½ decline, the latter at an advance of ½ per cent.—City and County Bonds.—We have but a few retail sales to notice of St. Louis City and County 6s, Albany 6s, both at rather better prices; also of Pittsburgh 6s, (municipal,) which sold higher than our quotations for railroad issues. Railroad Bonds.—There was but a very moderate amount done of Illinois Central Construction at a decline of 1c; Freeland rose ½, with very few sales.—There was a fair demand for New York Central 6s, which are 1 per cent. lower, and for Erie 7s of 1871 and 1883; the latter at 1 per cent. advance. At private sale there were transactions of some amount in Michigan 8s, 1869, and in Milwaukee and Mississippi, first mortgage, third section, without any marked fluctuations. We notice the negotiation of an issue of \$350,000 first mortgage bonds on the first section of the Burlington and Missouri railroad, (Iowa). These bonds bear 8 per cent. interest, are redeemable in 1876, and have the privilege of convertibility in the shares of the company till 1871. A sinking fund of 2½ per cent. annually is provided for in the mortgage deed. We give below further details about these bonds, the road, and the grant recently made in its favor by the Government of the United States of public lands. Railroad Shares.—The decline is without exception, and in some cases rather heavy. There has been some movement in Erie, New York Central, Reading, and Cleveland and Toledo, and to a less degree in Michigan Southern, Cleveland and Pittsburg, and in Chicago and Rock Island. Panamas with few sales have declined 2¾. Money is in better demand, 7 for call loans. Paper—8a9 for first class.

DE COPPET & CO.

Berths in Railroad Cars.

The Illinois Central railroad is now introducing upon their road a new style of passenger cars, which are far ahead of anything in that line yet in the West. Some of these contain six state rooms, each having two seats with cushioned backs long enough for a person to lie upon. The back of the seats are hung with hinges at the upper edge, so that they may be turned up at pleasure, thus forming two single berths, one over the other, where persons may sleep with all the comfort imaginable. In one end of the car is a small wash-room, with marble wash-bowl, looking-glass, &c. On the opposite side of the car, from the state-room, is a row of seats with revolving backs similar to barber's chairs, so arranged that the occupant may sit straight or recline in an easy atti-

tude at pleasure. The other cars have each two or three similar state-rooms.—Exchange.

American Railroad Journal.

Saturday, August 16, 1856.

Syracuse and Binghamton Railroad.

In another column will be found an advertisement of the sale of the Syracuse and Binghamton railroad, which is to take place on the 20th of September next. The sale is on behalf of the first mortgage bondholders.

The Syracuse and Binghamton railroad connects the above towns by a line of 80 miles in length. It is well built, and is now in excellent running order. It has an ample equipment, costing about \$250,000. The road is also well provided with depot and station buildings. The track has a gauge of 6 feet, and is laid with a heavy T rail. The total cost of the road at the date of the company's last report was about \$2,400,000. The total issue of first mortgage bonds is \$1,200,000.

The road we have always believed to be a valuable one, and with improvements contemplated and now on the point of being carried out, may be made productive on its entire cost. A leading object in its construction was the formation of a continuous line of railroads from the coal fields of Pennsylvania to Syracuse and Oswego. This object has not yet been accomplished, which is one reason for the recent embarrassments of the Company. There, however, appears to be no doubt that this connection will be speedily formed by the construction of a new road from Oswego to Syracuse, which will bring the Syracuse and Binghamton railroad in connection with the Erie Canal, the salt works of Syracuse, as well as with Lake Ontario. The demand for coal from all these points is very large and is rapidly increasing. There appears no doubt that its transportation would yield a very large income. The coal trade to the Lakes would be followed by a reciprocal one toward tide-water. Taken together they would very soon afford an ample business for the support of the road.

Though the road has a fair local business, and one in passengers much above the original estimate, yet a great prospective value results from its relations to Oswego, the chief commercial town on Lake Ontario. This is by far the nearest Lake port to tide-water, and is consequently on the cheapest route for all the territory dependent upon the great Lakes. Owing to this fact, the growth of its commerce has exceeded in ratio that of any other Lake port, and, as it seems probable, is soon to exceed that of any other connected with the Eastern trade. By means of its immense water power, it is already one of the leading manufacturing towns in the State, particularly in the article of flour. It is also the great entrepot for the Canadian trade, which has already become one of immense magnitude and importance since the establishment of reciprocal free trade with the British Provinces. A railroad connecting such a point as Oswego with the coal fields and with New York cannot fail to have a business of a first class work.

The total cost of the road according to the last report to the Legislature, was \$2,272,777. Total

earnings for the first year after its opening was \$172,000. The proposed connections would undoubtedly soon treble this sum, making the road a good property upon its entire cost.

The Locomotive.

No. 6.

By THEODORE KAUSON, Civil and Mechanical Engineer.

The results already mentioned in regard to the strength of the different kinds of rivetings, are of course dependant on the dimensions of the rivets used and thickness of iron. The diameter of the rivet, their distances from centre to centre, and the distance from the rivet to the edge of the sheet, are the most important points to be considered. Each must have a proportion that will enable all to resist equally. Riveting may be divided into three classes, namely:

1st. The sparse riveting, with strong rivets; which have the advantage of great strength, in comparison with the 2d close riveting, with small rivets; which are used where density is demanded. The 3d kind, with moderately strong rivets and medium riveting, will answer when both great strength and density are required. Hence the character of the boiler determines the kind of riveting to be used. No. 3 will correspond to the character of a locomotive boiler. For the details of its application, the following rules are recommended:

Thickness of the boiler iron

- ×2 gives the diameter of the rivet.
- ×4 " diameter of the rivet head.
- ×4 " distance from the centre of the rivet to the end of the sheet.
- ×5 " distance from centre to centre of the rivet.

At present, a machine for working the riveting is employed in large shops. This machine has been lately perfected. It operates by a lever, moved by steam; while one piston is riveting the head, a stamper calks the other end. The riveting is thus made perfect, and the noise of the old practice in a great degree avoided.

The principal points relating to the construction of boilers, have now been considered.

The examination of the parts which are required to give the boiler entire security, and also of those parts which influence the combustion, and therefore the steam production, will be next discussed.

We know the size of a boiler depends upon the greatest quantity of steam to be consumed per stroke in a certain time. Suppose the train reaches a descending grade, where possibly no steam is wanted, or at most a trifling quantity, the production though not entirely suspended is then diminished, and the blast consequently weakened. It amounts to ⅓ of the greatest quantity which can be produced. If no arrangement were made to remove this quantity, the pressure in the boiler would gradually increase, in proportion to the degree of production; an explosion would be the result. The safety valve is the arrangement which allows this over-plus of steam to escape in such proportion, that the steam pressure does not increase beyond a given point. It also allows the escape of superfluous steam, when the generation is most active. Hence, then, the proportion of the safety valve depends on the proportions of the boiler or on the steam production. The proportional diameter of the valve, its load and freedom of play, are the important considerations to receive

attention in its construction. To determine the diameter, it is necessary to understand the law of the velocity of steam escaping under a certain pressure into the atmosphere. Theory teaches, that steam escapes into a vacuum with the velocity that a body would attain by falling from a height equal to that of a column of steam, of uniform density, whose weight is equal to the pressure of steam.

Steam of one atmosphere, or 2.49 feet barometrical pressure, is nearly 1,700 times lighter than water, consequently $1,700 \times 18.6 = 23,120$ times lighter than quicksilver; a column of steam of such pressure, would be as high as $2.49 \times 23,120 = 57568.8$ feet.

A body falling from this height, in a vacuum, will receive a velocity per second=

$$\sqrt{2 \times \text{double space of fall at the first sec'd} \times 57568.8} \\ = \sqrt{2 \times 32.17 \times 57568.8} = 1,924 \text{ feet.}$$

The height, producing such velocity, could also be found, by multiplying the height of the column of quicksilver, which indicates the pressure of the steam, by the proportion of density of the quicksilver to the steam. The weight of one cubic foot of quicksilver=849.2 pounds; the weight of one cubic foot of steam of one atmosphere=0.0368 pound; consequently their proportion of pressure $\frac{849.2}{0.0368}$ and the height which produces

the velocity= $2.49 \times \frac{849.2}{0.0368} = 57568$ feet; and the velocity per second=

($2 \times \text{double space of fall, at the first second} \times$ by the height of the column of the quicksilver; indicating the pressure of the steam \times by the proportion of the pressure of the quicksilver to the steam.) $\frac{1}{2}$

Some changes are necessary in this formula, to adapt the result to steam, escaping into the atmosphere. Instead of the figure, representing the height of the column of quicksilver, indicating the steam pressure, the figure expressing the proportion between the barometrical difference of the steam pressure to the atmospherical height of the quicksilver, must be inserted. The pressure of the steam and its weight, we see, are necessary elements in the formula. To illustrate: let the pressure of the steam be 6 atmospheres; weight of one cubic foot 0.1894 pound and its barometrical pressure equal to 11.35 feet.,

$$\left[2 \times 32.17 \times (11.35 - 2.49) \times \frac{849.2}{0.1894} \right]^{\frac{1}{2}} = 1598.84$$

feet per second. This figure multiplied by the area of the safety valve opening, gives the quantity of steam escaping from the safety valve per second. An important result arises from the above formula, namely that, the higher the pressure of steam, the greater its velocity; consequently, the higher the steam pressure, the smaller the diameter of the opening. The French government orders the following formula, to regulate the diameter of the opening.

$$2.6 \left(\frac{\text{heating surface of boiler in sq. meters.}}{\text{the effective steam pressure} = 0.412} \right)^{\frac{1}{2}}$$

The method of finding the corresponding direct load upon the safety valve, is very simple. The formula is as follows: Interior valve surface \times (steam pressure—the outside atmosphere.) The product is the pressure against the valve, consequently, the load upon the valve (when its own

weight is included) must be equal to the pressure, acting against the valve. If the load acts indirectly upon a lever arm n , the valve upon a lever b , the static momentum of the valve being o and k the steam pressure against the \times valve, the corresponding load $L = \frac{kb-o}{n}$. These rules are still

somewhat imperfect, especially if the face of the valve and of the seat is not very narrow; because the pores of the metal, near to these surfaces, are filled with steam, besides the air; consequently the surface of the pressure, will be somewhat larger than $3.1416 \times r^2$.

The easy lifting of the valve depends upon its shape. An even narrow valve seat, will answer the purpose better than a conical seat. The best attested proportion, between the interior diameter of valve and the width of the valve face is recommended as $\frac{1}{30}$.

The over-loading of the valves, through the ignorance of the engine-driver or his incompetency, might cause great damage, and an explosion be expected. To remove this danger, it is necessary to apply two safety valves: one of them may be accessible to the engine-driver, the second be loaded something higher, and its lever arm placed inside the boiler, whereby the valve becomes inaccessible.

Gardiner's Volute Spring for Cars.

We have neglected till now to call attention to the compact and highly elastic steel spring, invented by Mr. P. G. GARDINER, of this city; not on account of any lack of importance in the subject, but from a wish to ascertain its actual durability in practice. The spring has now been upwards of a year in use under the iron horse cars of the Sixth-av. Railroad in this city, and for several months under passenger cars running in express and other trains on the Hudson River, and some twenty or more other railroads, without a single case of failure coming to our knowledge.

A company has been formed, and arrangements completed for manufacturing these springs in the most perfect and rapid manner, and each spring is carefully tested by apparatus constructed for the purpose before being sent out. The manufactory is on Twenty-sixth street in this city, and is provided with a powerful steam engine, large and well arranged heating furnaces, and with new and admirably contrived machinery for producing the springs with little labor, and keeping the delicate structure of the steel in the best possible condition. A strip of good cast steel about five feet long, $4\frac{1}{2}$ inches wide, and $\frac{1}{4}$ of an inch thick is wound up so as to form a low cone or sugar-loaf, but without allowing any of the coils to touch each other. It is then tempered in oil, and finally put to a severe trial in the testing machine. The load is allowed to bear constantly upon the point, or apex of the cone, and it is found in practice that this compact, strong, and extremely elastic spring, in addition to its other qualities, possesses the important one of springing to very nearly an equal amount with any given shock whatever may be the load supported. The whole may be enclosed in cast iron housings or not, as preferred, but in either case it promises all the compactness and ease of the rubber spring with more than the durability and economy of the ordinary elliptic one.

Ohio and Pennsylvania Railroad.

A report recently made its appearance, signed by Thomas W. Bartley, Dwight Jarvis, and William Bagaley, styling themselves a committee appointed by the stockholders of the Ohio and Pennsylvania railroad, to whom was referred the report of the committee appointed in 1855 to investigate the affairs of the company, the conditions of the accounts, etc., etc.

This report of the stockholder's committee, as it is termed, is chiefly characterized by a spirit of bitter hostility against the former management of the road, and particularly against Gen. Wm. Robinson, its President, during the entire period of its construction, and for several years thereafter.—The report charges that in the accounts of the company, \$951,902 remain to be accounted for, and attempts to throw upon Gen. Robinson the responsibility for the deficiency. This report is seized hold of by our city papers, ever eager to fill their columns with gossip, no matter on how slight a foundation, and produces for the moment quite a sensation as another case of railway mismanagement, or misconduct, on a stupendous scale.

The following is a correct abstract of their balance sheet, taken from the books of the company:

	DR.
Road, equipments, offices and stations.....	\$5,014,621.03
Profit and loss.....	448,106.19
Bills receivable.....	266.80
Stock in other roads.....	162,500.00
Bonds of other companies, including hypothecated.....	413,000.00
Acc'ts with brokers and bankers...	42,923.93
Gas company.....	753.75
Ass't Treasurer's acc'ts.....	16,428.60
Individual balances.....	8,876.05
J. J. Brooks, to pay taxes in Ohio..	14,842.60
Unsettled stock.....	261.91
Wm. Larimer, Jr.....	86,381.93
Cash.....	18,495.86

Total.....\$6,227,458.55

	CR.
Capital stock.....	\$2,458,240.00
Income bonds.....	1,469,000.00
Mortgage bonds.....	1,750,000.00
Bills payable.....	518,150.31
Winslow, Lanier & Co.....	20,825.60
John Larwell.....	260.07
Wm. Robinson, Jr.....	6,952.82
Unpaid dividends.....	4,030.25

Total.....\$6,227,458.55

To the debit side, the stockholder's committee added the net earnings, \$1,082,027, (since the road went into operation,) but which do not belong to this account, and are satisfactorily accounted for in another place.

The great discovery of this committee is simply a blunder of their own making. Every cent received by the company, or its officers, is satisfactorily accounted for by proper vouchers. There appears to be no doubt that these groundless charges were made in a spirit of hostility to Gen. Robinson, and with an earnest hope that they might prove true.

While upon this subject, and while exculpating General Robinson from the censure sought to be thrown upon him, it may be proper to add a word of our own. We happen to be pretty familiar with the history of the Ohio and Pennsylvania Railroad. It was commenced among the first of our newly built western roads; and consequently

with very inadequate notions and estimates as to its probable cost, and still more inadequate preparation of means. These soon began to be exhausted with the progress of the work, leaving no other alternative for a further supply than the credit of the Company. Now there is no doubt that the road owes its construction to a good credit, mainly secured to it through the instrumentality of General Robinson. In this way he created the means for construction as he proceeded with the work. In no other way could the road have been built; and we certainly know of no other man who could have carried it out, or who could have brought to his aid such powerful coadjutors. Under his administration, no enterprise more entirely commanded the confidence of capitalists, and no work, depending mainly upon its credit, proceeded more steadily towards its completion. Its great success measures the extent of the labors of its President, which, for years, were incessant, and aggravated by a constant anxiety which the necessity of borrowing to meet daily expenditures, imposed. Neither the people of Pittsburgh, nor of Central Ohio, nor of Pennsylvania built the Ohio and Penn'a R. R., but strangers to all these, and whose confidence General Robinson secured.

We are not accustomed to be personal in this manner we have; but when we see a meritorious public servant, who has built one of the great works of this country, maliciously slandered, we think it but just that his neighbors and the public should know what he is and what he has done for them.

Railroad Earnings for July.

The receipts of the Hudson River railroad for July, 1856, were.....\$120,991
Against July, 1855.....119,494

Increase.....\$1,497

The receipts of the Galena and Chicago railroad for July, are:

	1855.	1856.
Freight.....	\$121,358	\$141,550
Passengers.....	62,606	80,259
Mails, &c.....	1,955	3,839

Total.....\$185,929 \$225,650

Increase.....\$39,729

The receipts of the Illinois Central in July were \$197,440, against \$180,000 in July last year.

The receipts of the Reading R. R. in July were:

	1855.	1856.
Received from coal.....	\$231,592	\$326,389
Received from merch'dise..	26,535	26,806
Rec'd from travel, &c.....	26,712	29,143

Total.....\$384,839 \$382,339

Transportation, dumpage, roadway, renewal fund, and all charges.....187,900 70,133

Net profit for the month...\$216,845 \$212,206

Net profit for previous six months.....665,900 977,086

Total net profit 7 mos.\$882,745 \$189,292

The receipts of the Little Miami railroad for the month of

July, 1856, were.....\$93,352
July, 1855.....68,896

Increase equal to 35 per ct.....\$24,456

The earnings of the Milwaukee and Mississippi road in the month of July amount to \$60,183, against \$47,158 same month last year. The earnings of the La Crosse and Mississippi railroad for the same month were \$46,676. Last year the

line was not opened in July. The present earning is on 61 miles, at a cost of \$26,500 per mile.

Mississippi Central Railroad.

REPORT OF THE DIRECTORS TO THE STOCK-HOLDERS.

Gentlemen—In compliance with the provisions contained in the original act incorporating your company, and in behalf of the Board of Directors, I have the honor to submit, for your consideration, this Fourth Annual Report:

During the fiscal year now just closed, the work of construction on the line of your road has been steadily and perseveringly prosecuted by the Directory, with all the means they could command, without a resort to credits, or the ruinous policy of obtaining funds at high rates of interest, that would result injuriously to the value of your investment, and detrimental to the future credit of your company. If the amount of work accomplished, during the year, has not equalled your expectations, it has been only limited by the amt of funds that could be collected from subscribers to the capital stock of your company.

Although the amount of work under contract, at the time of your last annual meeting, was greater than desired in the then pecuniary condition of the country, the engagements of the company have been met with a punctuality satisfactory to all parties interested.

That portion of the road-track between Holly Springs and the junction with the Memphis and Charleston road—a distance of about 25 miles—was not completed and in readiness for the cars until the 22nd day of November last, a period of the year when a very large portion of the cotton crop of the country had been forwarded to market. The burthen cars necessary for the movement of freight offered for transportation, were not delivered until the 5th of December, although by the stipulations of the agreement for their construction, they were to have been delivered in the previous month of October. The delay in the delivery of the burthen cars, and the completion of the road-track to Holly Springs, materially lessened the amount of freight traffic that otherwise would have been transported over the division of the road here referred to.

By reference to the report of William M. Stockton Esq., Chief Engineer and Gen. Superintendent of your road, (herewith submitted for your consideration and marked "A,") it will be seen that the gross receipts of that division of your road, now in operation, for the six months ending on the first of the present month, have been as follows:

From Passengers.....	\$11,830 63
From Freights.....	16,943 50
From Mail service.....	1,200 00

Making the total of gross receipts....\$29,974 18

The expenses during the same period of time of operating this portion of your road, including repairs of track, cars and locomotives, the cost of oil, fuel, &c., has been.....11,233 02

Which, taken from the gross receipts, leaves a net income of.....\$18,741 11

The expenses incident to the transportation of iron rails, and other materials for the construction of track and road-bed, are included in the above item of expenditure without a corresponding credit to the receipts of the road. To exhibit correct results from the working of the road, the sum of \$4,150 should be credited to freight account for the transportation of materials; should this be done, the net income of the road, for six months, would be \$22,891 11, instead of \$18,741 11, as above stated.

The injurious effects of the severe frosts and heavy rains of the past winter upon the recently constructed earth-work, forming the road-bed, increased in no small degree the expenses of track repairs. It is believed that in consequence of the more firm condition of the road-bed, and more perfect drainage, that in future this extra expense

will be very much diminished, if not entirely obviated, even though we should again experience such an unusually inclement winter as the last.

The Engineer in Chief, in his report, already referred to, estimates the cost of the work yet to be executed, and materials to be supplied for the completion of the road-bed and superstructure between Holly Springs and Oxford, and from Canton north to a point on the line of road in Holmes county, near the Williams Ferry road, embracing a distance of 55.89 miles, at \$249,261.

The estimated cost of work to be executed, and materials to be furnished to complete the road-bed, and lay down the superstructure on the division of your road extending from Oxford to Grenada, a distance of 46 miles, is \$30,926 39, and the estimated cost of completing the road for operation from Grenada to the Williams Ferry road, in Holmes county, a distance of 60½ miles, is \$53,525 08.

From these estimates, it appears that the cost of the unfinished work, and materials necessary to complete the road between Holly Springs and Canton, exclusive of materials now on hand, and exclusive of depot buildings and equipments, is \$1,433,712 47.

Additional equipments will be required during the present year to successfully operate the anticipated extension of your road-track to the estimated amount of \$80,000.

In the estimates here made, as to the cost of the unfinished portion of your road, the value of the iron rails, the principal item in future expenditures, is based on its present market price, and at an increased value of nearly ten dollars per ton over the estimate in my last Annual Report. The price paid for iron rails when purchased, may increase or diminish the amount of present estimates.

Contracts for the erection of all the Truss Bridges on the line of road have been made with an experienced bridge builder, who is now engaged with a large party of hands in the erection of the bridge over the Big Black, which will be in readiness for the rails by the time the track is laid from Canton to it.

Contracts favorable to the company have also been made for all the Trestling on thirty miles of the Southern division of the road, and on that part of the Northern division, extending from Holly Springs, south to Oxford. A large amount of the timber for the trestling here referred to, has been delivered on the line of road, a portion of it framed and in readiness for erection.

A contract has also been entered into with an experienced track-layer for laying down the superstructure on the Northern and Southern division of the road. The party with whom this contract has been made, is now in readiness with a large party of hands to commence, and energetically prosecute the work undertaken by him.

Anticipating the completion of the road-bed from Holly Springs south, to Oxford, and from Canton north, a distance of some 30 miles, within the term limited in the several contracts embracing that portion of the work, purchases of iron rails, chairs and spikes, were made last fall, to be delivered in New Orleans, during the winter and spring months, preparatory to the re-commencement of track-laying, nearly the entire amount of which has been delivered, and the residue will soon be; but the unusually inclement and cold weather of the past winter retarded the work of many contractors to such an extent, that they have not, even at this time, completed the work undertaken by them; and others, I regret to say, have disregarded the obligations contained in their agreements for the performance of work on the road-bed, and the Directory, to avoid long continued delay in the extension of the track, have been compelled to increase the effective force on some of the contracts referred to, at the expense of the contractor.

These causes have delayed the re-commencement of track-laying, but the work on the unfinished portions of the road-bed is now progressing in a manner that gives assurance of its speedy

completion, and as the iron, chairs, spikes and ties, are now at command, a much longer delay in the prosecution of the work of laying down the superstructure need not be apprehended.

The Legislature of this State, at its recent session, passed a law authorizing a loan of \$400,000 of the proceeds of sales of the Chickasaw School Lands to the several railroad companies therein named, for the term of seven years, with interest at the rate of eight per cent. per annum, payable semi-annually in the city of Jackson. The Directors accepted of the provisions of the law here referred to, and the Treasurer of your company has obtained from the State, on account of this loan, the sum of \$95,850, and the additional sum of \$104,150 will be hereafter obtained from the same source whenever paid into the State Treasury to the credit of the Chickasaw School Fund.

The Legislature also authorized the issuance to your company of Internal Improvement Land Scrip to the amount of 50,000 acres, to be sold on account of the State, at a price limited at \$1 75 per acre, if sold for cash, and the State to be reimbursed for the scrip so issued and sold, by an issuance of certificates to the capital stock of your company, to an amount equal to the scrip sold, estimating its value at the price limited by law. The land scrip was received by your Treasurer from the State, and sales have been made to the extent of 39,000 acres, and no doubt is entertained but that the residue will be sold in a very short time.

I have the honor, also, to submit for your consideration, the reports of A. J. McConnice Esq., the Secretary of your company, marked "B," and the report of D. B. Molloy Esq., Treasurer, marked "C." The first named report exhibits all the fiscal transactions of the company from its organization to the present time, and the second embraces the receipts into and the disbursements from the Treasury during the fiscal year.

It appears from the report of the Secretary, that there has been paid into the Treasury on account of—

Capital Stock	\$1,211,857 86
Chickasaw School Fund Loan	95,850 00
Interest and Company Bonds	27,194 80
Receipts from road	29,974 18
Other sources	183,067 79

Total payments into the Treasury. \$1,547,944 58

There has been drawn from the Treasury, on account of Real and Personal Property, Engineering, Rights of Way, Graduation, Bridges and Trestling, Depot Grounds and Buildings, Iron Rails, Track-laying, &c.	\$1,248,488 02
Salaries, Printing, Stationery, Attorneys' Fees, Court Costs and Expenses	29,759 84
Rolling Stock, Repair Shop, and Fuel	62,634 27
Running Expenses and Repairs of Road and Cars	11,233 02
Loss, Damage, Discount and Interest, &c.	5,111 05

Making total expenditures.. \$1,357,226 20

There remains in the hands of the Treasurer, cash and reliable cash assets, to the amount of \$190,718 38.

The item of bills payable, exhibited in the report of the Secretary, is almost entirely made up of notes issued in part payment for iron rails, chairs and spikes, and are not payable until March, April and May of next year.

There remains unpaid, on account of subscriptions to the capital of your company, the sum of \$533,797 08. Of this amount \$245,538 57 is payable by the counties of Marshall, Lafayette, Yalobusha and Holmes, in the years 1857, 8 and 9, with the exception of \$29,410 53, which is now due and payable.

The sum of \$288,258 51 is now due on individual subscriptions to capital stock. Of this amount the Secretary estimates \$60,000 as doubtful and worthless, leaving \$228,258 51 of reliable

individual subscriptions applicable to future construction.

The Treasurer, D. B. Molloy Esq., reports the receipts into the Treasury during the fiscal year, ending on the first of the present month, to be as follows, on account of—

Capital Stock	\$569,274 59
Interest and Exchange	8,334 79
Chickasaw School Fund Loan	95,850 00
Company Bonds	16,920 00
Freights, Passengers and Mail	29,974 18
Bills Payable	95,460 60
Bills Receivable	20,000 00
Reserved Fund	48,987 52
Total payments into the Treasury during the fiscal year	\$884,781 63

There was in the hands of the Treasurer, at the date of his last annual report, the sum of \$5,553 24.

This, added to the receipts, during the year, makes a total of \$890,334 87.

The disbursements by the Treasurer, during the same period, have been \$699,616.49, and on the following:

Graduation, Trestling, and Engineering	\$364,085.77
Depot and Water Stations	7,681.38
Superstructure	17,882.28
Iron and Equipments	279,271.19
Salaries, Printing, Attorneys' Fees and Expenses	13,632.43
Real and Personal Property	719.37
Discount, interest on Bonds, expenses of operating road, loss, damage, &c.	14,481.12

Total disbursements for the year. \$699,616.49

Leaving in the hands of the Treasurer of cash and other available assets to the amount of..... 190,718.38

At your last annual meeting, a committee of Stockholders was appointed to examine the books and accounts of your various officers and agents, and the condition of your road and its equipments, and to report the result of their investigation to this meeting.

The committee then appointed have neglected to discharge the duties assigned them. In consequence of this neglect, I, without authority from you, appointed three intelligent stockholders of Marshall county to perform the duty assigned by you to others. The report of the examination made by them is herewith submitted for your consideration.

The duties devolving on our examination committee, are of too important a character to be omitted, or carelessly performed. The security and protection of your property, the safe keeping and disbursement of your funds, the faithful discharge of the duties of each and all the officers and agents of the Company, involves much too large an amount to be committed to the care of any man or number of men, however honest, without frequent critical examinations into all of their acts.

I have, therefore, to recommend that a committee be appointed by you to discharge this duty the present year, and that authority be delegated to some one to fill any vacancy that may occur in said committee.

I have been instructed by the Board of Directors to recommend to your favorable consideration the propriety of reducing the number of members now composing the Directory. By the provisions of your charter you are authorized to reduce the number of members composing the Board to any number of not less than five. It is for you to determine if the success of the road will be best promoted, and your interest better protected, by a reduction of the number of Directors, or otherwise.

In the preceding part of this report, it has been stated that the Chief Engineer estimates the cost of completing the unfinished road-bed and laying down the superstructure, from Holly Springs to Canton, at \$1,433,712.47, exclusive of depot buildings, station houses and repair shops.

An expenditure to the estimated amount of \$80,000 will be required this year for additional equipments to supply the demands that will be made on the company for the movement of freight on the anticipated extension of road-track.

The assets of the company to meet this expenditure, and to pay its present liabilities are as follows:

Cash and cash assets now in the hands of the Treasurer of the Company	\$190,718.38
Amount of reliable individual subscriptions, after deducting such as are now considered worthless	228,258.51
Amount of county subscriptions payable in this and the three succeeding years, by direct taxation on the property in the counties	245,538.57
Amount of Bonds of the State of Tennessee to be received from the Mississippi Central and Tennessee Railroad Company	50,000.00
Estimated amount yet to be derived from the proceeds of the sale of Internal Improvement land by the State	128,000.00
Amount yet to be obtained by virtue of the law authorizing a loan to this company of a portion of the Chickasaw School Fund	104,150.00
Total assets	\$946,665.46
From this sum must be deducted the present liabilities, of the Company amounting to	183,067.79

There remains a balance of.... \$763,597.67

Applicable to future construction, and exhibiting a deficiency in the estimated sum necessary to complete the road of \$670,114.80, exclusive of necessary expenditures for equipments, depot buildings and station houses.

Should the track of the road be extended south from Holly Springs to Oxford, a distance of about thirty miles, and from Canton north about the same distance, by the first of January next, as is now confidently anticipated, it is believed that the net income of the road the present fiscal year will not fall short of \$75,000. If there is no disappointment in this particular, then the working of the finished portions of the road will furnish an amount of funds equal to the estimated cost of the additional equipments that will be required for its operation.

From the preceding estimates and statements, it appears that the reliable assets of the company fall short of the estimated cost of the work you have undertaken to the amount of \$670,114.80.—How shall this deficiency be supplied, and what measures adopted to obtain speedy payments from delinquent subscribers to the capital stock of your company, are questions necessary to be solved, if you desire an early completion of the road.

It is undeniably certain, if the assets of the company can be realized during the present and succeeding year, and sales of the company bonds to the amount of \$800,000 or \$900,000 can be effected during the same period of time, the entire road can be fully completed and equipped by the first of January, 1858. Of this there at present exists no reasonable doubt.

With these sums at the command of the Directory, the work of track-laying, when re-commenced, need not be again suspended until the whole is accomplished. With a prospect so desirable in view, so beneficial to your interest, so advantageous to the whole community, duty impels me to appeal to each and all delinquent stockholders for prompt and immediate payment of all balances due by them, and to those stockholders who have complied with their engagements to the company with a promptness and punctuality worthy of all praise, I appeal for further aid. If you desire to render your stock profitable and the road beneficial, it must be completed. To speedily accomplish this object, I earnestly and respectfully urge upon all stockholders an investment in the bonds

of the company to an amount equal to the stock held by each.

There is another class of citizens to whom I also appeal for aid in making up the deficiency in the estimated cost of your road. I refer to those wealthy citizens of our State who, to the present time, have extended to you no willing aid in a work that must, when completed, result in great benefit to them as well as all other classes of the community. It is well known, that in the past progress of the work now under consideration, the company have been mainly dependent for the funds expended, not upon the wealthy residents on the line of road or in the State, but upon the middling classes, as regards individual wealth; while the former have looked idly, even coldly on your efforts, giving no encouragement, but, instead thereof, predicting loss to the stockholders and failure to the enterprise, the latter have pushed forward the work to its present favorable condition.

The sale of any considerable amount of the bonds of the company to citizens of our State, would have a tendency to impart additional value to those you may be compelled to dispose of abroad. If those who are supposed to be best acquainted with the importance, value and probable traffic of the road give evidence of the security of the bonds by investing in them, then may we reasonably hope that capitalists in other States may be willing to follow the example of our own citizens, and invest in them also.

It is not proposed to issue more than \$5,000 to each mile of road, and the payment of both principal and interest on this limited amount is secured by a mortgage on all the property and effects of the company, rendering the security good beyond all reasonable doubt.

The railroads with which yours connects at its northern and southern termini, are rapidly progressing towards completion. It is in contemplation to complete the New Orleans, Jackson and Great Northern road to the town of Canton by January, 1858. Efforts are being made, which, if successful, will insure the accomplishment of an object so advantageous to you, and beneficial to our whole State.

The iron rails on the Mississippi Central and Tennessee road, being the northern extension of yours, are now being laid down, and the track will be completed to Jackson, Tenn., before the close of the present year.

The Memphis and Charleston is fast approaching completion, and in a very few months, railroad communication will be opened from the northern terminus of your road to the city of Charleston and all the Atlantic cities. The benefits to be derived by you from the completion of these connecting links of communication, will be far greater than the most sanguine friends of your road can now anticipate, opening, as they will, direct railway communication with New Orleans, the North-western States and the Eastern cities.

All of which is respectfully submitted.

W. GOODMAN, Pres't.

Heavy Verdict against a Railroad Company.

Mr. Robert D. Ward has received a verdict of \$8,935 against the Buffalo and Erie Railroad Company, damages for the destruction of his hotel and furniture, which he claimed was set on fire by coals blown from a locomotive of the railroad company.

Northwestern Virginia Railroad.

We are informed that the track-laying on this road has already reached a point twelve miles from Grafton. The progress now making is about 4,000 feet per day, but with the aid of an additional engine, now on its way, the Superintendent expects to accomplish a mile per day from the eastern terminus. Another engine is on its way to Parkersburg, and from the time it reaches that point, about three-fourths of a mile per day can be laid at the Western end of the road. If these rates of progress can be maintained, and the skill

and energy of the Superintendent, Wm. D. Burton, Esq., gives assurance that they can, the road will be in full operation early in November, contracts having been made for all the iron required, and for the necessary rolling stock, deliverable by that time.—*Balt. Patriot*.

Railroads in Texas.

We learn that a bill authorizing a loan by the State to railroads has passed the House of Representatives of the State. The condition of the State loans are that fifty miles of road shall be graded, of which thirty-five miles must be complete before the company owning the road can avail itself of the State loan. The amount as fixed by the State is \$6,000 per mile.

General Freight Agent.

John J. Houston, Esq., has been appointed General Freight Agent of the Pittsburg, Fort Wayne and Chicago railroad. The Board of Directors and Management of the road have secured the service of a most efficient and thorough business man.—He will be able we predict, to conduct his department with credit to himself and satisfaction to the officers and stockholders of the road. We wish him, as he deserves, every success.—*Pittsburg Post*.

Coal-Burning Locomotive.

The Schenectady Locomotive Works have completed a coal-burning locomotive for a Western road. She has been run several days on the New York Central road, between Albany and Schenectady, with freight and passenger trains, and works admirably, making the time of express passenger trains with ease. The coal intended to be used in this engine is the Illinois and Ohio bituminous.—The coal used was Cumberland. The construction of the engine is similar to the ordinary wood-burning engine, with the exception of a large fire box, a shaking and dumping grate, and some minor differences. The consumption of coal is very moderate, being only 30 to 40 lbs. per mile when running with heavy freight or express trains.—*Exchange*.

Memphis City Bonds.

We learn that one hundred of the city bonds, for \$1,000 each, endorsed by the State, and issued for the benefit of the Memphis and Little Rock railroad, were sold yesterday at 93 cents on the dollar. Ex-Mayor Douglass, we understand, was the purchaser. The bonds have thirty years to run.—*Memphis Bulletin*.

Department of Practical Science,

UNION COLLEGE, SCHENECTADY, N. Y.

THE CIVIL ENGINEERING COURSE opens Sept. 5, 1858. The studies during the coming Term are Draughting by plans, elevations and sections; Levelling, applied to Topography, &c.; Stability of Structures; Stereotomy; Road and Railroads, with field-work; Analytical Geometry; Optics; Electricity and Magnetism; German. The entire course occupies two years.

A course of ANALYTICAL CHEMISTRY commences at the same date. The plan of study depends on the objects, acquirements and time of the student. A complete professional education in Chemistry will be given to such as may desire it.

For Catalogues of the College, containing full particulars of the courses, address 233 G. GILBERT, Registrar.

FOR SALE.

2, 20 Ton Locomotives } 4 ft. 8 in. gauge,
4, 25 do. do. } at a bargain.
6, 24 do. do.
4, 26 do. do.

Apply to DAVIS & KASSON,
July 24, 1858. 4131 24 BROADWAY.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILADELPHIA, Penna.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston. NAYLOR & CO.,
99 and 101 John St., N. Y.

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appearances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

H. S. WELLES & CO.,
8132 No. 4 WALL ST., New York.

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 60 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural locks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't LaC. and Mil. R. R. Co.
MILWAUKEE, August 1st, 1858. 10132

Railroad Chairs and Spikes.

ORDERS taken at fixed sterling prices for Wrought Iron Chairs of any pattern, and Spikes, to be manufactured in England.
NAYLOR & CO.,
99 and 101 JOHN ST., New York City.

FOR SALE.

A GOOD second hand Archambault Steam Engine, about 10 horse power, with tubular boiler complete.
4130 Apply to A. & P. ROBERTS, Philadelphia.

SALE OF THE

Syracuse & Binghamton R.R.

SUPREME COURT.—David Hoadley & Horace White, Trustees for the First Mortgage Bondholders of the Syracuse and Binghamton Railroad Company, against the Syracuse and Binghamton Railroad Company and others.

In pursuance of a judgment of foreclosure and sale, entered in this action on the first day of August, 1858, there will be sold by me, or under my direction, at the Syracuse House, in the city of Syracuse, on the 20th day of September, 1858, at 10 o'clock in the forenoon, "All and singular the corporate property and franchises of the said Syracuse and Binghamton Railroad Company, consisting of all the lands, tracks, lines, rails, bridges, ways, buildings, piers and wharfs, erections, fences, walls, fixtures, privileges, franchises, rights and real estate whatsoever, and all the tolls, income, issues and profits to be had from the same, and all the railway depots or stations, with the buildings thereon, together with all the locomotives, tenders, cars, carriages, tools and machinery owned by said Syracuse and Binghamton Railroad Company, or any way belonging or appertaining to said road and used thereon, between the city of Syracuse and village of Binghamton, including 13 locomotive engines, tenders and fixtures, 10 locomotive lamps, 10 first class passenger cars, 3 second class passenger cars, 2 mail baggage and express cars, 3 baggage cars, with stoves and lamps in each, 80 box cars, 34 platform cars, 40 gravel cars, 8 hand cars, 1 large snow plow; also one stationary engine and boiler, 2 lathes, 1 wheel press, 1 upright drill, 40 feet line shafting, 5 bands and pulleys for same, 3 forges and bellows, 3 anvils and all the tools in the shop at Syracuse, and along the line of said road, and materials on hand for repairs and use of said road; also, 80 tons of iron rails, 20 tons of railroad chairs, 10 tons of rail spikes, 18 frogs, 8,000 cords of wood at various points along the line of said road, 12 hand trucks, 8 platform scales, 10 stoves, and all the furniture, books and blanks at the several stations and buildings along the line of said road; 120 lamps of various kinds, in use on trains, at stations, shops, and switches along the line of said road; also, the office furniture, consisting of two large desks, two tables and cases of pigeon holes, 3 iron safes, one draughting table, one case of drawers, 4 stoves, one ticket case and tickets in same, one regulator, sundry blanks, blank books and stationery for use of said Company."

A more complete inventory of property and description of premises to be sold, together with the maps and profiles, will be exhibited on the day of sale, and also the terms of sale will then and there be made known. Dated August 4th, 1858.
R. DAVIS NIXON, Referee.
DAVIS & LEACH, Attorneys. 6133

BROOKLYN WATER WORKS.**To Contractors.**

SEALED PROPOSALS will be received by the undersigned until the 15th day of August at 12 M. for the construction of the **EDGE HILL RESERVOIR**, situated near the Jamaica road, about five miles from Brooklyn.

The work consists of earth-work, slope wall and puddling. Specifications and plans of the work will be shown on the ground and at the Engineer's office, Halsey's Building, Brooklyn, from the 6th August.

The right is reserved to reject any or all of the proposals made.

H. S. WELLES & CO.,
No. 4 Wall Street, New York.

The above is postponed as follows:

Plans, Specifications, etc., will be ready on the 12th, and propositions received until the 20th, at 12 M.

331

H. S. WELLES & CO.

Railroad Iron.

1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from English shipping port to New York. For sale by

THEODORE DEHON,
10 Wall st., near Broadway.
NEW YORK.

4131

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1,000 TONS "New York and Erie" pattern, weighing about 57 lbs. per linear yard, on the way from England to New Orleans. For sale by

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NEW YORK.

4131

KEROSENE LUBRICATING OIL.

SECURED BY PATENTS.

THE effect of this Oil on machinery is found to be perfectly magical. It removes the gum caused by the use of impure oils, wears equal to best Sperm Oil, and does not congeal at a low temperature. It burns magnificently in all the solar, binocular and hand lamps; also in signal and bowspit lanterns.

The attention of engineers, ship-owners, ship-chandlers, ship supply men and others, is particularly requested to the certificates to be seen at the office of

AUSTENS,

AGENTS FOR THE

KEROSENE OIL CO.,

No. 50 BEAVER ST.,
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4129

Railroad Iron.

800 TONS best quality Welsh Rails "Erie" pattern, 55 lbs. per yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, July 26th, 1856. 1m36

Railroad Iron.

500 TONS best quality Welsh Rails, 55 lbs. per linear yard, now on the way from Great Britain, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, July 26th, 1856. 1m30

First Class Locomotive

FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and fire sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a FIRST CLASS PASSENGER ENGINE.

For particulars address

ELLIOTT & BOWLES,
118 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above. 251

INTERESTING TO RAILROAD MEN.

A **DIAGRAM** has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 11x4½ inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1856.

3m.

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Blank Books.—Ledgers, Journals, Day, Cash, Bill, Invoice, Stock, Dividend, Receipt, Note, Tuck-Memorandum, Pass, Metallic-Memorandum, all sizes, Church, Log, Time, Record, Daily Memorandum, Scrap, and Pocket Books, Hotel Registers, Pocket Ledgers, &c., &c.

Papers.—Blank Note and Bond Papers, Whatman's Drawing Papers, all sizes, from Cap to Antiquarian, Tracing Paper and Tracing Cloth, Ruled and Plain Cap Papers, French, English and American Letter Papers, Packet and Commercial Post.

Note Papers.—French, English, American and Chinese, more than 150 different kinds, from all the different Mills. Mourning Note and Letter Papers.

Inks.—Copying and Writing Fluids; Perryman Ink, a superior article; French Carmine; Red Inks; also, French and Chinese Red, Black and Blue Stamping Inks.—**MOUTH GLAZES.**

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R. ARCHER & CO., Proprietors.

R. ARCHER.
A. D. TOWNES.R. S. ARCHER.
F. T. GLASGOW.

Bar Iron, all sizes, Manufactured from the best Charcoal Pig Metal.
Flats, up to 7 inches.
Rounds and Squares, up to 5 inches.

Angle and T Iron.
Car Axles.
Railroad Spikes.
Do. Chairs.
Bridge Bolts, Screwed and Tapped.

Strict attention paid to the quality and finish of our IRON, and all orders promptly filled.
August, 9, 1856. 3m

Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, &c., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, &c.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned sod is sure to yield very large profits. A man with a plow and two yokes of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, &c., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$1 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of, — that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried either in wagons, or interrupted water routes, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the

facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent. per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

READY FRAMED FARM BUILDINGS, WHICH CAN BE SET UP IN A FEW DAYS, CAN BE OBTAINED FROM RESPONSIBLE PERSONS.

They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State — also, the cost of fencing, price of cattle, expense of harvesting, threshing, &c., by contract — or any other information — will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,

Land Commissioner of the Illinois Central R. R. Co.,
No. 52 Michigan Av., CHICAGO, Ill.

Philadelphia, Wilmington & Baltimore Railroad. UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m., 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	5 00

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

New York and Erie R. R.

On and after Thursday, August 7, 1856, and until further notice,

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz: —

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m. for Dunkirk.
MAIL, at 8 1/4 a.m. for Dunkirk and Buffalo, and intermediate stations. — Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
ROCKLAND PASSENGER, at 3 1/4 p.m. (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad; at Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad; for Syracuse; at Corning with Buffalo, Corning and New York Railroad; for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c.,

D. C. MCALLUM, General Sup't.

NEW YORK IRON PAVEMENT AND STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,

ROOM 16.

TO THE
MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,

AND TO
RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

- 1st. The cheapest pavement ever used, because most enduring at least cost of repair.
- 2d. The safest pavement for either man or beast to travel on.
- 3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.
- 4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.
- 5th. The easiest and least tiresome pavement to ride upon, because most even of surface.
- 6th. The least noisy pavement to use or reside near.
- 7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables — each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPED, Esq., Detroit, Mich.
HON. J. V. O. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. P. FRENCH, Associate Judge, Superior Court, Boston, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 34.]

SATURDAY, AUGUST 23, 1856.

[WHOLE No. 1,062, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, August 23, 1856.

Milwaukee and Horicon Railroad.

Below we give the exhibit of this company prepared to facilitate the sale of their mortgage bonds to the amount of \$450,000.

These bonds bear date May 1, 1856, are payable May 1, 1882, and are convertible into stock at the option of the holder, at any time within five years from their date, with interest of eight per cent., payable semi-annually on presentation of the coupons annexed, at the Bank of the Republic in the city of New York.

They are secured by a mortgage upon, and are a first lien upon forty-two miles of the road between its junction with the Lacrosse and Milwaukee Railroad, in the village of Horicon, in the county of Dodge, and the village of Berlin, in the county of Marquette, together with all the rolling stock, depot grounds, and all other property of the company, and by a sinking fund sufficient to extinguish the whole mortgage debt of the company before the maturity of the bonds.

On the 2d day of April, 1856, the board of directors by resolution, authorised the issuing of bonds to the amount of \$420,000, and also the execution of a mortgage upon the forty-two miles of this company's road lying between the junction thereof, with the Lacrosse and Milwaukee Railroad in the village of Horicon and the village of Berlin, and upon all the rights and franchises, real and personal estate and property thereunto belonging, said mortgage to bear date the 1st day of

April, 1856, to secure the payment of said issue and also to provide for a sinking fund to be set apart annually of \$5,000, and paid on or before the last Saturday of December in each year, for the ultimate redemption and payment of said bonds.

It will be seen by reference to the mortgage hereto appended, that the trustees of the sinking fund is required to use its avails in the purchase of the mortgage bonds of the company whenever they can be purchased at par or under, but in case they can not be purchased at par or under; then the fund is to be invested in other securities under the direction of the company. Should there be a failure on the part of the company, or neglect to make the annual deposit to the sinking fund as specified, the Trustee, Robert H. Lowry, Esq., Cashier of the Bank of the Republic in the city of New York, is authorised and directed to foreclose the mortgage in same manner as if default was made in the payment of principle or interest on said bonds, thus putting it out of the power of the company to evade this obligation.

The road is now completed to the village of Waupun, fifteen miles from its junction with the Lacrosse and Milwaukee Railroad, a point sixty-six miles North West from Milwaukee, and has been in operation since the 20th of February last. A satisfactory and irrevocable contract, running twenty years, exists for a connection of this road with the Lacrosse and Milwaukee Railroad at Horicon, under which the road has been operated since it was opened, to the mutual satisfaction of both parties. The company has expended on this forty-two miles embraced in the mortgage, about \$400,000, have fifteen miles of it in operation; the grading of the balance is now in rapid progress; has ties purchased and on hand sufficient to complete it, and sixteen hundred tons of iron purchased, which is now going forward. It has for equipment, now on the road, 3 first-class locomotives, 8 passenger and 2 baggage cars, and 80 freight cars, all of which are first-class and second to none in the country. The fifteen miles of road have earned in the three months ending May 26th, over \$12,400, which is a much larger amount in proportion to its length, than was earned by the Milwaukee and Mississippi Railroad in the corresponding months in the year 1854, the first year that road was opened to Madison—and this amount was much less than it would have been had it not been for the great fall in produce, which prevented farmers from sending their grains forward to market. The country through which this road passes is not exceeded in the fertility of the soil by any portion of our country, it is settled by an intelligent and enterprising people, and though not half developed, it is sufficiently so to support a railroad and give it business enough to pay a large dividend on its cost. At Waupun, the point to which the

road is now finished, is located the States Prison, in a flourishing village of some 1500 inhabitants. At a point eight miles from Waupun, on the line of the road, is the growing village of Brandon, where a steam flouring mill has just been constructed, and a steam saw-mill is soon to be erected for which a supply of logs is to be conveyed over this road, when completed to Berlin, on the Fox River. The next point of importance, 16 miles from Waupun and 31 from Horicon, is the village of Ripon, with a population of about 2,000—in this village is a college for learning, three flouring mills on a fine stream of never failing water, and several manufacturing establishments. This is a lovely spot, surrounded by a country of unexampled fertility, and the centre of a large and flourishing trade.

Eleven miles farther is the town of Berlin on the Fox River, with a population of some 3,000 inhabitants. This is at the head of steamboat navigation. At this place are several steam saw-mills for manufacturing pine lumber, the supply of logs being obtained from the Wolf River. This pine lumber, when the road reaches this point, will be taken over it and distributed at the various places over which it passes, for buildings and fences on the prairies and openings, and will furnish a large amount of business to the road. This is as far as it is contemplated to finish the road this year, and the means at the command of the company are to be devoted to that purpose. The company is in good credit at home, it has thus far met all its engagements promptly, and it is believed that it has the ability and vitality to continue to do it.

For the purpose of completing the forty-two miles of road mortgaged, the company have the following securities on which to raise money:

Bonds of this issue.....	\$420,000
Bonds of the town of Berlin.....	100,000
Bonds of the town of Ceresco.....	50,000
Bonds of the town of Waupun, voted, but not yet issued.....	50,000
Amount from stockholders to be paid on stock subscriptions.....	186,000
Amount of stock to be paid contractor...	36,000
Bonds of towns and counties that will be voted when called for.....	220,000
Unperfected real estate mortgages.....	100,000
	\$1,162,000

Estimated cost of road to Berlin..... \$840,000
Amount expended up to last report..... 354,000

Estimated amount required to complete the road to Berlin..... 486,000
Leaving an excess of..... \$676,000

The stock basis is as follows:

Stock held on the line of the road.....	\$383,100
" " by the city of Milwaukee....	166,000
" " to be paid contractor.....	55,100
	\$604,200

And the stock books are now open; and from the success of the stock agents, thus far, the company is warranted in setting down the amount of stock subscriptions that will be added to the list this month at not less than..... 500,000

\$1,104,200

which, when completed, will make a stock basis of over a million of dollars.

Until the forty-two miles, now under contract, are completed, it is not contemplated to make any outlay in extending the road farther. The motto of the company, "Complete your road to paying points as fast as the means at command will enable you to do so, but not embarrass yourself by trying to accomplish more than prudence dictates." When the road is completed to Berlin, the next move will be for its continuation to Stevens' Point on the Wisconsin river, fifty miles farther, through a rich and fertile country, which is being filled up with inhabitants with great rapidity. When this point is reached, it will open a railroad communication with one of the most extensive lumber regions of the West. It is estimated that the lumber manufactured and run down the Wisconsin river, amounts to not less than one hundred and fifty million feet per annum. From Stevens' Point the ultimate destination of the road is Lake Superior, near Lapointe, and thus open from Milwaukee, through the centre of the State in a north-westerly direction, a railroad communication to the rich mining regions of Lake Superior. For the purpose of facilitating the continuance of this road at an early day, a bill is now pending in Congress for a grant of land to aid in its construction from Berlin to Lapointe, and there is but little or no doubt but that it will pass this session of Congress.

This road is so situated, geographically, that it will always be without competition, as no other road can be constructed to compete for the business that is justly tributary to it, without being much more circuitous and distant, besides being much more costly in construction.

That this road, when completed to Berlin, will pay largely on its cost there can be no question; and as it progresses, its proportionate earnings will be much larger, as it is a settled fact that railroads pay much better as they increase in length. All the estimates made as to the cost of this road and its earnings, at the outset, have been fully justified in every step as the work has progressed. In the first annual report of the Chief Engineer, Jasper Vliet Esq., made in December, 1854, appears the following: "An estimate of the number of acres sown to wheat and other grains in the district of country extending from three miles south of Waupun to Berlin, and within eight miles of the lines of the railroad, was made during last summer by a highly intelligent and respectable gentleman residing in that section of the country. After a careful examination, he has given it as his opinion that the number of acres sown to grains was 86,500. The amount and value of these products, at a low estimate, would be equivalent to a yield of twenty bushels of wheat per acre, or in the aggregate, to 1,700,000 bushels of wheat. Other country beyond Berlin, and outside of this tract, which will be tributary to this road, produces at least an equal amount, which, added to the foregoing, makes a sum total of 3,460,000 bushels. Deducting from this one quarter for home consumption, would leave a balance of 2,595,000. Deduct twenty per cent. of this latter amount as being directed to other channels, and 2,076,000 bushels are left for this road to carry to market. If the price received by the company for carrying this amount to market, was only eight cents per bushel, it would amount to \$166,080, which sum, after deducting

forty per cent. for operating expenses of the road, would leave a sum sufficient to pay twelve per cent. on its cost for carrying grain products only."

"No one, at all familiar with the country and the subject of railroad operations, can doubt for a moment that the receipts of the road for carrying passengers, lumber, goods, and other products of the country other than grains, will equal the amount for carrying grains. If this and the foregoing estimate be true, then we have clear net earnings amounting to 24 per cent. on the cost of the road when completed to Berlin."

The following is the estimate alluded to.

CLASSIFICATION

OF VALUE OF REAL ESTATE, ETC., IN THE FOLLOWING TOWNS ALONG THE ROUTE OF THE MILWAUKEE & HORICON R. R., IN 1854.

Name of Town.	Number of acres.	No. of acres under cultivation.	No. of acres sown with wheat and other grains.	Aver. value of land per acre.	Value of personal property and improvements.	Total value of lands and improvements.	Population.
Waupun.....	23,040	7,000	6,000	\$4.00	\$30,000	\$80,000	1,100
Berlin.....	23,040	8,000	7,000	3.00	30,000	60,000	1,000
Chesler.....	18,120	6,500	6,000	3.00	30,000	60,000	1,000
Ceresco.....	23,040	8,000	7,000	3.00	30,000	60,000	1,000
Berlin.....	23,040	8,000	7,000	3.00	30,000	60,000	1,000
Rushford.....	21,540	6,000	4,000	3.00	30,000	60,000	1,000
Green Lake.....	26,240	10,000	8,000	3.00	30,000	60,000	1,000
Macdonald.....	23,040	6,000	5,000	3.00	30,000	60,000	1,000
Nepeshkin.....	19,840	6,000	5,000	3.00	30,000	60,000	1,000
Rosendale.....	23,040	6,000	5,000	3.00	30,000	60,000	1,000
Metomen.....	23,040	6,000	5,000	3.00	30,000	60,000	1,000
Springvale.....	23,040	6,000	5,000	3.00	30,000	60,000	1,000
Alto.....	23,040	6,000	5,000	3.00	30,000	60,000	1,000
Trenton.....	23,040	8,000	7,000	3.00	30,000	60,000	1,000
	325,820	106,000	86,500	\$3.50	\$300,000	\$3,400,000	14,460

This estimate of the amount of grains raised in 1854, was shown to be within the amount when the census of 1855 was taken. In several of the towns, the amount of grains raised the previous year was ascertained, and in every instance it verified the correctness of the estimates. Each year adds largely to the population and the amount of land under cultivation, and the products of the country are increased.

That this road is to be a very highly remunerative one, there can be no question; and the company feel confident in recommending these bonds, as not only a safe and profitable investment, but a very desirable one for capitalists. That they will be able to complete the road, and meet all engagements of every kind, they have the fullest confidence.

There is one feature in the banking law of Wisconsin that should enhance the value of this security—and that is, when the road has earned an amount net equal to eight per cent. per annum on this issue of bonds, they will be receivable by the controller, as securities for banking purposes; and as the State increases in wealth and banking capital, there will be a home demand for these bonds.

June 10th, 1856.

J. B. SMITH, President.

Flemington Railroad.

At a meeting of the Board of Directors of the Flemington Railroad and Transportation Co., held at the Trenton House, in the city of Trenton,

August 9th, 1856, Charles Bartles was elected President, and A. V. Bonnell, Secretary and Treasurer of the company.—*Hunterdon Gazette.*

Louisville and Nashville Railroad.

We copy from the *Louisville Journal* the following correspondence showing the progress of this road.

Gentlemen:—Aware of the deep solicitude felt by the citizens of Louisville, the stockholders, composed of individuals and counties, and the community generally in the progress of the Louisville and Nashville railroad and Lebanon Branch, I submit the monthly statement of the Engineer in Chief:

ENGINEER'S OFFICE L. & N. R. R. }

Louisville, Aug. 7th, 1856. }

JOHN L. HELM Esq., President L. & N. R. R.
Sir—I herewith submit a statement of the value of the work done during the month of July upon the main stem and upon the Lebanon branch of the Louisville and Nashville railroad; also, a statement of the force in the employ of the company on July 31st:

LEBANON BRANCH.

Between junction and New Haven.....\$4,233 45
Between New Haven and Lebanon..... 8,198 52

\$12,476 97

MAIN STEM.

First division.....\$2,593 27
Second do. 7,277 14
Fourth do. 12,497 93
Fifth do. 11,658 18

34,026 52

Total value of work\$46,503 49

	Men.	Horses.
Lebanon branch.....	100	30
First division (main stem).....	100	..
Second do.	330	79
Fourth do.	321	136
Fifth do.	269	130

Total force1,120 375

Yours, respectfully,
GEO. MACLEOD, Chief Engineer.

Notwithstanding the proceeding recently had was calculated to retard the progress of the branch road, the community may feel assured that everything will be done that can be done to overcome this embarrassment and progress with the work. I think there need be no apprehensions. The whole grade will be completed in four months.

The grade is complete to Rolling Fork on the main road, and the track laid to within one-quarter of a mile of that stream. A vigorous prosecution of the work on the Rolling Fork bridge is now being made, and no doubt is now entertained that the track will cross that stream and advance one mile by or within the month of December next. By the 1st of January next, there will be one mile of Muldrow's Hill prepared for the track, and by Spring the cars may run to within seven miles of Elizabethtown. The remaining part of Muldrow's Hill may, and probably, will be prepared for the track during the winter of 1857-'8.

An idea seems to prevail that the whole of Muldrow's Hill is to be tunneled. Allow me to explain the mode of overcoming this paramount difficulty in the way of the speedy progress of the road.

Muldrow's Hill is separated by Clear creek, almost to its summit; the road is laid to pass up by a side-cut on the hill for about four miles. The tunnel is through the last half-mile of the hill, and on passing out the southern entrance the road courses the valley of the creek which passes Elizabethtown on a descent of a little over twenty feet to the mile to Elizabethtown. The work on the hill will be pressed on the located line to within a short distance of the northern entrance of the tunnel. At that point, if it is thought best to make a connection with the expenditure of the \$1,000,000 under the late ordi-

nance, with a view to cross Green river at the earliest possible day with a rail-track, a temporary track round the tunnel may be adopted, with a grade which may be easily ascended by motive power, at a cost of \$5,000, losing only 150 feet in distance over the tunnel line.

The work south of the tunnel is now being pressed, and I think it may be safely assumed that the grade across Green river will be prepared for the track within the next year. Within the same period the grade will be completed through Warren and Simpson counties. If the company can negotiate for iron with its mortgage bonds, of which there exists some probability at this time, the entire line between the tunnel and State line may be fitted for iron within the next year.

The grade from Nashville out thirty miles will be prepared for the iron within the next year.

Respectfully,
JOHN L. HELM, President.

Norfolk and Petersburg Railroad.

This company was organized on the 6th of April, 1853, by the election of Dr. Francis Mallory as President. At a meeting held on the 11th of same month the company adopted by-laws and regulations for their government. On the 13th of April, 1854, the first annual report of the President, Chief Engineer, and Treasurer was submitted, from which we learn that soon after its organization, in 1853, the Board selected Wm. Mahone Esq., as Chief Engineer, and authorized him to make the requisite arrangements for the speedy and energetic prosecution of the work. Mr. Mahone had previously been in the service of the Orange and Alexandria railroad and brought with him high recommendations for professional skill and experience, affording a promise of usefulness, which his services have more than realized. Mr. Mahone proceeded at once to organize a corps of engineers for a thorough survey and location of the line between Norfolk and Petersburg. The number of roads at that time in progress throughout the Union, rendered it difficult to obtain competent assistants and to procure the necessary instruments and appliances. Consequently, the preparations were not completed till the 20th of May. The survey was immediately commenced and closed at Petersburg on the 20th of September following, covering in the aggregate of lines traced 128½ miles, and though executed with all due care and precision, was accomplished by one party of engineers, with the ordinary equipments.

From the peculiar position of the city of Norfolk, the best mode of entering it by railway required much consideration, and early engaged the attention of those to whom was entrusted the management of the affairs of the company. A careful examination of the localities was, therefore, deemed of primary importance. These having been thoroughly examined and the line projected as far as Dismal Swamp, the party of engineers, headed by the chief, took the field on the 1st of August, and on the 28th of September finished the survey to Petersburg.

The location of the road was established close on the line of the survey. The length of the road is about 80 miles, and occupies the most eligible ground the country affords. The streams are crossed at points the most favorable. The grades are light not exceeding 36.96 feet per mile. The curves are of large radii, the maximum being 7,970 and the minimum 3,143 feet. Over 73 miles are absolutely straight—this is in parcels, how-

ever, of 3, 18, and 52 miles. The road crosses the Seaboard road at or near Suffolk, and about 20 miles from Portsmouth, on an elevated plane of some 18 feet. At the city of Petersburg, it connects with the South Side railroad. Subsequent explorations, both north and south of the established line, proved the route selected to be in all respects preferable to any other; accordingly, directions were given to proceed at once with the construction of the road. Lettings were advertised on the 15th of December, bids were received for 60 miles, and contracts entered into to be commenced with the opening of the year 1854. At the date of the report, nearly the whole line was under contract.

The following is the plan of construction as laid down in the report of the Chief Engineer:—The road width has been taken at 100 feet, with such a proportion on either side as circumstances may require. The road bed will be prepared for a single track, and for sidings at stations, etc. The cuts graded for a width of twenty feet, with slopes of 1 to 1, the embankment to be not less than fourteen feet, with slopes 1½ to 1. The masonry to be generally of stone, of a kind, style and quality suited to each particular structure; but where the facilities for the delivery of stone do not exist, wooden structures will be temporarily used, to be afterwards replaced with stone. The bridges to be of the most approved style, of the best material either iron or wood. The railway track to consist of a heavy rail spiked upon white oak cross-ties, placed two feet apart, and on a layer of sand or gravel, as most convenient. The road to be ballasted upon its completion to Petersburg, this being the only point at which suitable material can be procured for that purpose.

The starting point in the immediate vicinity of Norfolk, is so situated as to afford easy ingress to several parts of the city. No steps had as yet been taken to procure iron for the superstructure. The President was of opinion that this would require attention about the latter part of the year. This road occupies a peculiar relation to the Government. The magnitude of the naval and military establishments in the vicinity of Norfolk, its central position, fine roadstead and contiguity to the West Indies, would, in case of war, make it the theatre of important movements, if not the point of attack. A communication by railway with the interior would be of immense advantage, in transporting men and supplies for distant service, or for defence at home. The connections thus formed with Richmond, Petersburg and other large cities would afford resources to the Government, which ought to be appreciated. It is worthy of notice, that while nearly every appropriation to works of internal improvement were defeated in the Virginia Legislature, during the winter of 1853-4, the Norfolk and Petersburg railroad was an exception.

In the charter the capital stock was fixed at \$800,000, which has since been increased to \$1,500,000—of this amount the State of Virginia is pledged to take \$900,000, upon condition that the remaining \$600,000 shall be made up from private sources. Of this private subscription of \$600,000, nearly \$250,000 have been taken, leaving \$350,000 yet to be made up, to ensure to the company their entire capital. If this sum can be made up

at once, the State will, under her late special enactment, issue her bonds to the company for the residue of the amount pledged by her.

The following estimate of cost of construction is either deduced from prices at which some portions of the work have already been let, or based upon prices for the material consequent thereto, which it is supposed will cover their cost, and which will only vary as such prices shall advance or recede:

For right of way.....	\$31,600.00
Clearing 623 acres.....	25,084.50
Grading 1,697,018 cubic yards earth excavation.....	302,651.70
Masonry—5,612 cubic yards culvert.....	25,775.00
“ 15,846 cubic yds. bridges.....	219,581.50
Temporary trestles and trusses.....	6,181.07
Bridging.....	74,742.00
Railway track including sidings, at \$9,350 per mile.....	803,800.00
Engineering and contingencies.....	61,679.00

\$1,551,294.77

Over and above this amount, equal to \$19,921.18 per mile, which covers the cost of construction proper, it will be necessary hereafter to provide for depot grounds, buildings, water stations and rolling stock, towards which there may be applied the sum of \$90,430 of the above estimate—which has been allowed therein, for the purpose of substituting masonry and iron superstructure, instead of the temporary trestles and trusses, as soon as the road shall be opened to Petersburg.

At the date of the first report, preliminary arrangements were being made for the construction of abutments of bridges over the Elizabeth river, either by the company, or by contract—to be afterwards decided.

The second annual meeting of the stockholders was held on the 12th of April, 1855. Dr. Mallory was re-elected President, and Joseph H. Robinson appointed Secretary and Treasurer, in place of G. W. Camp, resigned.

The President in his report states that during the year nothing had transpired calculated to impair the belief in the early and successful completion of the road. A large force was at work upon the road, and the more important parts were being energetically prosecuted. Proposals for rails had been invited, and several offers received, but no contract had as yet been made. The company had purchased a site for a depot at the city of Petersburg, eligibly situated, and on terms believed to be highly advantageous. From the substantial manner in which the road was being built, it was thought that but few repairs would be required for a long time after it was opened.

The Engineer in his report adheres to the original plans and estimates; and therefore only finds it necessary to refer to the progress which has been made during the year.

Of the clearing, only 180 acres—covering 15 miles of the entire line between Norfolk and Suffolk, remains to be executed. Between Suffolk and Petersburg the whole track is open.

One-third of the graduation has been completed.

The most eligible plans for the bridges over Elizabeth river, having been adopted after mature deliberation, contracts were entered into for the execution of such parts as it was deemed inexpedient for the company to undertake on its own account. A large portion of the stone for the abutments of the two bridges had been delivered.—

The materials requisite for the foundations of the masonry connected with the bridges, as well as the apparatus for laying the same, had been procured. But little masonry, independent of the above bridges has been done, beyond the construction of some culverts near Suffolk and Petersburg, and the delivery of small quantities of stone at those points for bridges in their vicinity. The entire number of cross-ties required for the road had been contracted for. No other contracts for superstructure had been made.

Bramble's Point at Suffolk has also been purchased by the company for station purposes. The Engineer proposes soon to commence here the erection of such portions of the machine shop as will be necessary on the opening of the road to be used in lieu of temporary shops for the construction of the superstructure for the Elizabeth river bridges.

The third annual meeting of the stockholders of this company was held on the 10th of April last. The report of the President and Chief Engineer, together with that of the Treasurer, was read and adopted. The following is a financial abstract of the receipts and disbursements of the company since its organization.

Capital stock.....	\$1,147,800.00
Received:	
From State of Virginia..	\$254,562.00
" City of Norfolk....	151,370.00
" Individuals.....	22,023.50
	427,955.50
Amount unpaid.....	\$719,840.50
CASH ACCOUNT.	
Received from State.....	\$254,562.00
" " Norfolk city bonds....	119,240.00
" " Individuals.....	22,023.50
	\$396,825.50
Paid for general management, salaries and office expenses.....	\$18,192.93
Miscellaneous expenses....	6,146.83
Engineering.....	38,677.27
Right of way.....	48,201.53
Construction.....	259,650.74
Equipment.....	6,802.00
Profit and loss account....	3,509.87
	381,181.17
Balance.....	\$14,644.33

From the report we learn that, notwithstanding the financial difficulties with which this company has had to contend, the work of construction has steadily progressed. Much has been accomplished during the year in the way of cutting and filling, and in the construction of bridges; but a small portion of the embankment remains to be finished, and for miles together in many parts of the line, the road is in readiness for the rails. The masonry of the bridges and culverts is in good progress, and the construction of the pier in the iron bridge over the north branch of Elizabeth river is in a state of forwardness. The stone for the bridge over the eastern branch has been contracted for and is being delivered as fast as required. The bridge over the Nansemond river is in an advanced stage. These bridges are all so far advanced that, with adequate means, they could be completed in a very short time.

The amount of work which has been done in the clearing, graduation and masonry is valued at \$283,348.07; and the completion of all these, including the screw pile piers of South Branch

bridge is estimated at \$308,000. There has been paid on account of work done, \$259,650.74—the usual reservation being made, as security for the faithful compliance with the contracts. Of the amount paid, \$35,000 has been in Norfolk city scrip, at the rate of 90 cents to the dollar. In the payment of the reservation, and for the work which remains to be done, amounting together to \$283,697.33, it is the intention of the Company to use \$65,000 more of the same scrip at the same valuation. The cross-ties for the entire road will cost about \$77,000. They are all to be delivered during the present year. One half of the sum to be paid in city scrip, at 90 cents on the dollar, or in cash at the option of the company. In depot grounds, station buildings, and the like, nothing has been done since the last report. As to the final cost of the road, the engineer finds no reason to demur from his original opinion upon the subject, except so far as it applies to right of way, which will exceed his estimate about \$35,000.—The estimate for engineering and contingencies is also largely augmented, from the greater length of time required to complete the road than originally contemplated. The liabilities of the company under all existing contracts are:

For right of way unsettled.....	\$16,000
Clearing, graduation and masonry....	258,000
Cross-ties.....	77,000
	\$351,000

The officers of this company are—Francis Mallory, President; J. J. Simpkins, Secretary and Treasurer; Wm. Mahone, Chief Engineer. Directors on the part of the State, A. F. Leonard, Geo. W. Camp, John B. Whitehead; on the part of the stockholders, W. G. Harrison, W. J. Hardy.

Baltimore and Ohio Railroad.

The Board of Directors of the Baltimore and Ohio railroad company held their regular monthly meeting on the 14th inst. The usual official statement of the operations of the road during the month of July was made to the meeting, and exhibits the following result:

	Main Stem.	Wash. Br.	Total both roads.
For passengers.....	\$63,265.46	\$29,370.87	\$92,636.33
For freight....	317,579.86	7,756.28	325,336.64

Total.... \$380,844.82 \$37,127.15 \$417,971.97

These figures, compared with the receipts for July of last year, show that on the main stem there is now an increase from passengers of \$11,991.67, and from freight of \$98,008.19; while on the Washington Branch there is an increase from passengers of \$4,645.01, and from freight of \$1,422.89;—total increase for the month, \$116,062.76. The following table exhibits the monthly receipts during the past ten months of the fiscal years, from which it will be seen that there has been a gain of \$576,882.16 over the corresponding period of last year:

	1855.	1854.
October.....	\$423,436.84	\$359,610.52
November.....	399,119.40	347,577.96
December.....	441,315.61	293,014.16
	1856.	1855.
January.....	\$191,809.81	\$370,211.93
February.....	211,513.76	216,299.49
March.....	405,820.39	370,455.02
April.....	551,811.28	368,202.84
May.....	479,418.25	385,358.14
June.....	438,788.26	371,783.84
July.....	417,971.97	301,909.21

Total.... \$3,961,405.57 \$3,384,523.11
8,884,523.11

Increase..... \$576,882.46

The Tehuantepec Route.

The Tehuantepec Company of this city have issued the following interesting statement of the condition, prospects and value of this great work.

It was much needed for the information of the public. The interest in this route is received with great force, and the circumstances of the country give it additional attraction.

We have been almost on the verge of a war with Great Britain, of which the real cause is the struggle for a free transit across the Isthmus, a communication not subject to the control or caprice of any foreign power, between the Atlantic and Pacific States of the Union. The affairs of Central America, which so much perplex our statesmen, and have so much involved us in controversy with foreign nations, that war, at several times, has been thought to be imminent, concern us mainly because through these States lie the chief routes by which it has been supposed that the commerce of the world could be made to pass from ocean to ocean. The United States, as the dominant power on this continent, with an immense commerce in both hemispheres, seeking vent by this channel, and requiring as a political necessity a quick and safe communication between its own ports, would not consent that any European nation should have influence or military stations by which it can block up the way or control the passage through, in either direction.

There is no settlement yet of the Central American difficulties, brought on by our efforts to abolish the predominance of England in the Caribbean sea, and secure, by compact with her, the neutrality of the Isthmus routes. The best settlement which can be expected amounts only to a truce—a mutual agreement to abstain from monopoly or interference; but it is obvious that all such agreements, however permanent they may be in their terms, have in them the elements of instability, and are subject to changes and chances which depend on the caprice of either government, or the changing circumstances and humors of the States of the Isthmus through which the guaranteed routes must pass. The distance from our own borders of the nearest of these routes adds to the burden of the uncertainty which must also exist in regard to the management of these transit routes, and the good faith with which the pledged neutrality is observed; and a costly establishment of naval observation must always be kept up. If these were the best, or the only routes, these burdens would be cheerfully borne with; for a transit free and sure, at all times to citizens of the United States, must be maintained at all hazards and cost—almost as a condition of the coherence together of the Atlantic and Pacific States of the Union.

The route via Tehuantepec disposes of a great many of these embarrassments, and takes the substance out of the quarrels with England about the Central American routes. Securing the Tehuantepec line and opening a road there, we have lost the paramount interest which we had in defeating the British attempt at monopoly below, and the British lost the inducement to insist upon keeping the points which are only useful to her for military and naval stations, to command the termini of the inter-oceanic canals or railroads. The dispute will thus have lost its importance, and there can be no difficulty in compromising details that have no real significance. If our people turn their eyes and their interests to the Tehuantepec improvement—the Central American—they will go the straight and short way to prevent Great Britain from caring any more about her pretensions, or from entertaining any designs to our prejudice at Nicaragua or Panama, or any other projected transit route.

The political advantage is resultant upon the intrinsic superiority of the route over all others, for the general commerce of the world, and its peculiar and immense value to the United States.—These views are very well and lucidly expressed in the circular which we copy below, and to which we invite the attention of our readers. Those who have any special interest in New Orleans, who de-

sire its prosperity, and wish to see it grow rapidly and largely in trade, population and wealth, will find in these statements ample inducements to put their own hands to the work, and assist, by their means, in bringing it to an early consummation. No enterprise presented to the public combines such great promise of public benefits, with such prospects of profit to the capitalists who shall take it in hand:

CIRCULAR.

NEW ORLEANS, July 24, 1856.

SIR—The Tehuantepec Company, established in New Orleans, possess the right of way over the Isthmus of Tehuantepec, granted by the government of Mexico, on the 8th of February, 1853, as well as the exclusive navigation of the Coatzacoalcas river.

This grant is recognized and protected by the government of the United States, in the eighth article of the Gadsden treaty, ratified on the 30th of June, 1854.

The value of this recognition may be estimated by the following extract from a letter from Hon. A. Dudley Mann, late Assistant Secretary of State, to the writer, dated London, October 4, 1855:—"If the road shall be made, the recognition of the route by the government of the United States will be of incalculable value. Such a recognition could not be obtained again for any consideration. Neither the Executive nor the Senate could be influenced to give its assent to it, and without it the contract would be comparatively worthless, as is manifest in the instance of the Garay grant. Mexico is restrained by obligations which it would be worth her peace to disregard, to repudiate the Sloo contract, while she abrogated with impunity that of Garay. The Sloo contract is, therefore, the only one that it is likely ever could be enforced in Mexico. The United States government most assuredly will never commit itself to another. Indeed, its policy with respect to American citizens engaged in enterprises or trade in foreign countries, is almost certain to be different from what it has been heretofore. Those who establish themselves abroad in business pursuits must look to the tribunals of the country in which they are located for redress, since they employ their capital in developing the resources and contributing to the wealth of that country. In this view of the matter, the Sloo contract is worth millions of dollars, because it is protected by the United States."

A mere glance at the map will convince the most sceptical that the Tehuantepec route must command all the commerce on the Pacific Ocean with the United States and Europe. By it New Orleans will be brought within 3,000 miles and ten days' travel of San Francisco; and passengers, by means of the railroads now in construction, will be conveyed thence to New York in thirteen days.

At the same time that New Orleans will by this route, be gaining 2,100 miles over that by Panama, which is the present highway, New York herself will make a saving of distance by sea of 1,160 miles, and thus be forced to use our road. The gain in passage from Liverpool by the Isthmus of Tehuantepec, over that by the Panama road to China, is 2,200 miles in distance, and ten days in time. With these advantages the route by Tehuantepec must command the whole China trade.

Our route is considered a link in the great chain of communication between Great Britain and Australia, and a project is now on foot to run a line of steamers to Norfolk, and thence by the railroads of the United States and the Isthmus of Tehuantepec, to Australia. When this line goes into operation it will at once double all our revenues, as the trade of Australia, with its fifty millions of gold, bears the same relation to Great Britain as the trade of California does to the United States.

A few years since the French government sent out a distinguished engineer, Monsieur Emilie Chevallier, to examine all the communications between the two oceans. He made an elaborate report on Panama and Nicaragua, and wound up in these words: "But if hereafter the other ways

of communication, and conspicuously that which traverses the Isthmus of Tehuantepec, should pass from a state of project into one of execution, it is certain the Panama railroad would be abandoned by all travellers going either from the Atlantic States or Europe to California and reciprocally.—This road would only preserve the South American trade, which is now so feeble that it would have to increase tenfold before the receipts of the railroad would arrive at a reasonable sum." (See "Annals du Commerce Extérieur," Feb. 1852.)

This opinion was confirmed and reiterated by the Geographical Society of Paris, after a detailed examination of all the authorities. (See "Bulletin de la Société de Géographie," July, 1852.)

For the present it is intended to run light draught steamers on the Coatzacoalcas river, a distance by the river of seventy-five miles, to Suchil, the head of navigation, and thence to open a carriage road for a distance of about 100 miles to the Pacific ocean. As a considerable part of this carriage road is already constructed, and from thirty to forty miles on the Pacific slope is prairie, requiring but little labor, the remainder being over a country "whose peculiar formation," to use the words of Mr. Avery, who made the survey, "is remarkably well adapted to the construction of good roads;" it is believed it can be completed in a short time, and at a small expense.

Our route has the advantage of unquestioned salubrity, and of passing through one of the most beautiful and picturesque countries that exists on the surface of the globe.

All the conditions of the grant have been punctually and faithfully complied with. The company made a contract with Sykes & Co., of Sheffield, England, who are contractors of some importance in Canada, for the construction of both the carriage and railroads. The work was commenced by them, and some five or six miles of road opened. James Sykes unfortunately embarked on board the Arctic, with his principal men, intending to push the work through vigorously, when they became victims of the catastrophe that befell that vessel.

It is difficult to estimate the probable revenue of this road without producing a sum that borders on the fabulous. Major Barnard, in his report, page 121, says: Taking 1849, '50 and '51 as the criterion, the lowest annual estimate of emigration between the Atlantic States and California is 141-320. Now, calculating the passengers at 50,000 only per annum, at \$25 per head, the price now paid over Panama; the freight at but thirty tons per day, and the mail pay and gold at the same proportionate rate as is now received by the Panama road, its revenues would exceed two millions of dollars per annum, after deducting \$900,000 for expenses. This sum will build the railroad in three years. If the steam transportation be undertaken by the company, at the rates now paid to other lines, this revenue will be much more than doubled. No one would have the temerity to estimate the profits of the railroad.

These are some of the advantages possessed by the route across the Isthmus of Tehuantepec over all its competitors.

It is peculiarly the Southern route, and it will concentrate in the ports of the Gulf of Mexico the whole trade of the Pacific Ocean, the Indies and Australia, and those ports the grand depots of all the commerce of the East. It is the conviction of this fact that has caused the whole moneyed interest of New York to combat with a fury hitherto unknown every effort to open this road. An attempt was made to prevent Sykes & Co. from performing their contract, by bribery; and the same means were tried on Smith, the present contractor. The recent attempt of Hargous and his party, which has been so signally defeated by the government of the United States, originated from the same cause, and was instigated by the same men.

At length the people of New Orleans have awakened to the immense importance of this route, and money sufficient to open, immediately the carriage road has been subscribed. It is to be hoped that the same good feeling will continue, and that the capital necessary for the establish-

ment of the steam transportation, and for all other purposes of the company, will be supplied at the South; and that for once she will be true to her own interests, and secure all the pecuniary as well as the political and moral advantages the accomplishment of this great enterprise will achieve.

There is nothing that will so completely render the South independent of the North, and bring her in intimate and close connection with our Pacific possessions as the command of the Isthmus of Tehuantepec.

All that is required to accomplish every purpose of the company is two millions of dollars, and it can be shown to an arithmetical certainty that the revenue derived from that investment will be greater than can be obtained from any other known enterprise.

The company have sent down a light draught steamer to navigate the Coatzacoalcas river, and a vessel has also been dispatched laden with supplies and men; there is sufficient native labor on the ground to vigorously prosecute the work, and as the whole population of the country anticipate its accomplishment with enthusiasm, it will not only be done, but be done well and speedily.

Inviting your active co-operation, I am, respectfully, your obedient servant,

WALTER NICOL,

President Tehuantepec Company.

M. ABRAMS, Secretary.

Iron Mountain and Wisconsin Railroad.

The Lake Superior Journal says that a company has been organized under the provisions of the general railroad law of the State of Michigan, called the Iron Mountain and Wisconsin Railroad Company, and have filed their articles of association in the office of the Secretary of State.

The line of the road of this company extends from the present western terminus of the Iron Mountain Railroad Company—twenty miles west of Marquette, in a south-westerly direction, crossing the Michigan river, and thence descending the valley of that stream, to the Wisconsin State line, striking the Menominee river, near the mouth of the Brule, in township forty-one, of range thirty-two. At the Menominee it meets the line of road extending from Fond du Lac, on Winnebago lake, by way of Appleton, to the north boundary line of Wisconsin, thus forming an unbroken connection from Chicago to Marquette, on Lake Superior.

The route, we understand, is one quite favorable for the construction of a road. The line has already been surveyed and located by the engineer of the company, Austin Burt, Esq., and the map of the route filed in the Register's office of Marquette county. The company have been fortunate in the selection of this gentleman as their engineer, as he is thoroughly acquainted with the country, and possesses an intimate topographical knowledge of the district through which the road passes.

The names of the corporators of the company are: Heman B. Ely, Austin Burt, John Burt, Hubbard Wells, Charles D. Welles and Sands G. Cole, of Marquette; and Jonathan Child, Lewis M. Morgan, Wm. H. Perkins, Samuel P. Ely, George H. Ely, C. F. Smith, G. H. Perkins, Chester P. Dewey, John N. Pomroy, H. A. Brewster, Aristarchus Champion, Alvah Strong, Thomas Kempshall, J. H. Child, S. L. Brewster, Henry F. Smith, Porter Taylor, Robert Gelding and Henry Fowler, of New York. We recognize among these names many well known to the public as men of capital, enterprise and experience; and to whom the Upper Peninsula is already much indebted in her onward march of improvement; and we have no hesitation in declaring that the work is in safe hands; and if other portions of the line are completed as soon as this will be, the next two years will find us in daily communication, by railroad, with our neighbors of Appleton, Fond du Lac, Milwaukee and Chicago.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	65	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.	.....	.....	.....	.....
Androscog. & Kennebec.....	55	538,042	1,622,905	2,210,947	209,475	110,247	none	14	South Western.....	92	1,097,496	465,500	1,024,920	253,306	141,168	8	.....	.....
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,600	.....	.....	.....	.....	Tennessee and Alabama.....	80	248,486	.....	679,006	In progr.	.....	.....	.....	.....
Portland, Saco, & Portland.....	51	1,367,000	119,237	1,486,327	270,214	112,491	6	85	Tennessee and Missouri.....	.....	170,931	.....	175,740	In progr.	.....	.....	.....	.....
Boston, Concord, & Montreal.....	93	1,808,093	1,059,512	2,771,310	223,234	120,834	.....	.....	Memphis and Charleston.....	217	2,179,440	2,127,002	4,028,796	811,631	169,672	.....	.....	.....
Cheshire.....	53	2,085,925	899,313	3,179,687	380,221	143,565	2	17	Mobile and Ohio.....	153	2,565,555	1,802,921	4,538,112	199,932	109,236	.....	.....	.....
Concord.....	35	1,500,000	8,242	1,412,676	383,919	134,454	6	76	Miss. Central.....	188	642,534	none	628,402	In progr.	.....	.....	.....	.....
Northern, N. H.....	82	2,768,400	none	3,016,633	370,529	138,290	2	40	N. O., Opelousas & G. W.....	55	2,930,425	671,645	2,657,565	In progr.	.....	.....	.....	.....
Con't & Passumpsic Riv.....	61	1,048,145	787,608	1,780,062	162,867	55,173	none	4	Nickab, Shreveport & Tex.....	.....	111,760	none	107,895	In progr.	.....	.....	.....	.....
Rutland & Burlington.....	120	2,233,376	2,662,396	5,378,428	384,971	.....	.....	.....	East Tennessee and Ga.....	111	1,000,000	1,500,000	2,500,000	In progr.	.....	.....	.....	.....
Vermont Central.....	117	4,000,000	3,550,238	8,463,360	320,119	214,793	none	1	East Tennessee and Va.....	16	625,425	938,593	1,033,781	In progr.	.....	.....	.....	.....
Boston and Lowell.....	27	1,830,000	325,635	2,188,995	489,754	140,377	6	59	Nash. and Chattanooga.....	151	2,319,330	1,497,081	3,843,694	310,090	112,177	none	.....	.....
Boston and Maine.....	83	4,078,974	150,000	4,179,535	854,426	339,060	6	75	Covington & Lexington.....	98	1,302,804	2,235,939	3,738,763	264,978	138,694	18	.....	.....
Boston and N. Y. Central.....	74	2,240,300	1,518,671	3,483,158	59,917	8,740	none	6	Lexington and Frankfort.....	29	430,055	168,099	637,071	93,263	43,635	0	.....	.....
Boston and Providence.....	66	3,100,000	359,132	3,677,154	558,671	219,689	none	61	Lexington and Danville.....	.....	694,444	52,734	747,178	In progr.	.....	.....	.....	.....
Boston and Worcester.....	68	4,500,000	655,428	4,865,439	1,008,004	404,461	6	82	Louisville and Frankfort.....	65	698,236	669,081	1,589,566	244,014	96,902	0	.....	.....
Cape Cod.....	47	681,690	280,595	997,252	119,221	65,527	3	40	Atlantic & Gt. Western.....	254	866,939	77,294	613,231	In progr.	.....	.....	.....	.....
Connecticut River.....	52	1,591,110	273,241	1,802,244	286,553	103,787	5	47	Belleville and Ind.....	118	1,861,635	2,025,925	2,852,652	298,293	140,823	none	.....	.....
Eastern, Mass.....	60	2,583,400	2,947,737	4,621,016	647,281	305,998	none	40	Clev., Col. and Cin.....	141	4,647,020	122,857	4,613,722	1,290,295	732,056	9	101	.....
Fitchburg.....	57	3,540,000	153,700	3,765,998	681,163	225,071	none	66	Cleveland and Toledo.....	200	2,675,425	2,689,301	5,124,629	736,272	396,986	10	72	.....
North-Eastern.....	30	800,242	235,535	968,521	In progr.	.....	.....	.....	Clev. and Mahoning.....	103	.....	.....	628,535	In progr.	.....	.....	.....	.....
N. Bedford and Taunton.....	21	500,000	none	533,953	198,491	56,533	6	83	Clev. and Pittsburgh.....	133	2,790,744	3,043,992	6,537,466	581,877	309,518	.....	.....	.....
Old Colony and Fall River.....	87	3,015,100	292,650	3,362,490	653,499	295,738	6	83	Cin., Hamilton & Dayton.....	60	2,153,990	1,321,213	2,967,757	508,271	278,012	.....	.....	.....
Vermont and Mass.....	77	2,232,541	1,033,670	3,209,727	264,726	87,313	none	7	Cin., Wilm. & Zanesville.....	131	1,120,450	1,131,265	2,326,450	In progr.	.....	.....	.....	.....
Western, Mass.....	155	5,150,000	5,966,420	10,495,905	1,569,673	638,013	7	87	Columbus and Xenia.....	55	1,454,550	149,000	1,481,733	356,365	187,518	10	82	.....
Worcester and Nashua.....	46	1,141,000	205,565	1,351,271	291,730	75,760	2	40	Dayton, Xen. & Belpre.....	63	487,838	422,668	860,490	In progr.	.....	.....	.....	.....
Worcester and Worcester.....	43	1,510,020	335,461	1,806,696	314,430	138,067	none	70	Dayton and Michigan.....	140	1,076,002	393,011	1,185,826	In progr.	.....	.....	.....	.....
Hartford and N. Haven.....	72	2,356,000	939,000	3,313,932	730,012	352,799	10	22	Dayton and Western.....	35	310,000	500,000	733,769	In progr.	.....	.....	.....	.....
Hartford, Prov. and Fishkill.....	122	2,006,110	2,030,665	4,066,369	258,685	119,611	none	.....	Eaton and Hamilton.....	42	454,690	904,489	1,565,135	171,929	65,000	.....	.....	.....
Housatonic.....	110	2,000,000	414,240	2,431,773	339,196	171,427	none	.....	Little Miami.....	65	2,993,921	1,171,785	3,643,172	681,562	336,708	.....	.....	.....
Naugatuck.....	57	1,031,800	524,244	1,580,728	220,459	98,768	none	.....	Mad River and L. Erie.....	206	2,451,650	2,572,932	4,444,061	In progr.	.....	.....	.....	.....
N. York and N. Haven.....	62	3,000,000	2,376,803	5,376,803	884,806	338,877	none	25	Central Ohio.....	138	1,660,927	3,485,078	4,283,445	Recently opened.	.....	.....	.....	.....
N. Haven and N. London.....	50	738,258	735,165	1,450,318	88,007	30,318	none	.....	Ohio and Penn.....	137	2,451,700	3,219,000	6,670,700	1,111,628	602,117	9	.....	.....
N. London, W. & Palmer.....	66	500,200	1,073,673	1,694,383	124,044	66,430	none	.....	Pittsburg, Mayv. & Cin.....	60	371,350	31,000	390,933	In progr.	.....	.....	.....	.....
Norwich and Worcester.....	64	1,222,300	873,489	2,597,183	304,236	88,453	2	25	Sand'y, Manaf. & Newk.....	127	1,350,000	2,205,357	3,562,367	328,958	164,479	none	.....	.....
Albany Northern.....	32	439,005	1,625,098	1,840,695	117,710	9,904	none	.....	Scioto & Hocking Valley.....	135	403,975	509,050	888,585	In progr.	.....	.....	.....	.....
Black River and Utica.....	35	643,330	317,359	974,323	In progr.	.....	.....	.....	Spring, Mt. Vernon & P.....	113	1,000,000	950,000	.....	In progr.	.....	.....	.....	.....
Buffalo, Conn. and N. Y.....	100	1,487,374	1,501,183	2,819,096	172,472	68,333	none	.....	Tol. Washab. & St. Louis.....	242	2,600,000	4,530,000	.....	In progr.	.....	.....	.....	.....
Buffalo and N. Y. City.....	92	798,439	2,537,349	3,401,868	288,392	31,896	none	.....	Cin., Log. & Chicago.....	255	4,196,679	1,008,125	2,080,433	In progr.	.....	.....	.....	.....
Buffalo and St. Line.....	69	1,300,000	1,040,000	2,494,304	679,750	385,763	10	.....	Evansville & Crawfordsv.....	109	708,495	1,177,596	1,844,541	127,400	64,552	.....	.....	.....
Canadaigua and Elmira.....	47	434,111	922,393	1,275,798	174,089	69,506	none	.....	Ind. and Cincinnati.....	83	1,213,723	1,442,859	2,745,451	356,012	193,142	7	60	.....
Canadaigua & Niagara F's.....	98	1,315,000	2,279,854	3,493,832	.....	.....	.....	.....	Indiana Central.....	66	611,400	1,291,179	1,907,911	850,176	184,875	.....	.....	.....
Cayuga & Susquehanna.....	35	687,000	506,689	1,187,662	135,433	48,049	none	.....	Ind., Clev. & Pittsburg.....	83	828,825	1,069,400	1,831,225	228,058	93,010	none	.....	.....
Hudson River.....	144	3,755,496	9,250,362	12,737,898	1,812,087	608,946	none	.....	Jedersville.....	60	1,014,282	694,000	.....	In progr.	.....	.....	.....	.....
Long Island.....	95	1,670,148	668,948	2,665,996	801,793	116,462	none	.....	Madison and Indianapolis.....	87	1,047,700	1,336,816	1,205,000	280,544	142,818	none	.....	.....
New York Central.....	534	24,164,360	14,462,742	25,528,913	6,563,581	1,162,126	8	.....	New Albany and Salem.....	288	2,535,121	6,281,948	6,645,189	645,827	371,402	none	.....	.....
New York and Erie.....	404	10,023,958	25,126,869	33,439,451	6,563,581	1,162,126	8	.....	Peru and Indianapolis.....	73	.....	858,314	150,000	.....	90,000	none	.....	.....
New York and Harlem.....	138	6,717,100	4,069,769	8,758,208	1,055,677	234,126	none	.....	Terre Haute and Ind.....	73	974,800	604,555	1,602,156	287,612	189,702	10	.....	.....
Northern, N. Y.....	118	1,633,022	4,068,874	6,470,714	1,206,153	185,764	none	1	Chicago and Rock Isd.....	182	3,141,500	2,987,166	6,214,152	1,077,512	.....	.....	.....	.....
Oswego and Syracuse.....	35	399,000	216,681	725,683	126,540	69,982	3	.....	Chicago and St. Louis.....	220	.....	.....	.....	In progr.	.....	.....	.....	.....
Pottsdam and Watertown.....	29	487,200	294,189	749,683	241,149	.....	.....	.....	Chicago, Burl. and Quincy.....	58	1,639,100	1,684,736	2,884,622	722,680	379,821	20	.....	.....
Rensselaer & Saratoga.....	25	610,000	140,000	896,423	241,149	.....	.....	.....	Central Military Tract.....	88	1,202,500	1,235,050	2,920,241	471,399	219,688	.....	.....	.....
Saratoga and Whitehall.....	48	500,000	398,600	.....	.....	.....	.....	.....	Ohio, St. Paul & F'd du Lac.....	178	2,900,000	1,325,000	3,625,000	In progr.	.....	.....	.....	.....
Syracuse & Bingham.....	80	788,398	1,578,804	2,372,777	159,434	22,503	none	.....	Galeana and Chicago.....	259	5,441,500	3,818,039	7,742,014	2,315,758	1,192,042	22	167	.....
Troy and Boston.....	27	437,836	737,073	1,109,622	166,363	55,134	none	.....	Illinois Central.....	627	2,271,050	19,416,392	20,374,468	1,582,118	527,962	.....	.....	.....
Watertown and Rome.....	97	1,870,378	706,978	2,068,063	404,374	172,474	3	.....	Pellonia and Oquawka.....	83	509,889	815,454	1,385,382	In progr.	.....	.....	.....	.....
Belvidere Delaware.....	64	1,000,000	1,610,000	2,610,000	161,355	74,534	none	.....	Ohio & Miss. (Wat. Dr.).....	173	2,281,420	1,255,000	3,537,424	In progr.	.....	.....	.....	.....
Camden and Amboy.....	60	389,320	1,522,131	1,729,642	122,417	60,090	none	.....	Terre Haute and Alton.....	173	2,281,420	1,255,000	3,537,424	In progr.	.....	.....	.....	.....
Camden and Atlantic.....	60	389,320	1,522,131	1,729,642	122,417	60,090	none	.....	Detroit and Milwaukee.....	185	838,000	1,128,064	1,966,989	In progr.	.....	.....	.....	.....
New Jersey.....	30	8,482,850	899,000	4,310,011	861,514	500,747	10	118	Mich. Central.....	282	6,032,004	5,999,013	10,688,155	2,215,283	879,556	10	89	.....
New Jersey Central.....	63	2,000,000	2,364,176	3,683,149	398,728	171,603	.....	.....	Mich. South'n & N. Ind.....	475	6,923,500	6,319,224	11,645,208	2,410,000	875,000	10	87	.....
Morris and Essex.....	53	1,157,805	375,000	1,636,550	229,341	96,267	6	.....	Green Bay, Mil. & Ch.....	155	764,075	447,728	1,183,765	In progr.	.....	.....	.....	.....
Allegheny Valley.....	44	1,337,867	845,564	1,99														

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$638,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	97 1/2	97 1/2
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	86	86
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	82	85
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	70	75
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	77 1/2	77 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	300,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1878	75	78
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87	80
Chicago and Mississippi	800,000	conv. till 1867	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	65	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	81
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	87	88 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	81
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1864	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1868	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	100 1/2	101 1/2
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	102 1/2	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1863	85	96 1/2
Do. do.	650,000	Do. 2d do. 1868	8	April, October	"	1863	85	85
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88 1/2	88 1/2
New Albany and Salem	500,000	1st section	10	April, October	"	1868-62	85	85
Do. do.	2,525,000	Do. oth. sec. con. till 1868	8	May, Novemb.	"	1864-76	85	85
Northern Cross	1,200,000	1st mortgage, convertible	7	Jan'y, July	"	1873	90	90
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1866-66	96	96
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1872	78 1/2	79 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1860	98	98
Pennsylvania (Central)	6,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1875	85	85
Racine and Mississippi	680,000	Do. conv. sink'g'd	7	Feb'y, August	N.Y.	1861	85	85
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1865	80	80
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1869	98	100
Terre Haute and Indianapolis	800,000	Do. do.	7	March, Sept.	"	1862-77	72	73
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1870	72	73
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	72	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	85	86 1/2
Do. do.	1,125,500	Do.	6	Jan'y, July	Balt.	1875	87	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	90	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104 1/2	106 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	96	98 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1868	96	98 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	92	92 1/2
Do. do.	4,351,000	Convertible, Insurance	7	Feb'y, August	"	1871	86 1/2	87
Hudson River	3,500,000	Convertible	7	Jan'y, July	"	1862	91 1/2	92 1/2
Do. do.	3,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	99	100
Do. do.	3,000,000	2d do.	7	18 June 18 Dec	"	1860	87 1/2	89 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	66 1/2	66
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90 1/2	91
Do. (Free Land)	8,000,000	M'ge \$45,000 acre-priv. 7 shares	7	March, Sept.	"	1860	100 1/2	101
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	96
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	83	84 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-66	81	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90 1/2	91
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	80	83
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85	86
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89 1/2	89 1/2
Do. do.	3,000,000	No m'ge conv. from June 67-69	7	15 June 15 Dec	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1866	7	Jan'y, July	"	1866	100	102
Do. 2d do.	1,478,000	Do. till 1868	7	Jan'y, July	"	1866	100	102
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88	89
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88	90
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	86 1/2	87

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York, 7 per ct. 1857	Feb'y,	99	100	Milwaukee, 7 per ct. coup.	X	Divers	85
Do. 5 do. 1852-60	May,	95	97	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	74
Do. 5 do. 1870-75	August, and	95 1/2	96 1/2	N. Orleans, 6 per ct. cp. municipal	X	Jan'y, July	81
Do. 5 do. 1890	November,	94 1/2	95	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	91 1/2
Albany, 6 per ct. coup. 1871-81	Feb'y, August	97 1/2	97 1/2	Pittsburgh, 6 per ct. coup.	X	Divers	73 1/2
Albany, 6 per ct. coup.	Jan'y, July	76	76	Quincy, 6 per ct. coup. 1868	X	Jan'y, July	85
Baltimore, 6 per ct. 1870-90	Quarterly	97 1/2	98	Racine, 7 per ct. coup. 1873	X	10 Feb'y, Aug	85
Boston, 6 per ct. coup.	April, October	97	99	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long	Jan'y, July	100	100 1/2	St. Louis, 6 per cent. coup. Long	X	Do.	78 1/2
Clev'rd, 7 per ct. cp. W.W. 1879	Do. do.	101	102	Do. Municipal	X	Do.	81
Cincinnati, 6 per ct. coup.	Divers	87	90	Sacramento, 10 p. ct. cp. 1862-74	X	Do.	71
Chicago, 6 per ct. coup. 1873-77	Jan'y, July	89	90	S. Francisco, 7 p. a. cp. 1865 pay N.Y.	X	May, Novemb.	80
Do. 7 per ct. coup. 1880	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871	X	Do. do.	96
Detroit, 7 per ct. cp. W.W. 1873-78	Feb'y, August	100	102 1/2	Do. 10 do. pay N.Y.	X	Jan'y, July	80
Galena, 6 per ct. cp. Long	March, Sept.	101 1/2	101 1/2	Do. 6 per ct. cp. N.Y. 1875	X	Do. do.	50
Jersey City, 6 per ct. cp. W.W. 1877	Jan'y, July	94	96	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. cp. 1880-83	Divers	79 1/2	81	Do. 6 p. ct. cp. Mun. 1874	X	March, Sept.	81 1/2
Memphis, 6 per ct. coup. 1882	Jan'y, July	68	70	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending August 13th, 1886.

BONDS.	
\$2,000 Little Miami, 6 per ct., 1st Mortg.	80
5,000 Covington & Lex., 6 per cent. 1st Mortg.	70
5,000 " " " " 2d " " " " " "	65
1,000 Indiana Central, 10 per ct. Income, due in '88	96
3,000 Little Miami, 7 per ct., due in 1888	96
3,000 Marietta and Cincinnati, 1st Mortg.	75
2,000 Hillsboro' and Cin., 7 per ct. 1st Mortg.	47 1/2
6,000 Clark County, Ky., 6 per cent.	70
3,000 Virginia, 6 per cent.	92 1/2
1,000 Cleveland and Toledo, 7 per cent. Income	75
900 Columbus & Xenia, Dividend, 7 per cent.	85
due in 1866	85
700 Little Miami, June, 1886, Dividend Scrip.	80
1,000 City of Springfield, O., 7 per ct.	80
1,000 Cin. Ham. and Dayt. 7 per ct. 2d Mortg.	80

By KIRK & CHEEVER.
For the week ending August 11th, 1886.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2d Mort. 7 per ct.	65	
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	48	
Indianapolis & Cin., 2d Mort. 7 per ct.	80	
Cin. Ham. and Dayton, 2d Mort. 7 per ct.	84	
Hillsboro' and Cin., 7 per cent. 1st Mortg.	49	
Covington & Lexington, 10 per ct. Income	65	
Indianapolis and Cincinnati Dividend	70	
Columbus & Xenia Dividend, due Jan'y 1, 1861	68	
Do. do. do. due July 1, 1865	75	
Little Miami, Dividend Scrip., issued June, 1886	78	

Marie & Kany's Money Circular for the
European Steamer of the 20th Inst.

[TRANSLATED EXTRACT.]

New York, Tuesday, Aug. 19, 1886.

Since our advices of the 11th inst. the market has again been active. Prices have considerably fluctuated, and, though at the close a better feeling prevails, almost all stocks with only a very few exceptions show a further decline compared to our last quotations. Money has been irregular; on call the supply has been better than during the previous week, while discounts are not quite so easy and rates a trifle higher. The stock orders from abroad have not been very important by the last mail, but they were for a greater variety, tho' only in small amounts. State Stocks.—The demand has been active at a slight decline in prices. Virginia receded 1/4, Missouri 1/8, Tennessee 1/8. Indiana 5s and Ohio 6s sold to a fair extent at former prices; the new California loan of 1875, has also been done again at 70 1/2 to 70 3/4. City and County Bonds.—Except in St. Louis City 6s, which are in fair demand, the transactions have been only of a retail character. Railroad Bonds.—Illinois Central bonds have again been the most active, but closed at a decline of 3/8. Erie 1875 bonds are 1 1/4 per cent. lower. Erie 1883 bonds 1/8. We also note some purchases of Michigan Central bonds, Ohio and Pennsylvania, and La Crosse and Milwaukee bonds for foreign account. Railroad Shares.—The business has been large at very fluctuating prices. Erie sold between 58 and 60, closing at 59 1/2. Reading sold as low as 84 and as high as 87, and closes at 86. N. Y. Central was down to 85 1/2, closing at 85. Panama is very heavy, and declined 2 3/4. Michigan Central, 1/2; Michigan Southern, 1 1/4; Cleveland and Toledo, 1/2; Chicago and Rock Island, 1/4; Cleveland, Columbus and Cincinnati, 1/4; Galena and Chicago I; Illinois Central stock sold as high as 110, but fell off again to 109 1/2. Money.—The supply on call has been better for the past week, at 7 per cent.

discount, a trifle higher prime bills, $7\frac{1}{2}\%$ a9; names less known, 10a12. Exchanges.—Weak, with a very moderate business. London, $109\frac{1}{2}\%$ a $\frac{3}{4}$; Paris, $5.17\frac{1}{2}\%$ a5.15.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 20th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Aug. 19, 1856.

Since our last advices of the 11th inst., a more marked demand for money has been experienced as well from the mercantile class, as from stock operators, and the tendency of rates of discount has been upward through the week. The semi-official returns for the fiscal year to 1st of July show that up to this period the exports from the United States, including specie, has rather exceeded the imports, in spite of the enormous importation at the port of New York since then, which attracts attention, as it must have, sooner or later, a direct influence upon the shipment of specie. The two above named causes seem mainly to have contributed in keeping our Stock market in a sort of hesitation, which have occasioned oscillations, resulting more generally in a decline, as shown by the annexed table of daily quotations. European demand by the last steamer has been most limited, and the transactions generally moderate. State Stocks—Some sales of United States 6s, 1867, have been made at 117. Transactions to some amount have taken place: in Indiana 5s at $\frac{1}{4}$ advance, in Virginia 6s at $\frac{1}{4}$, and in Missouri 6s at 1 per cent. decline. The latter were rather active. City Bonds—We know of no transactions worth mentioning, excepting a few sales of St. Louis 6s at rather better prices. Railroad Bonds—At private sale we notice some sales of Ohio and Pennsylvania Income, of Milwaukee and Mississippi 1st mortgage 3d security, and Michigan Central 8s, 1860, at about previous quotations.—At the Stock Exchange there was some animation in Illinois Central Construction, closing at $\frac{3}{4}$ decline. Some few New York Central 6s have been done at $\frac{1}{4}$ advance, and some Erie 7s, 1875, at a decline of $1\frac{1}{2}$, and also some Terre Haute and Alton 2d mortgage at improving prices. Railroad Shares—There has been some animation in Erie, which after various oscillations closed at a decline of $\frac{1}{2}$. Also, in New York Central and Reading, which have advanced $\frac{1}{2}$. Transactions to a moderate extent took place, and with a decline in Michigan Southern of $1\frac{1}{4}$, and in Cleveland and Toledo of $\frac{1}{2}$. With a pretty good demand for Illinois Central, they rose $1\frac{1}{4}$. Panama, on the other hand, have been affected downward by vague apprehension of some future competition. They are quoted $2\frac{1}{2}$ lower. Money in active demand at 7 for call loans. Paper is more offered at 8a9 for 1st class, and from 9a12 for less known signatures.

DE COPPET & CO.

American Stocks in London.

Michigan Southern and Northern Indiana Railroad Stock has just been admitted on the official list of the Stock Exchange. This stock has always paid 10 per cent. dividend since the opening of the road, and frequently divided a surplus equal to 5 per cent. additional. The market price in New York has averaged about 126. During the recent pressure it has ranged from 90 to 105. There will be a half-year's dividend due on the 1st of August of 5 per cent., already declared in the New York papers. The stock is selling here at 92 sterling, equal to 87 sterling ex-dividend, which pays fully 11 per cent. per annum upon cost. The road was opened for business in 1852.

The gross earnings for 1853 were... \$1,573,181.20
The gross earnings for 1854 were... 2,158,311.91
The gross earnings for 1855 were... 2,595,630.22

And thus far during 1856, the earnings have been at a rate indicating over \$3,250,000 for the year. These earnings, we understand, are derived from the portions of the road now in operation, and the company have 120 miles of new line nearly completed, which will be opened for business within a few months, and from which the

company anticipate a large increase of earnings. The road extends from Chicago, on Lake Michigan, to Toledo and Munroe, on Lake Erie, connecting with the great lines to the Atlantic cities. The number of miles of road belonging to the company, now in actual use, is 338, and in process of construction, 130. In July, 1855, the capital stock paid in was \$6,928,900; the bonded debt, \$5,600,000. When the double track is completed, and all the new lines in operation, the stock and debt will stand at \$8,000,000 each.—*London Morning Herald*, July 26.

New Joint Stock Schemes in England.

A resume on the 30th of June showed the total capital nominally required for the new schemes introduced during the half year to be £23,490,000. Of this about £11,000,000 was the amount estimated as having been promised for foreign countries, while of the remainder only a small proportion was pledged to undertakings of a description to withdraw serious sums from the ordinary channels of employment. The prospect, although not calculated to awaken anxiety, was such as to stimulate caution. Nevertheless, although the public are disposed probably to infer that this fact and the dullness of the money market during the subsequent period have led to an abatement of the ardor of projectors, such has not been the case.—Their demands have steadily increased, and if any effect has been produced by the less buoyant state of prices, it has simply been to prevent this increase assuming still more objectionable dimensions. The subscriptions invited from January to June averaged £3,900,000 per month, and in July they had reached £5,370,000. Annexed is the list:

Metropolitan railroad.....	£1,000,000
New Brunswick and Canada land and railroad.....	220,000
Calcutta and South Eastern.....	1,000,000
St. James' Hall.....	40,000
Sittingbourne and Sheerness railroad..	80,000
Central Italian Copper Mining Co.....	120,000
Forest of Dean railroad.....	65,000
London and West of Ireland Fishing and Fish Manure Co.....	50,000
Patent Woollen Fabric Co.....	100,000
London Cork Co.....	50,000
Lahn (Nassau) Iron Co.....	70,000
Copiapo Extension (Chile).....	180,000
Detroit and Milwaukee Bonds.....	250,000
United Kingdom Provision Co.....	500,000
European and Indian Junction Telegraph.....	200,000
Hungarian land.....	85,000
South Western Hotel Co.....	50,000
Metropolitan Bath Co.....	10,000
Bristol, South Wales, and Southampton Union R. R. Co.....	300,000
Madras Extension.....	1,000,000

An additionally unfavorable feature connected with the above is that the foreign proportion presents relatively a large augmentation. Of the total of £5,370,000, £3,125,000, or considerably more than half, is destined to be drained from us in quarters whence a reflux will be very distant.—£2,000,000 is intended for India, although the requirements for that country have for several years past produced a chronic pressure on the money market, which most injuriously affected our resources during the war, and the amount remaining to be sent thither was still inconveniently large. £470,000 is raised for Canada and Western America, apart from a further sum understood to have been privately negotiated on the bonds of a railway in the repudiating State of Michigan; £180,000 is for Chile; £190,000 for mines in Italy and Germany; £85,000 for a land project in Hungary, and £200,000 for a telegraphic communication with the East. Whether undertakings such as these can be entered upon safely at the rate at which they thus promise to be multiplied, any person can judge who will avail himself even of the experience of what is now passing in Paris. A large majority of them are sound, and such as would be desirable if there were a prospect of an early pause in the number to be introduced. But

on this point there is little hope. It is certain that one or more important railway lines are about to be brought forward under attractive concessions from the Turkish government, and that Russia is deliberating on a comprehensive plan to obtain from the capitalists of England and France the means to prevent, by a network of internal communications, a repetition of her recent failure.—The first will be recommended by their commercial and political characteristics, and the latter by the existing prices of Russian securities; and as the guarantees in each case will, of course, be calculated to meet the condition of the money market for the time, there can be little doubt as to their reception. Once commenced, with the present facilities for railway construction, they are sure to proceed with rapidity, and, although owing to the activity of her trading relations with England, the expenditure in the case of Turkey would be likely to flow back freely; in Russia it would probably be hoarded with almost as much tenacity as in India. Under these circumstances it is for the public to consider whether they should exercise for the moment a discriminating reserve. At all events they should bear in mind, before taking every American or other debenture that may be offered, that the agents in the transaction are paid a large percentage for recommending them, and also with regard to undertakings announced on the Stock Exchange, the fact of their being quoted at a premium before the day of issue does not, except in large and unquestionable instances, afford the slightest proof of the value at which they will really stand.—*London Times*, Aug. 4.

American Railroad Journal.

Saturday, August 23, 1856.

Milwaukee and Horicon Railroad.

In another column we give a recent exhibit, or circular statement, issued on the occasion of offering for sale \$450,000 mortgage bonds of this company.

These bonds may, we think, be considered a first class Wisconsin security, which experience has shown to be equal to the best in the country. Wisconsin railroads have proved exceedingly productive upon their full cost. Their routes are in direction of the trade of the country they traverse, and in that of the great line of emigration setting west from Lake Michigan. They fortunately do not as yet come into injurious competition. That portion of Wisconsin traversed by her railroads is one of the most densely settled portions of the West, and supplies probably a larger amount of traffic, in proportion to its area, than any other.—The soil of the State is well cultivated, and exceedingly productive, while its people are, probably more than any other, addicted to railway traveling. In addition to these reasons for the success of her railroads, the finances of these works have been conducted with uncommon prudence and skill. No roads have been undertaken that have not been successfully carried forward, and none that have not, or that do not promise to be productive. All these causes have tended to render the securities of the Wisconsin railroads justly favorites as well in foreign, as in our own markets.

The above road we are confident is no exception to the general rule of success. It traverses an admirable section of country, and one capable of supplying an abundant traffic, as the result of the working of the few miles already completed; shows. For the three months ending May 26, the receipts of the fifteen miles in operation were over \$12,400, which exceeded per mile the average receipts of the Milwaukee and Mississippi, with a

Income	\$5,042.82	\$5,626.18	\$11,578.11
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The earnings of the La Crosse and Milwaukee Railroad Company, in the first week in August, amount to \$9,618 93. Considering the fact that the farmers are now busily engaged in their fields this is large.

The earnings of the Cincinnati, Hamilton and Dayton Railroad for July were:

For Passengers.....	\$22,662 76
For Freight.....	16,176 69
Mail Expenses.....	1,411 00

Total.....	\$40,250 45
For July, 1855.....	31,659 74

Increase over 27 per cent.....\$8,590 71

The earnings of the Mad River and Lake Erie Railroad for July were:

For Passengers.....	\$19,725 82
For Freight.....	20,286 07
For Mail and Express.....	2,100 00

Total.....	\$52,111 89
For July, 1855.....	42,784 63

Increase nearly 22 per cent.....\$9,316 26

The earnings of the Central Ohio railroad for July were:

For Passengers.....	\$22,142 23
For Freight.....	28,548 23
For Mail and Express.....	2,820 46

Total.....	53,511 81
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The earnings of the Indianapolis and Cincinnati railroad for

July, 1856, were.....	\$40,426.48
July, 1855.....	24,323.00

Increase.....\$16,103.48

=equal to 67 per cent.

Rutland Railroad Bondholders' Meeting.

In compliance with the emphatically expressed wishes of a large number of persons who are interested in its various securities and obligations, a special meeting of the bondholders and creditors of the Burlington Railroad Corporation will be held at the business room of the "Boston Stock Exchange Board," in Union Bank Building, No. 40 State street, on Thursday afternoon, the 21st inst., at 3½ o'clock. The object of this meeting is to consult together in regard to the affairs of the corporation, and recommend such measures and suggestions for the co-operation of the Trustees, as may be deemed conducive to the safety and best interests of the bondholders and creditors, many of whom are not only very much disappointed, but quite impatient at the delay which has deprived them of any returns from the income of the road.

It is particularly desirable that on this occasion there should be a full attendance of all parties interested in this important matter, for in a multitude of counsellors (not lawyers) there is wisdom; and in union there is strength. Nothing in this call should be construed as a movement in opposition to the "Board of Trustees," or as reflecting upon their management or fidelity in any way whatever, and these worthy gentlemen can surely have no objection to a full and mutual interchange of views and opinions, on the part of those whose investments in the securities of the corporation are more or less valuable, according to the income that may be derived from the most judicious management of the property.

The first mortgage bonds amount to \$1,800,000; the second to \$1,200,000, and the third also to \$1,200,000; total, \$4,200,000. The 8 per cent. guaranteed stock amounts to \$350,000, the 6 per cent. preferred stock to \$600,000, and the common stock to \$1,350,000; total, \$2,900,000 in stock and \$4,200,000 in 7 per cent. bonds, besides over half a million of back interest, arising from unpaid coupons; making the whole cost of the Rutland road, in round numbers, seven millions

of dollars, which is certainly an investment well worth looking after.

The gross earnings of the road for the financial year ending June 1st, were \$401,000; of which \$350,000, being 87½ per cent. of the gross income, has been absorbed in running expenses, extraordinary road repairs, rail renewals, cars and locomotives—not added to the cost of the road, but deducted from the receipts; thus reducing the actual net revenue to \$51,000, which is not enough to pay even one set of the over-due coupons, on the 1st mortgage bonds, into \$12,000. There is now about two years' interest due on all the bonds. Taking the 1st at 44, the 2nd at 14, and the 3rd at 4, the present market value of the whole would be but \$1,008,000, for an aggregate cost of \$7,000,000—placing the stock at zero, for the purposes of this explanation only. But there can be no reasonable doubt that there is a prospective value to all the classes of bonds and shares, and if a suitable plan of the consolidation could be devised, to embrace the whole, its accomplishment would be a consummation most earnestly to be wished for the bondholders, creditors and stockholders of the Rutland and Burlington railroad.—*Boston Courier.*

On the Junction of the Atlantic and Pacific Oceans, and the Practicability of a Ship Canal, without Locks, by the Valley of the Atrato.

By Mr. F. M. KELLEY, U. S.

[Abstract of paper read at the Institution of Civil Engineers, April 22, 1856.]

It was stated that the consideration of this subject had become urgent, and the adoption of some definite plan indispensable, in consequence of the commercial activity, which had resulted from the discovery of gold in California, and in Australia, and the rapid development of trade, throughout the whole of the Pacific. But the very extension of trade had introduced new elements into the problem: the larger dimensions now given to ships, and the increasing value of time, rendered it necessary that the proposed communication should be of a sufficient width and depth, to permit the passage of the largest class of vessels, and that it should, if possible, be constructed without locks, so as to insure economy of time, as well as of distance. It then gave a brief review of the different routes hitherto proposed, and the objections to which they were open.

The Tehuantepec route would require 160 locks; even then it would be 210 miles in length, and great improvements would be necessary in the harbors at both ends. The very unsettled state of the government in Mexico, rendered this undertaking most hazardous at the present time.

The Honduras route, 160 miles in length, was open to the same objection as to locks; the summit level was very high, 2,681 feet above the sea, and, moreover, sufficient water could not be obtained, for the number of locks required.

The Nicaragua route, 194 miles in length, would have 28 locks; the river San Juan would require to be deepened throughout; 47 miles of additional canal must be made; great improvements must be effected in the harbor of Greytown, and a new harbor altogether constructed on the Pacific.—The modification of this project, by which the port of Realeja would be the terminus on the Pacific, would increase the distance above 100 miles, and require great additional lockage, which it was very doubtful whether the Lake Leon could supply.

The Chiriqui route was considered utterly impracticable by M. Hellert, who found that the supposed passage through the mountains offered the most formidable difficulties.

The Panama route would require 36 locks and six aqueducts, and the approaches on either side, would demand vast alterations to adapt them to the present wants of commerce.

The San Blas, or Mandingo Bay route, had never been sufficiently explored, on account of the decided hostilities of the Indians; moreover, that part of the Atlantic was beset with reefs and

shoals, and there was every reason for believing that there was no depression in the mountain range.

The Darien route was only partially explored by Mr. Lionel Gisborne, who reported favorably of its capabilities; but subsequent expeditions had invalidated these conclusions, and tended to demonstrate that the Sierras Lloranas formed an unbroken chain from the Gulf of San Blas to the Gulf of Darien. All explorers agreed on the decided hostility of the Indians, and, with the exception of Dr. Cullen, who averred that he had repeatedly crossed the Isthmus at that point, no subsequent explorer had succeeded in traversing it. It was proposed to construct a canal without locks; but the great difference in the height of the tide at the two extremities, (25 to 30 ft. in the Pacific, and only 2 feet in the Atlantic), would produce a tidal current of such force as to endanger the works, and materially interfere with navigation.

The Atrato route had already been pointed out by Humboldt, as likely to afford one of the best solutions of the problem. It was stated that the River Atrato flowed almost due north for a length of 300 miles, in the midst of a vast alluvial plain between two ranges, resulting from the bifurcation of the Andes; it then discharged itself by nine mouths into the Atlantic, by the Bay of Candelaria in the Gulf of Darien. The upper part of the river had been carefully explored by Messrs. Trautwine and Lane, who had both reported against the feasibility of any plan for uniting the head waters of the Atrato, with those of the San Juan, which flowed into the Pacific. An exploration on the Pacific side, led to the discovery of a depression in the mountain chain, between Punto Arditá and Punto Marzo, which was found to correspond in an almost direct line eastward with the Truando, one of the most considerable western affluents of the Atrato.

The route more especially advocated in the paper, would commence on the Atlantic side, at the estuary of the Atrato, by widening and deepening one of its entrances, removing the sand bars, and stopping up, by breakwaters and dams, the remaining mouths, so as to direct the full force of the current into the branch called Cano Coquito, or an entrance might be effected by a side cut from the bay into one of the mouths, and the erection of guard gates at each end; by stopping the current, would prevent any deposit or bar outside. At the distance of two miles from the mouth of the river deepened to 30 feet: and from this point to the mouth of the Truando, was no where less than 47 feet, with an average width of 350 yards. It was then proposed to follow the Truando for 36 miles, deepening and widening its channel where required, to a point named Townsend's Junction. Up to this point the works required would be very simple, as the banks are principally levels, formed of sedimentary deposit, and the soil of the bed of the river was of the same character. From Townsend's Junction, an open cut was contemplated for a distance of 13 miles. It was then proposed to tunnel through the base of the ridge, a length of 3¼ miles. A double tunnel was recommended, as the width (200 ft.) would require a single arch of too great a height; the division into two arches would also have the advantage of precluding any possibility of collision. The height proposed (120 ft.) would be sufficient to allow of the passage of the largest vessels, by merely lowering their topmast. From the tunnel of the Pacific, a distance of eight miles, the canal would follow the valley of a small stream, and debouch into Kelley's Inlet.

The line would thus uninterruptedly proceed, without locks, direct south, from the Bay of Candelaria to the junction of the Atrato, 7° 15' N. lat., and 77° 8' 32" W. long.—a distance of 67 miles, 1,436 yards, whence it would diverge by the Truando to the south-west, and terminate at the Peninsular of Paracuchichi or Kelley's Inlet, 6° 57' 32" N. lat. 72° W. long.—a distance of 63 miles, 1,216 yards. It would thus have a total length of 131 miles, 892 yards, with a minimum width and

depth throughout of 200 feet and 30 feet respectively. The most important point to be considered, was the rate and direction of the flow of water from the junction of the Truando with the Atrato, and the supply which might be depended on at that point. It had been ascertained by Col. Totten, the Engineer of the Panama railway, that the mean level of the two oceans was very nearly, if not entirely, similar. The difference in the height of the tides at the two extremities of the proposed route, was found to be,—at the entrance of the new river in the Pacific 12 ft. 6 in. at spring tides; and 10 ft. 11 in. at neap tides,—while the tidal wave of the Atlantic, at the mouth of the Atrato, never exceeded two feet at any phase of the moon. After careful observation, Capt. Kennish had fixed the height of the junction at 15.2 feet above the mean tidal level of the two oceans.

The junction of the Truando with the Atrato, would thus be 9 feet above the Pacific at the highest tide, and would flow down it with a velocity equal to that head; while, at the lowest tide, the velocity would be equal to a head of 21.45 feet.—The summit being at the same height from the mean level of either ocean, and the distance being nearly equal, their average rate of current would be nearly the same,—about $2\frac{1}{2}$ miles per hour.—As far as theory could elucidate the tidal influence of the Pacific, it would extend to Townsend's Junction, and pass under the fresh water coming down the river, without commotion, either at flood or ebb. That part of the river between Townsend's Junction and the Pacific, would be slightly agitated by the rise and fall of the tide, but the velocity of the current would be scarcely effected.

By careful calculation it had been ascertained, that the discharge of the Atrato was 667,014,600 cubic feet per hour, and the mean discharge of the new river would be about 42,000,000 cubic ft. Now, if this were taken solely from the bed of the Atrato, it would only reduce that river one-sixteenth, and its surface level $3\frac{3}{4}$ feet, the Atrato being 58 feet deep at the point of junction with the Truando.

The principal advantages which gave the proposed route the pre-eminence over all others, were claimed to be:—

1st. That the two oceans could be thus united, by an open channel without locks or any other impediment.

2d. That the width and depth would be sufficient to allow of the simultaneous passage, up and down, at all times, of the largest class of vessels.

3d. That excellent harbors existed at both ends, requiring but little improvement, and at all times perfectly accessible.

4th. That the route passed through a country in undisputed possession of a legal government, and among a people favorable, instead of hostile to the undertaking.

A summary of the estimated cost of the canal, including the works of every kind throughout its whole length, with lighthouses, piers, depots, &c., as also the execution, medical and commissary departments, was annexed to the paper. The total, including all contingencies, was fixed at \$145,407,042, or £30,000,000. In constructing the canal of a width sufficient for the passage of one ship at a time, the estimate would be reduced nearly one-half.

The vast saving in time and distance, which would be effected by this canal, was then dwelt upon. From New York to San Francisco, it would be no less than 13,000 miles, and proportionately large for all the ports in the Pacific. Details were given of the rapid development of trade which was annually increasing between Great Britain, France, and the United States—and the Pacific; and also an approximate calculation of the commercial value of the canal.

In conclusion, the author repeated, that the plan developed was, perhaps, not the only practicable one,—that although the information contained in the paper had been obtained, by sending to the Isthmus four different corps of engineers, fully provided with instruments for leveling and surveying, and they had made complete plans, and sec-

tions of the route, yet that a more extended survey might suggest the superiority of selecting some other affluent of the Atrato, and some other terminus on the Pacific. His principal object has been to show the practicability of communication between the two oceans, by the valley of the Atrato, and that it possessed peculiar advantages for rendering that communication as large and open as the present wants of commerce imperatively required. If such was the case, he thought that it was worthy of an official survey, and thorough examination, by the governments of the great commercial nations of the world.

April 29, 1856.—The entire evening was devoted to the discussion upon Mr. F. M. Kelley's paper.

It was admitted that a correct description had been given of the routes hitherto proposed, and of the valley in question; but that the route by Panama would be found the most economical and most convenient, if the communication was made between the River Chagres and the Rio Grande, where there were only 15 or 16 miles from tide to tide, instead of by Chorrera, as proposed by M. Napoleon Garrela.

It was objected that Mr. Trautwine, when starting on his expedition, was not supplied with proper instruments for taking a correct survey, and, therefore, that his account could not be implicitly relied on;—that Capt. Kennish, on his return to Carthagena, was also in possession of but imperfect levels, and that if the height of the junction of the Truando with the Atrato was not absolutely correct, it would invalidate all the calculations of the work to be performed. But even assuming the figures and levels of the author, it would hardly be possible to execute works of such gigantic proportions without a great sacrifice of life. It was true that Chagres and Greytown were the two most unhealthy places in Central America, (and, perhaps, even in the world, 400 out of 600 of the Irish workmen employed on the Panama railway having died in three years, and H. M. S. *Rosamond* having lost more men in six months, off Greytown, than during a three years' station on the West Coast of Africa); but the valley of the Atrato was also very unhealthy, as was evidenced by the state in which Capt. Kennish returned, after his exploration. If the necessity for a tunnel was granted, then other places might be found more advantageous for inter-oceanic communication, and Darien presented greater facilities.

Another objection to the proposed route, was the great length of the canal, entailing the employment of steamships, which would be found more expensive than transshipment by the Panama railroad. Particulars were given of the height of the range of mountains running through Central America, more especially opposite Port Escoscos: the summit level was stated to vary between 950 and 1,150 feet, and the apex of the ridge, or backbone, of the Andes, to be so narrow as not to allow of more than five men walking abreast, even supposing it to be cleared of trees. But the chain of the Andes had not been sufficiently examined, to ascertain whether or not it was unbroken between the Napipi, where the depression was found to be 300 or 400 feet, and the Panama railroad, of which the summit level was only 250 feet. This was a most desirable point to be assured of, before coming to any determination upon the best route; and it was also of great importance that the coast on both sides should be accurately surveyed, to fix upon good harbors, for it was next to impossible to create them; the maps and charts at present in use were not to be relied on. It was doubted, also, whether the traffic would ever repay the cost, for the route from England to Calcutta, or Hong Kong, was actually 600 miles longer by Panama, than by Cape Horn; although it was, of course, admitted, that the former route had the advantage of calmer seas and of the absence of wind, and that this was no argument against the American trade justifying such an expenditure.

The results of observations with the mountain barometer, were also given, showing that its variations constituted a regular tide, by a knowledge

of which calculations could be based with sufficient accuracy, for preliminary surveys, as they would never vary more than 10 feet from those obtained by sections run with instruments.

It was contended on the other hand, that Mr. Trautwine, Mr. Lane, Mr. Porter, and Captain Kennish, had all been furnished with proper instruments, and that the spirit level had been used for the survey of the whole length of the Atrato, and from the Pacific on the West, over the summit of the Andes, down to the river Truando on the eastern side,—that Captain Kennish was thoroughly qualified for the task he had undertaken; and that the five different surveys, which had been undertaken at different times, and by different persons, all agreed in their results. It was admitted that the whole of Central America was very unhealthy; but it was stated that the proposed route was less so than the Isthmus proper. It was submitted that these were not the questions at issue, but whether a practicable route could be made between the two oceans by the valley of the Atrato, and whether sufficient evidence had been shown to authorize an official survey.

A letter was read, addressed by Baron Von Humboldt, to Mr. Kelley, (after examining the maps and plans,) expressing great confidence in the survey made and levels taken by Mr. Kennish, and his predecessors. The large number of maps and sections taken on so large a scale furnished all the elements necessary for forming an opinion of a possibility of a communication through the mouths of the Atrato, by the Truando, and by a canal to the Pacific. The failure of the expedition in 1852, and subsequently, for exploring the mountainous country between the Gulf of San Miguel and Caledonia Bay, might be ascribed to the want of such plans.

Humboldt expressed an opinion that a free and open discussion would demonstrate the relative advantages and disadvantages of each proposed locality, and there would really be little difficulty in tracing the proper route, wherever there were good plans and sections, such as had been made under Mr. Kelley's directions, of the valley of the Atrato; his opinion in favor of that route, as compared with all the others, had always been strongly expressed; and in his works, he had even given all the details he had collected relative to the small canal stated to have been made in the year 1778 by the Indians, under the direction of a monk, the Cure of Novita, in order to unite the waters of the river Raspadura with those of the river San Juan, and thus establish a water communication for canoes across the Isthmus. He alluded also to the labors of Captain Fitzroy, R. N., who had in his report, on the Isthmus of Central America, descanted on all the known routes; and he recalled the statement of Lieutenant Wood, R. N., when surveying the coast, to the effect that he traveled on foot, with native guides, from Cuzco to the Napipi, in which he bathed, and returned to his ship within six hours, and that the most elevated ground passed over, did not exceed 300 or 400 feet. In fact, Humboldt looked upon the proposition of forming an inter-oceanic canal, by the valley of the Atrato, as perfectly feasible; and he even added, "without locks, or, if possible, without tunnels."

It was due to Mr. Kelley to state, that he did not appear as the agent of any other persons; but that he had caused these various surveys to be made solely at his own cost, and that he had already expended large sums, for the prosecution of these investigations which were carried on under his direct suggestions. In further explanation of Mr. Kelley's views, it was stated that originally he had been favorable to the route by the Atrato and the Raspadura, but subsequently, he became convinced that the route by the river Truando, to Humboldt Bay, would be preferable. He had, therefore, instructed Mr. Kennish and Mr. Lane, to survey that part of the country, and the result had been that the latter route was the one that he at present recommended. He was, however, by no means, prejudiced in favor of any

one particular route. His anxiety was, that very accurate and extensive surveys of these districts should be made, under the auspices of the Governments of Great Britain, France, and the United States; and he believed that part of the Isthmus would be found to present more favorable features than any other. With regard to the river Atrato, it was mentioned that it was only to be compared in magnitude with the largest of the American rivers, and was known to be navigable for the largest ships as far as beyond the junction with the Napipi. It would, therefore, not require any change below that point, and the nature of the climate was such as to preclude the probability of the supply of water failing at any season. It also drained the whole valley, in which rain fell for nine or ten months in the year; besides which, it received a number of rivers, some of which were of equal size with those of the Truando, the current of which it was proposed to reverse, so as to turn the water of the upper part of the Atrato, into the channel of the Truando, and thence into the Pacific.

Although the mean level of the two oceans was generally agreed to be the same, yet in the northern and narrowest parts of the Bay of Panama the tide rose 20 or 30 feet, whilst at Humboldt Bay, to the South, it did not rise more than 12 ft. The high tide level at this latter point, was, therefore, nearly on a level with the junction of the Truando and the Atrato—so that the current would not be so great as to prevent navigation or to damage the works in the channel, as it had been contended would be the case, if a canal were made across the narrow part of the Isthmus where the lift of the tide was greater.

In concluding the discussion, it was stated that the Institution was very much indebted to Mr. Kelley for the paper he had brought forward. It gave a clearer insight than any of its predecessors, into the difficulties of the whole problem of an inter-oceanic canal, and it suggested a route which possessed greater facilities than any other that had been proposed. The English, French, and United States Governments, entertained enlightened and enlarged views on the subject, and it was believed, that at the proper moment they would lend their strenuous aid in furtherance of this great question, so important to the commercial and political interest of the world.—*London Artizan, June, 1856.*

Terre Haute and Alton Railroad.

The *Alton Courier* says: "The business of the Terre Haute and Alton road is steadily increasing, especially in freight, which is to the full extent and capacity of the rolling stock. Recent advices from the West also indicate a large increase during the present over any preceding month. The earnings for July were about \$60,000. This road traverses perhaps the most beautiful agricultural portion of Illinois, passing through the county towns of several of the first counties of that State. It has been but recently opened for operation over the entire line, from Terre Haute to the Mississippi river, which it strikes both at Alton and St. Louis. The short time, however, that it has been operated, showed a large local business. It also affords the most direct route from the seaboard to St. Louis for through freights and travel, which must, as the busy season approaches, increase rapidly."

Great Southern Railroad.

We have the proud satisfaction of recording this morning the complete success of the arrangement recently entered into by certain parties in this city, for the control of the Southern Railway along the shore of Lake Erie, from Niagara Falls to Amherstburgh. The annual meeting for the election of Directors was held at Amherstburgh yesterday, and resulted in the election of a Board which gives to this city the entire control of the line. The main object has thus been accomplished, and it now only remains for the Great Western Railway Company and the business men of Hamilton, to put forward a strenuous effort for the completion of the Southern road in connection with

the Hamilton and Port Dover Railway.—*Hamilton Spectator.*

The Projected Suez Ship Canal.

The European Commission of Engineers, assembled in Paris to discuss the details of the plan for cutting a canal across the Isthmus of Suez, have brought their labors to a close. The following is a summary statement of the resolutions agreed upon at the various sittings:

1. The commission have rejected the system of indirect tracts across Egypt, and have adopted the principle of a direct cutting from Suez to the Mediterranean.

2. They have rejected the system of supplying the maritime canal from the fresh water of the Nile, and have adopted that which supplies it with sea-water.

3. They have discussed the advantages and inconveniences of a canal, with continuous embankments, from one sea to the other; and at the close of this discussion it was decided that the canal should not be embanked in its passage across the Bitter Lakes.

4. The effect of the interposition of the Bitter Lakes, thus left open to the waters of the canal, being to neutralize the tidal currents, the commission have considered that the locks proposed at each end of the canal, at Suez and Pelusium, would not be indispensable. They have left it open, however, to establish these locks at a future period, should they be judged necessary.

5. It has confirmed the breadth of 100 metres (328 ft.) at the water line, and 66 metres (207 ft.) at the bottom, throughout the main course of the canal; for the portion, 20 kilometres (12½ miles) in length, between Suez and the Bitter Lakes, which is to be lined with stone, the breadth is reduced to 80 metres at the water lines (262 feet), and 48 metres (156 feet) at the bottom.

6. The section of the precursory scheme drawn up by the Viceroy's engineers is in other respects maintained.

7. As regards the entrance into the Mediterranean, to be called Port Said, the commission adopt the plan of jetties proposed by those of its members who proceeded to Egypt, with the exception that the breadth of the channel will be 400 metres, or 1,312 feet, instead of 500 metres, (1,640 feet,) and an inner basin will be added.

8. As regards the port of Suez, on the Red Sea, the commission adopt the situation and direction given to the channel. The breadth will be 300 metres, (984 feet,) instead of 400, and an inner basin will be added. The jetties will terminate at a depth of six metres (19 ft. 8 in.), low water, and a broad channel in the direction of the jetties will be dredged to a depth of nine metres (29½ feet 9 in.)

9. The commission declare that beacon lights of the first order will have to be established to point out shoals on the Egyptian coast and on the shores of the Red Sea, as a necessary consequence of opening the canal.

10. A port for taking in stores and refitting will be created in Lake Menzaleh.

11. As regards the auxiliary canals supplied with fresh water from the Nile, while the commission prefer, in a technical point of view, the plan of a canal from Zagazig, near Bilbies, they leave the choice of the best mode of executing it to the judgment of the engineers to whom the works will be entrusted.

12. Lastly, from the detailed information given by the naval officers, members of the commission, it is established that the navigation of the Red Sea is as favorable as that of the Mediterranean and the Adriatic. This was the substance of the opinion given to the commission by Captain Harris, who has performed seventy voyages from Suez to India.

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TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites proposals with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlaying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural locks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't La C. and Mil. R. R. Co.
MILWAUKEE, August 1st, 1856. 10132

SALE OF THE Syracuse & Binghamton R.R.

SUPREME COURT.—David Hoadley & Horace White, Trustees for the First Mortgage Bondholders of the Syracuse and Binghamton Railroad Company, against the Syracuse and Binghamton Railroad Company and others.

In pursuance of a judgment of foreclosure and sale, entered in this action on the first day of August, 1856, there will be sold by me, or under my direction, at the Syracuse House, in the city of Syracuse, on the 20th day of September, 1856, at 10 o'clock in the forenoon, "All and singular the corporate property and franchises of the said Syracuse and Binghamton Railroad Company, consisting of all the lands, tracks, lines, rails, bridges, ways, buildings, piers and wharfs, erections, fences, walls, fixtures, privileges, franchises, rights and real estate whatsoever, and all the tolls, income, issues and profits to be had from the same, and all the railway depots or stations, with the buildings thereon, together with all the locomotives, tenders, cars, carriages, tools and machinery owned by said Syracuse and Binghamton Railroad Company, or any way belonging or appertaining to said road and used thereon, between the city of Syracuse and village of Binghamton, including 13 locomotive engines, tenders and fixtures, 10 locomotive lamps, 10 first class passenger cars, 3 second class passenger cars, 2 mail baggage and express cars, 3 baggage cars, with stoves and lamps in each, 80 box cars, 34 platform cars, 40 gravel cars, 8 hand cars, 1 large snow plow; also one stationary engine and boiler, 2 lathe, 1 wheel press, 1 upright drill, 40 feet line shafting, 8 bands and pulleys for same, 3 forges and bellows, 3 anvils and all the tools in the shop at Syracuse, and along the line of said road, and materials on hand for repairs and use of said road; also, 80 tons of iron rails, 20 tons of railroad chairs, 10 tons of rail spikes, 16 frogs, 8,000 cords of wood at various points along the line of said road, 12 hand trucks, 8 platform scales, 19 stoves, and all the furniture, books and blanks at the several stations and buildings along the line of said road; 120 lamps of various kinds, in use on trains, at stations, shops, and switches along the line of said road; also, the office furniture, consisting of two large desks, two tables and cases of pigeon holes, 3 iron safes, one draughting table, one case of drawers, 4 stoves, one ticket case and tickets in same, one regulator, sundry blanks, blank books and stationery for use of said Company."

A more complete inventory of property and description of premises to be sold, together with the maps and profiles, will be exhibited on the day of sale, and also the terms of sale will then and there be made known. Dated August 4th, 1856.

B. DAVIS NOXON, Referee.
DAVIS & LEACH, Attorneys. 6133

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appurtenances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

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Should there be a failure on the part of the Company, or neglect to make the annual deposit to the sinking fund as specified, the Trustee, Robert H. Lowry Esq., Cashier of the Bank of the Republic in the city of New York, is authorized and directed to foreclose the mortgage in same manner as if default was made in the payment of principal or interest on said Bonds, thus putting it out of the power of the Company to evade this obligation. The road is now completed to the village of Waupun, fifteen miles to its junction with the La Crosse and Milwaukee Railroad, a point sixty-six miles northwest from Milwaukee, and has been in operation since the 20th of February last, and is so situated, geographically, that it will always be without competition, as no other road can be constructed to compete for the business that is justly tributary to it without being much more circuitous and distant, besides being much more costly in construction. The fifteen miles of road have earned in the three months ending May 26th, over \$12,400, which is a much larger amount in proportion to its length than was earned by the Milwaukee and Mississippi Railroad in the corresponding months in the year 1854, the first year that road was opened to Madison—and this amount was much less than it would have been had it not been for the great fall in produce which prevented farmers from sending their grains forward to market. When the road has earned an amount not equal to eight per cent. per annum on this issue of bonds, they will be receivable by the Controller as securities for banking purposes, and as the State increases in wealth and banking capital there will be a home demand for these bonds.

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DUNKIRK EXPRESS, at 6 a.m. for Dunkirk.
MAIL, at 8 1/2 a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
ROCKLAND PASSENGER, at 3 1/2 p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.
D. C. McCALLUM, General Sup't.

NEW YORK

**IRON PAVEMENT
AND
STREET RAILWAY CO.**

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE

MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,

AND TO

RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you in

ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD.

In substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST; that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD are furnished for walks in public parks and grounds, also for side walks, private lanes, yards, foot-ways, cellars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq., {
DAVID BURBANK, Esq., Baltimore, Md.
JOHN J. SPEED, Esq., Detroit, Mich.
HON. J. V. O. SMITH, Mayor of Boston, Mass.
L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.
HON. H. F. FRENCH, Associate Judge, Superior Court, Ezelet, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 35.]

SATURDAY, AUGUST 30, 1856.

[WHOLE No. 1,063, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, August 30, 1856.

Bellefontaine and Indiana, and Indianapolis, Pittsburgh and Cleveland Railroads.

Under instructions of the respective Boards of Directors, the undersigned presents to the stockholders in form of a circular, a comparative statement of the operations of the roads for the last six months.

The two roads are worked together as a continuous line, thus promoting economy and promptitude of service. Under this working contract each road receives its own revenues, which are assessed and collected upon its own tariffs. The rolling stock is used in common, and the expenses of working are divided upon mileage. Each road keeps up its own track and other repairs. A copy of the contract will be given at length in the next Annual Report.

INDIANAPOLIS, PITTSBURGH & CLEVELAND R. R.

Annexed will be found statement of details, showing gross receipts for six months ending June 30th, '56, to be

Same for same time in 1855.....

Gain in six months.....

Being a fraction under 25½ per cent. The same

ratio of increase for the present six months,

which is confidently anticipated, will give gross

earnings for the year

Against same in 1855.....

Giving increase in 1856.....

The expenses for the term have not been fully made up. They are estimated not to exceed 50 per cent. This will state the amount for the six months thus:

Amount of gross earnings\$129,236 90
Working expenses.....\$64,618 45
Interest and Taxes 37,959 04

102,577 49

Balance net.....\$26,659 41

Being a fraction under 3¼ per cent. on the capital stock. The amount has been applied in payment of the floating debt of the company.

The floating debt, independent of the Domestic Bonds, was given on first of January last at \$212,000. Since then a number of unadjusted matters have been closed, somewhat increasing the liabilities.

The debt on 1st July is.....\$183,977 73

Of which there is arranged to be

funded into 2nd Mort-

gage Bonds.\$35,927 50

Will be contested at Law. 10,000 00

45,927 50

Balance.....\$138,050 23

Against which the company has available the proceeds of \$114,000 of 2nd Mortgage Bonds;—\$15,000 of Bond fund receivable in twenty days, and the lands received from the Peru Company, valued at \$25,000 in cash.

If this road was relieved from its floating debt, which is carried at so heavy an expense, it would very soon return a dividend to its stockholders.

The amount of capital stock and funded debt are the same as stated in the last Annual Report.

Capital stock.....\$826,825 00

First Mortgage Bonds..... 661,000 00

Second do. 400,000 00

Of the 2nd Mortgage Bonds the sum of \$191,000 is set apart to protect a like amount of Income Bonds. These Income Bonds, under the provision of the Second Mortgage may be exchanged at any time for Second Mortgage Bonds, upon application to the Trustee, Simon Yandes Esq., at Indianapolis.

There is a sinking fund provided for 1st Mortgage Bonds to which the payment of twenty-five hundred dollars per month is made from earnings.

BELLEFONTAINE & INDIANA R. R.

The account for this road for the past six months stands as follows:

Amount of gross receipts.....\$168,279 62

Against same six months of 1855..... 135,657 42

Increase.....\$32,622 20

Being a fraction under 24 per cent. The same

ratio of increase during the present six months, which is considered a safe estimate, will give as gross earnings for the year\$359,474 50

Against same last year 298,293 57

Increase.....\$61,180 93

The account for the six months is stated as follows:—

Amount of gross earnings.....\$168,279 62

Working expenses.....\$84,139 81

Interest and taxes 47,862 00

132,001 81

Net receipts.....\$36,277 81

which is a fraction under 2 per cent. upon the capital stock.

The floating debt on the first day of January last was \$35,000. This has been entirely liquidated, in part from the sale of \$10,000 Second Mortgage Bonds, and the balance from earnings of the road. This, with the additional ballasting during the six months, has absorbed the surplus earnings. The road is entirely free from floating debt; but the ballasting is not yet completed, and will require an expenditure of probably \$30,000 to put the road in good working order.

As was stated in the Annual Report, \$150,000 of the Second Mortgage Bonds were appropriated to the payment of the floating debt, and the completion of the ballasting. Of these \$82,000 have been sold, leaving \$68,000 still in hands. About the 1st of April last a portion of our stockholders commenced proceedings against the company, enjoining the payment of principal and interest on the Bonds of the Columbus, Piqua and Indiana Railroad Company, guaranteed by us, in connection with the C. C. & C. and the I. P. & C. Railroad Companies. The effect of this action was, as we think, unreasonably, to discredit our own securities, upon which we had never made default; and therefore the Directors, unwilling to submit to large sacrifices, felt compelled to withdraw their Bonds from sale and rely upon the earnings to pay the floating debt and ballast the line. This has necessarily restricted our ballasting operations; but having opened new pits, largely reducing our length of haul, and expenses, we hope to be able, during the remainder of the year to so far complete this labor, as to work the road with great safety and facility, and reduce the expenses.

The increase of local business on both lines is a promising feature; while the through connections and business are steadily gaining, and give assurances that the line is increasing in public favor, and consequently in value to the stockholders.

Both roads have had a remarkable exemption from accidents. No passenger has been injured; the trains have run with great regularity, and the

connections been made with promptitude, and satisfaction to the public.

Very respectfully,

JOHN BROUGH,

President B. & I., and I. P. & C. R. R. Co.
INDIANAPOLIS, August 2nd, 1856.

COMPARATIVE STATEMENT

MONTHS.	PASSENGER.	FREIGHT.	EXPRESS.	MAIL.	TOTALS.	INCREASE.
January	\$5,291 04	\$9,296 63	\$11,042 93	\$691 66	\$26,683 89	\$1,664 97
February	6,658 92	8,194 63	7,547 45	691 72	23,093 72	3,571 36
March	10,258 88	7,804 25	11,371 77	691 66	29,926 36	6,218 73
April	10,186 69	7,809 62	11,547 09	691 67	29,333 61	9,404 27
May	9,948 81	6,055 40	7,979 58	691 72	24,676 81	2,600 92
June	7,691 99	5,876 98	6,477 20	691 67	20,737 84	4,268 64
July	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
August	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
September	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
October	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
November	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
December	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
Of Gross Earnings of B. & I. R. R. Co., for first six months of 1855 and 1856.						
January	\$5,291 04	\$9,296 63	\$11,042 93	\$691 66	\$26,683 89	\$1,664 97
February	6,658 92	8,194 63	7,547 45	691 72	23,093 72	3,571 36
March	10,258 88	7,804 25	11,371 77	691 66	29,926 36	6,218 73
April	10,186 69	7,809 62	11,547 09	691 67	29,333 61	9,404 27
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November	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68
December	11,086 24	5,876 98	6,477 20	691 67	23,131 08	18,793 68

Illinois and Wisconsin Railroad.

The Fond du Lac road, from Chicago to Janesville, will be completed to the latter city and open for business this week. At that point it connects with the Milwaukee and Mississippi Railroad, over the western extension of which it will reach the Mississippi at Prairie du Chien. It is already doing a fair business, although without any connection at its northern end.

American Association for the Advancement of Science.

Orography of the Western Portion of the Continent.

Below we give a very interesting and instructive paper, read by Mr. W. P. BLAKE, upon the Western portion of this Continent, which will be read with peculiar interest, in connection with the proposed lines of railroads across it.

Wm. P. Blake read a paper on the orography of the western portion of the United States, illustrating it with a map. Mr. Blake has, for two or three years past, made this part of the country his especial study, and is now engaged in comparing the geological reports of the various Pacific railroad surveys. It was but a few years, he said, since the vast territory lying between the Mississippi and the Pacific was an almost unknown region. Solitary explorers had here and there traversed the wilderness, and brought home thread-like lines of topography, to be laid down upon the great spaces marked unexplored upon our maps, but still wide blanks remained untouched. The explorations of Lewis and Clarke, of Long, Nicollet and Fremont, gave us the first glimpses of the true structure along the several lines of travel. Fremont had brought us a knowledge of that singular feature in the geography of America, the Great Basin, with its included Great Salt Lake, and given us the first reliable knowledge of the structure of the great Sierra Nevada of California, and the extended valleys at its western base. Still vast regions remained to be explored. These grand contributions to geography were, however, sufficient to authorize extensive generalizations, which map publishers and others soon made, not always distinguishing between exact knowledge and the fancies of ignorant observers. The result had been that our maps left little to desire; all the space was filled, and few could distinguish between the true and the fanciful. The recently completed surveys made to determine the most practicable railroad route to the Pacific had added largely to our previous knowledge. Indeed it was believed that such extensive contributions to the geography and natural history of the interior of our country had never been made in so short a space of time. Eight expeditions had been sent out, each with an independent outfit, instructions, and line to survey. They crossed the country at different parallels of latitude, and their routes were selected with reference to the unexplored spaces. In many instances these parties, when in the field, were subdivided, and in this way more lines were explored. The result of these surveys filled up nearly all the previous blank spaces on the map of the Territories, and served to connect the results of explorations previously made. The position, direction and altitude of ranges of mountains not before described had been made known. The direction and position of a part of the Great Colorado and other rivers had been changed, and the boundaries of the Great Basin restored to the limits originally assigned by Fremont. As the attention of the surveys had been specially directed to the determination of altitudes and grades, and a large number of accurate instruments had been provided for this purpose, the results were unusually interesting in an orographic point of view. The altitude of a large number of mountain passes, in all the principle mountain ranges from British America to Mexico, as well as the inclination of their slopes on either side, had been accurately determined. The materials which had been collected at the date of publication of the preliminary report were sufficient to admit of the construction of five profiles of the country from the Mississippi to the Pacific. These were reduced to one scale, and published on one sheet under the direction of the Secretary of War. With such an accumulation of new material it is not surprising that previously constructed maps, and even the large map published from the Bureau of Topographical Engineers in 1850, should be found greatly in error. It is from these new materials, combined with the results of previous explorations, that Mr. Blake

had prepared the map which was before the association. He had endeavored to present the trends of the principal ranges, and yet avoid the errors which result from representing the water-shed as a continuous chain of equal height and similar structure in all its parts. The great number and wide distribution of the mountains, and the variety of names under which the same chain is known at different places, make it necessary to consider them in groups in order to facilitate descriptions and comparisons. We may readily form them into groups; indeed, they are already separated by nature into three great divisions, which may be described as follows: The first group consists of the great line of water-shed between the Pacific and the Atlantic Oceans, commonly known in part as the Rocky Mountains, extending from the table-land of Mexico to and beyond our northern boundary. The second may include the Sierra Nevada of California and its prolongations, south into lower California, and north into Oregon and Washington Territories; also all the ranges between this chain and the coast—the coast mountains of California. The third is composed of the numerous and broken ranges lying between the first and second groups. The first group is sufficiently characterized by being the dividing ridge or crest of the continent, from which the waters flow each way into the Pacific and Atlantic. The second is characterized by its lofty and unbroken line of snowy peaks, forming a great wall along the Pacific; and the third is well separated from the first by the valleys of the Colorado and Green rivers in the south, and Snake river in the north, while on the west it is separated from the second group by the well-defined line of snowy heights of the Sierra Nevada, and further south by the low valley of the Colorado Desert and the Gulf of California. It will thus be seen that these divisions of the mountains are founded upon geographical distinctions and not on the geological ages or relations of the chains, although it is believed that the same division will be convenient for geological description. Two other groups may be formed, of the long line of azoic rocks extending north-west from the great lakes, and of the Appalachian chain and its extensions through New England and Canada, and thus the principal chains of the continent will be included in five groups. We find the northern portion of the first group to be composed of three principal and nearly parallel ranges—the Rocky Mountains proper, the Bitter Root Mountains, and the Cœur d'Alene Mountains. The last two ranges are intersected by the head waters of the Columbia river, but they are very properly referred to this group. The Bitter Root range extends from about lat. 46° to Clark's fork of the Columbia, and is prolonged beyond it to the eastern side of Flatbow Lake, where it is known by another name. A parallel chain, or possibly a portion of the same, is called the Kootanie Mountains. The Bitter Root range is considered more lofty and rugged than the Rocky Mountains, with which it is joined by the dividing ridges between the Bitter Root river and the Jefferson fork of the Missouri. The Salmon River Mountains, further south, may be regarded as connected with these ranges. The Rocky Mountains proper extend in our territories from the boundary in a direction S. 20° E., 260 miles to lat. 46°, where they curve to the south-west and unite with the Bitter Root range. From this point south there is but one range, of which, however, very little is known, until it unites with the Wind River Mountains, which extend S. 40° E. for about 170 miles to the depression known as the South Pass. In this range we have the highest point in the group—Fremont's Peak—13,570 feet in altitude. From the end of this range to the next, continued Mr. Blake, there is a wide interval without any mountains. The country is a table land or gently rolling prairie, 7,500 feet above the ocean. About 140 miles S. E. we find the ranges again in parallel ridges, trending southerly, and inclosing wide rectangular valleys known as the Parks. The first, Medicine Bow range, is nearly coincident in direction with the Wind Riv-

er Mountains, and is separated from a parallel range by the head waters of the Platte. These mountains, south of the Medicine Bow range, display on the maps a singular rectangular intersection of the ridges, arising partly from errors of drawing. These mountains are known as the Park Mountains, and extend south to the sources of the Arkansas river. Some of the highest points of the group are here, such as Pike's and Long's Peaks. The long ridge usually represented between Fort Laramie and Fort Union, called Black Hills, does not exist, as recently determined by Lieut. C. K. Warren. The great central chain in the territory of the United States is about 1,400 miles in length, consisting principally of ranges running about N. N. W. and S. S. E. The principal measurements by which we can estimate its general elevation have been made in its lowest points or passes.—Mr. Blake then read a list of passes, heights, and authorities, which we throw into tabular form:

TABLE OF PASSES IN THE ANAHUACIAN CHAIN.
(Pronounced Anawhackian.)

Passes.	Range.	Hight.	Explorer.
Marias Pass.....	Rocky Mts.	7,600..	Stevens.
Lewis & Clarke's..	Rocky Mts.	6,323..	Stevens.
Cadotte's.....	Rocky Mts.	6,044..	Stevens.
Hellgate.....	Rocky Mts.	6,000..	Stevens.
N'r K'skooskia R..	Bitter Root.	7,040..	Stevens.
South Pass.....	Wind River.	7,490..	Fremont.
Bridger's.....	Wind River.	7,500..	Fremont.
Cheyenne.....	Black Hills.	7,500..	Fremont.
(Nameless).....	N. & O. P's.	9,000..	Fremont.
".....	Park Mts.	7,000..	Fremont.
".....	O. & S. P.	11,200..	Fremont.
Cochetopa.....	S. S. Juan.	10,932..	Gunnison.
Sangre de Cristo..	S. S. Juan.	9,396..	Gunnison.
Raton.....	S. S. Juan.	7,479..	Gunnison.
Albuquerque.....	Sandia Mts.	6,987..	Whipple.
Campbell's.....	Si'ra Madre.	7,750..	Whipple.
Cam'o del Obispo.	Si'ra Madre.	7,946..	Whipple.
El Paso del Norte.	Organ Mts.	8,800..	Parke.
Huaco.....	Huaco Mts.	4,844..	Pope.
Guadalupe.....	Guadalupe.	5,717..	Pope.

Mr. Drake remarked that the great range of the Sierra Nevada was not one continuous ridge or snowy crest, as is generally supposed. It is formed of many nearly parallel ranges, which inclose elevated valleys precisely as in the Great Basin. The northern part of the Sierra is flattened down into a broad table-land. This plateau, in the vicinity of the Madelin Pass, has an elevation of about 5,000 feet, and a width of some twenty miles; it is walled in by ridges on each side, rising from 500 to 3,000 feet higher. This plateau is broken by short ranges, but it extends northward into Oregon to the numerous small lakes about Lake Abert. A chain of lakes, in fact, occupies the lower portions of the plateaux for the whole length of the chain, and shows the great amount of precipitation on the summits. The passes through these mountains generally turn the points of the isolated ridges, or cross them at their lowest point. In passing southward along the crest, the elevation of these mountains increases, as shown by the observations of those who have searched for a location for a wagon-road. Thus Fremont's or Carson's Pass, traversed by Fremont in 1844, is nearly 8,000 feet high, and one from Sonora across to the basin is 10,932 feet in height. Further south, the chain tends to the west, and its altitude decreases, preserving, however, its broken character. Here were high valleys wooded with oaks and covered with grass. This plateau is about 3,500 feet high, and the passes from 4,000 to 5,300.

In the Great Basin mountains, the principal range is known as the Wahsatch mountains, which form the eastern rim of the Great Basin. Between this and the Sierra Nevada there is a constant succession of ridges, which are short and much broken, arranged in parallel lines, and generally trending north and south. The general surface of the Basin has an average elevation of 4,500 feet, and these ranges rise from 1,500 to 3,000 feet higher. Midway between the Lake and the Sierra swells up the Humboldt Mountains, reaching an altitude of nine or ten thousand feet, the summit of the principal pass being 6,579 feet high. Prob-

bly the southern end of the Wahsatch range turns toward the west, conforming to the curvature of the Colorado River, and similarly to the southern end of the Sierra Nevada. Mr. Blake, after having described the three great groups and their prominent orographic features, proposed names for them which, he said, would not conflict with the names applied to any portion of them. He proposed to call the grand central chain, extending from the Andes to the Arctic Ocean, the Anahuacian chain, since it might be said to commence in the south, where it formed nearly the whole of the table-land of Mexico, or Anahuac. The second chain, traversing the two Californias, and including its northern prolongations, the Cascade ranges, he thought a more appropriate name could not be found for than the California chain. For the third group he suggested the general appellation of the Aztecian chains, or Great Basin chains.—These names harmonized with the elegant general title of Appalachian, proposed for the Alleghanies and their extensions by the Messrs. Rogers, a name which had now passed into general use.—The two great chains were each about 1500 miles long in United States Territory. The Californian chain extended along the Peninsula 800 miles further south, and the Anahuacian became the table-land of Mexico. The greatest breadth of surface covered by these chains was along the parallel of 40 deg. from the meridian of 105 deg. 30 min. to 124 deg. or about 1200 miles. This, however, includes the elevated table land at the sources of the Colorado. The breadth diminished both toward the north and the south. Comparing these two chains, we were struck by their general and close parallelism throughout, even the irregularities of one chain finding their counterparts in the other, as, for example, the trend in the Californian chain at the Bernardino Sierra corresponding to the Wind River Mountains in the Anahuacian chain. So, also, the peculiar south-western bend of the southern end of the Sierra Nevada had, to all appearance, its counterpart in the deflection of the southern end of the Wahsatch Mountains, along the Colorado. The parallelism of the coast-line with the mountains was also interesting, from its close conformity, showing that, in general, the shores were rocky; the coast-line being formed principally by erosion, and not, as our Atlantic seaboard is, by deposition. We might also infer the existence of strong coast-currents carrying away the debris of the rocks beaten down and ground together by the waves. It was interesting also to note that the lowest and most open passes, the greatest and most decided breaks in the chains, were found at their greatest bends; as, for instance, the South Pass between the Wind River Mountains and the Medicine Bow Mountains. One of the most important characteristics of these chains was the great number of ridges of which they consisted. These ridges were not ranged exactly side by side; they generally overlapped each other. This distribution *en echelon* was not a new feature; it was found in the Appalachians, and was one of the results of the earth's contraction, which, according to the theory so ably sustained in this country by Prof. Dana, was the cause of the great plications of the crust.—This overlapping was very well shown in the Coast Mountains of California, where the ranges reached the coast successively from the south northward. The Bay of Monterey is included between the end of the projection of one ridge into the ocean at Point Pinos, and the side of another which ends much further north. This parallelism and overlapping of the ridges as in the Appalachians, show that forces similar to those which formed the Appalachian chain have been here exerted on a much grander scale. Instead of one chain we have several, each rivaling the Alleghanies in extent and altitude. The folding of the rocks is not only inferred from the topography of the ranges, it has been found in the Sierra Nevada and Coast Mountains of the California chain, as well as the chains of the Great Basin. We cannot contemplate the peculiar relations of the principal chains, as exhibited in the map, without recogniz-

ing the result of the action of two opposing forces. If we conceive the principal lines of flexure to be meridional, north and south, the folding may be referred to a force of contraction, acting in east and west lines, and this may be termed the equatorial contraction. The trends of the ranges show also the action of force of action in another direction, or from north to south—a polar contraction, to which the sudden bends in the long chains of mountains may be referred. These bends are found in the Sierra Nevada, east of the Bay of Francisco, in its southern portion, where its curves gradually round to the south-west; and in the Bernardino Sierra trending nearly at right angles to the Sierra Nevada. Parallel deflections are found in the Anahuacian chain in the Wind River range, and again they are seen in the Wahsatch range of the Aztecian chain.

Thus all the long chains are bent as if by compression upon the ends, and the action of a force exerted at right angles to the force which has produced the prevailing meridional folding is clearly shown. It is most probable that this force has acted in north and south lines, and we may term it the *polar force* or contraction. The overlapping of the ridges and ranges is another evidence of this polar contraction; for we see that it is nothing more, to speak in general terms, than the sliding of portions of the range upon themselves, at least the appearance presented is the same, although there is no actual break. We may also refer the great north-west and north-east trends to the interference of this polar force or resistance, either producing the same result with the equatorial contraction, the diagonal trends being the resultants of the two forces. Though this train of thought leads to interesting speculations concerning the earth's gradual cooling and contraction, which are reserved for future communications, my present object is to present some of the leading conclusions which may be drawn from the study of the relations of our mountains, now that we have the principal chains placed with approximate correctness on our maps, and to show that there is not a region where the great dynamics of the earth are recorded on a scale of greater simplicity and grandeur than our own land, between us and the Pacific.

Lackawanna and Lanesboro' Railroad.

We learn from Mr. Trautwine, the engineer of the road, that the Lackawanna and Lanesboro' railroad survey is nearly completed. We are gratified to learn that the result is highly favorable, the steepest grade against the coal trade being but 45 feet to a mile. The entire length of the road from Scranton to the New York and Erie railroad near Lanesboro' is about 55 miles. With the exception of a few points near the northern end of the line, the character of the earthwork is light. The estimates are not yet fully made out, but are advanced sufficiently to show that the cost of a first class single track road will fall considerably below \$40,000 per mile. A very general interest is felt in the early completion of this road, which can have no competitor in the business of carrying to the lakes and to a great portion of Eastern New York the anthracite from the northern section of the Lackawanna coal fields. An immense amount of capital has already been invested in coal property along the line, the value of which will be greatly increased by the construction of the road. We learn that books for stock subscription will be opened soon after the completion of the survey and report; and we can entertain no doubt that the requisite amount will be taken at once to secure the early commencement and speedy construction of the road. The coal which it is designed to carry to market is the most northerly portion of Pennsylvania anthracite, the peculiar geographical position of which is such as to entirely preclude rivalry from other sources as regards reaching those markets which lie north of it. This fact will, no doubt, commend the enterprise to discerning capitalists, as well as to those who may be able to invest a small amount in a safe undertaking. To the owners of

farms and timber lands, the road will undoubtedly be as welcome as it is to the coal owners; and we trust that they also will show their appreciation of the benefits they receive from the increased value of their property, by not only freely releasing the right of way, but by contributing to hasten its construction by subscribing the stock.—*Scranton Spirit of the Valley.*

Commerce on the Lakes.

We give below an abstract from the Report of the Congressional Committee on Commerce.—For this abstract we are indebted to EDWARD WADE, Member from this District, and one of that Committee, who has been indefatigable in gathering and collating these valuable commercial statistics.

The following are the points examined in the Report, viz:

1st. What are the present and prospective amount and value of the enrolled and licensed tonnage of the different Collection Districts established by law on the Lakes and their connecting waters!

2d. The extent and value of the commerce carried on by means of the enrolled and licensed tonnage, the dangers incident to Lake navigation, and the losses of vessels and cargoes engaged therein.

3d. Whether this commerce is of such national importance as to render it a proper subject of Congressional consideration and encouragement!

4th. The amount of losses sustained by vessels and cargoes on the Lake waters, for want of suitable harbor improvements.

5th. The amount hitherto appropriated by the Federal Government in favor of Lake Harbor improvements, and the revenue collected at the several Lake districts.

Tonnage of the Lakes for 1854 and 1855, including the Steam Tonnage for 1855.

	Tonnage		Steam Tonnage
	1854.	1855.	1855.
Sackett's Harbor.....	7,570	6,227	1,944
Oswego.....	24,365	42,460	5,199
Genesee.....	..	233	128
Niagara.....	868	468	128
Oswegatchie.....	3,744	4,485	3,042
Buffalo Creek.....	82,678	76,952	38,262
Cape Vincent.....	4,866	6,609	1,143
Presque Isle.....	8,210	9,269	4,720
Cuyahoga.....	45,483	51,078	15,012
Sandusky.....	6,084	8,051	306
Miami.....	5,479	3,763	115
Detroit.....	62,363	65,058	32,180
Mackinaw.....	4,393	4,431	2,397
Milwaukee.....	14,117	15,673	288
Chicago.....	31,041	50,972	3,207
Total Tonnage.....	291,231	345,729	108,243

Increase of Lake Tonnage (steam and sail), from June 30th, 1854, to June 30th, 1855, a fraction over 18.8 per cent.

Ratio of steam to sail tonnage for 1855, a small fraction less than $\frac{1}{3}$.

Total Tonnage of the United States for 1854 and 1855.

	Registered.	Enrolled.	Total Tonnage.
1854.....	2,333,819	2,469,083	4,802,902
1855.....	2,535,186	2,676,864	5,212,000

Ratio of increase of Lake tonnage over the aggregate total tonnage of the U. S., a fraction over 2.3 per cent. per annum, more than double; or as 18.8 to 8.5 in favor of Lake tonnage, which thus constitutes 1-15th of the entire tonnage of the United States.

The clearances of vessels from ports in the United States to Canada, and the entries of vessels from Canada to ports in the United States, during the year 1855, as exhibited in the following table, show a greater amount of tonnage entered and cleared than between the United States and any other foreign country.

Clearances from Ports in the United States to Ports in Canada.

American Vessels.....	2,369
Canadian.....	6,638

Whole number.....	9,007
Tonnage, American.....	890,017
Do. Canadian.....	903,602

Total cleared from the States.... 1,793,519

Entries from Ports in Canada to Ports in the United States.

American Vessels.....	2,454
Canadian do.....	4,194

Whole number.....	6,648
Tonnage, American.....	897,133
Do. Canadian.....	870,579

Total entered into the States.... 1,767,730

Total Tonnage..... 3,561,249
Value of Lake tonnage for 1854, \$10,185,000; at an average of \$43 per ton, this would make the value of the increased tonnage for 1855 (viz, 345,000 tons,) reach \$14,835,000.

2nd. Present value of the commerce of the Lakes.

The data upon which the Committee arrive at this value, are stated at large in the Report. The following table shows the value of that commerce for the season of 1855, (excluding the districts of Presque Isle and Michilimackinac for want of data.)

Commerce of the Lakes—Freight and Passenger Trade Excluded.

Districts.	Tonnage entered and cleared.	Value of Imports and Exports.
Cuyahoga.....	1,782,493	\$162,185,640
Buffalo Creek.....	3,330,232	303,023,000
Sandusky.....	..	59,966,000
Maumee.....	1,034,644	94,107,000
Chicago.....	2,632,000	233,878,000
Detroit.....	1,538,000	140,000,000
Milwaukee.....	..	35,000,000
Oswego.....	1,607,000	146,235,000
Sackett's Harbor, } Cape Vincent, } Oswegatchie, } Genesee, } Niagara, } Presque Isle, } Michilimackinac, }	..	42,226,000
Omitted.	..	..

Exports and Imports..... \$1,216,620,640

Total value of Lake Commerce excluding Presque Island and Michilimackinac..... \$608,310,320

This sum may seem incredible to those unacquainted with the immense carrying trade of these Lakes. It may serve, however, to mitigate this astonishment to state that the trade between the United States and Canadas, carried on almost over these Lakes and their connecting waters, is in value next to that between the whole United States and the Empire of France, making our foreign commerce with Canada in value No. 3, and in tonnage No. 1 among the foreign countries with whom we carry on commerce; being greater in tonnage of entrances and clearances, even than that between Great Britain and the whole United States.

Trade with Canada.

American Goods to Canada.....	\$9,950,764
Foreign do. do.....	8,769,580

Canadian Goods to the States..... 12,182,314

\$30,902,658

The foregoing examination of this subject shows also that the actual value of property exposed to the perils of Lake navigation is considerably greater than the total value of the merchandise of every description exported from the United

States to all foreign countries, added to the total value of merchandise imported from all foreign countries into the United States.

Exports to Foreign Countries.

Domestic.....	\$246,708,553
Foreign.....	28,448,293

Total Exports to Foreign Countries. \$275,156,846
Total Imports from do. 261,468,520

\$536,625,366
Under this head is discussed the dangers to which this vast Lake commerce is exposed, and the nature of the disasters by which losses on the Lakes are principally incurred, viz, shipwreck, collision and stranding. These are shown to be attributable in a great measure to the narrow area, over which this commerce is carried on, the stormy character of the Lakes, the exposed condition of the Lake coasts, and the want of natural or artificial harbors of commerce or of refuge for the Lake shipping.

Dimensions of the Lakes.

Lakes.	Length.	Greatest Breadth.	Average Breadth.	Areas.
Ontario.....	180	52	40	5,400
Erie.....	240	57	38	7,800
Huron.....	270	105	70	20,400
Michigan.....	340	83	58	20,000
St. Clair.....	18	25	25	300
	1,048		46 $\frac{3}{4}$	53,900
Str. Detr.....	25			
St. Clair.....	36			

1,109 total length.

Thus a vessel sailing from Cape Vincent, Lake Ontario, to Chicago, Lake Michigan by keeping the center lines of the Lakes will sail 1,109 miles; and yet will average not more than 23 miles from shore, throughout the whole distance.

But the coast line of the Lakes on the American side is much longer, and excluding Green Bay and the North-west coast of Lake Michigan is for Ontario..... 200 miles.
Erie..... 870 "
Huron..... 440 "
Michigan..... 850 "
1,960 "

A very large proportion of the extensive commerce above set forth, is conducted by sail and steam vessels, at but a few miles distance from the American coasts of these Lakes, and over a surface not exceeding an area of 7,000 square miles; more than 1,400 miles of this coast constitutes to the numerous vessels by which this commerce is carried on, a lee shore, to the fear of which, vessels navigating those Lakes are constantly exposed.

No reference has been made to the commerce and navigation of Lake Superior, from the want of satisfactory statistical data. A ship canal around the St. Mary's Rapids connecting Lakes Superior and Huron, was completed during the autumn of 1854. During the season after the opening of this canal (1855) the exports of iron and copper alone, from the ports of Superior, amounted to \$2,700,000.

3d. National importance of the commerce and navigation of the lakes.

This head is considered, first with reference to the population of the seven States, bordering on these lakes, and consequently, interested in their Navigation and Commerce. Secondly, the position of those States, relatively to the Great Valley of the Mississippi, and the extent and cost of their railroads and lands, designed to open and facilitate commercial intercourse between the Atlantic Ocean, the Lakes and the navigable waters and tributaries of the Mississippi River. Thirdly, the position of these seven lake States, relatively to the British possessions, and the Valley of the St. Lawrence River.

Fourthly, The importance of the Commerce and Navigation of the Lakes, as a nursery of seamen,

from which the Navy of the United States may be supplied with the first class of seamen in time of war, in which the tonnage of the Lakes is compared with the tonnage engaged in the whale, cod, and mackerel fisheries.

The tonnage employed and the value of the commerce carried on by means of it, might seem perhaps satisfactory under this head of enquiry; but there are some other considerations tending to the same result, which are worthy of note.

1. The white population of the United States according to the census of 1850, was 19,553,038. There are seven States, bounded in part with Great Lakes, with a population as follows:

New York.....	3,048,325
Pennsylvania.....	2,258,160
Ohio.....	1,955,050
Michigan.....	395,071
Indiana.....	977,154
Illinois.....	846,034
Wisconsin.....	304,756

White population of the 7 L. States. 9,784,550

" " " 24 other S... 3,768,488

Balance in favor of the Lake States. 16,662

Showing that the white population of the seven Lake States is greater by 16,662 than the total white population of the remaining twenty-four States: and the difference has probably been still more increased since 1850,

Total Value of Merchandize Imported from Foreign Countries for the year ending July 1, 1855.

Paying duties.....	\$221,378.141
Free of duty.....	40,090,366

\$261,468,507

To the amount of duty paying merchandize add.....	53,025,794
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and the cost of the merchandize to the country will be.....\$274,403,985

Cleveland and Toledo Railroad.

GENERAL STATEMENT, 30TH JUNE, 1856.

Capital stock, (increased since April, by surrender of bonds).....	\$3,323,712.50
Bonds.....	3,370,277.50
Bills payable, balance.....	335,473.55
Balance income accounts.....	113,159.96
Construction.....	\$6,704,840.96
Bonds, &c., on hand..	218,381.87
Cash in bank, and in hands of Cashier, at Cleveland.....	181,833.34
Interest upon bonds, paid in June.....	14,958.61
Sundry balances.....	22,608.83

\$7,142,823.51

STATEMENT OF EARNINGS.

Gross earnings for six months ending June 1.....	\$548,576
Operating expenses for same.....	253,350
Net earnings.....	\$295,226
Deduct interest, &c., paid.....	133,574

Net income, over five per cent.....\$161,652

The Treasurer's report, showing the income account on the 1st of June, and the finances of the company on the 1st of July, 1856, is as follows:

Balance cr. of income account, Dec. 1, 1855.....	\$73,757.92
Gross earnings six months, ending June 1, 1856.....	548,576.11

Total.....\$622,334.03

Working expenses, as per Supts. report.....	\$253,350.82
Interest on bonds and debt six.....	128,074.85
Exp's New York office..	5,500.00
Dividend in April, 1856.	122,248.50
Balance to credit of income acct..	\$113,159.96

In concluding the financial statement, the Treasurer says:

Showing cash on hand, and good securities for more than the amount of floating debt. During the last year the north division of our road, which runs from Toledo to Ohio city, upon the opposite side of the river, from Cleveland, has been finished, and for a portion of the time a majority of the business has been done upon it, obliging us to use a ferry at Cleveland, occasionally causing delay. To make the line what the public demand, we are either compelled to have a bridge across the Cuyahoga river, or connect with the Columbus road, a few miles out of the city, and run in upon their track; that company having a double track for some distance, could accommodate our northern line by allowing it to come into their road at Berca, 12 miles from Cleveland, and our southern division at Grafton, 25 miles from Cleveland; and proposing to allow us to use the same in common with themselves, it was thought the interest of the stockholders of both companies would be best promoted by such an arrangement; the plan was fully approved by the stockholders of this company present, and the Board authorized to make the arrangement, which has been done, and a contract agreed upon between the two companies—and while it protects the Columbus road against an expensive competition, and secures to them an annual rental for a portion of their property, and may be considered a valuable arrangement for that company, it is none the less important to the Cleveland and Toledo road, as it enables us to dispense with the ferry at Cleveland, an annual expense of \$25,000, and allows us to enjoy, in common with themselves, their valuable depot and lands at Cleveland, for the accommodation of our business. The whole line from Cleveland to St. Louis, by the Wabash Valley, Terre Haute, Alton and St. Louis, and the Mississippi, by the Michigan Southern and Chicago, and Rock Island road, are much benefitted by this arrangement, as it enables us to load a car at Cleveland for either of the parts named, and run it without change, being of the same gauge. The line from Cleveland east, to New York, the Mahoning road and Northwestern will soon be completed, which are also same gauge, will make us what no other line can boast of, an unbroken line of road, without ferry, from Jersey City to the Mississippi river, and even beyond, by the Mississippi and Missouri road to Council Bluffs.

During the past season a large portion of the Wabash Valley road (connecting with our road at Toledo) has been finished, and the balance will be early in the fall, connecting with the Great Western of Illinois, Illinois Central and Terre Haute, Alton and St. Louis railroads, thus adding to our road the business of nearly one thousand miles (a small portion of which has already found its way to us) and to those familiar with the country through which these roads run, it does not appear visionary to say the Wabash Valley road, with its connections, will furnish business sufficient to pay good dividends upon either division of our road, which, with our present business—to say nothing of the large annual increase which must continue for years to come—will show earnings sufficient to satisfy the most exacting stockholder.

The two roads belonging to this company were commenced and prosecuted nearly to completion by rival interests, and so far advanced at the time of consolidation it was thought advisable to complete them both, and which for a time appeared to have been an unwise undertaking; but the time has now arrived when the business will require the use of both roads, which, by our arrangement with the Cleveland and Columbus roads, makes us a double track from Cleveland to Toledo, and will enable us to accommodate the increasing business, without any further expenditure for that purpose, as we should soon be compelled to make without the two divisions. A large business will be done upon our road with Pittsburg and Detroit, as soon as the road from Detroit to Toledo is open, which will be by the 1st December. In our arrangement with the Cleveland and Columbus roads, we ar-

range with the boats running in connection with that road, between Cleveland and Buffalo, to form a line with our road, enabling passengers taking the Cleveland boats to reach Chicago several hours earlier than by the Michigan Southern or Michigan Central boats, which will add to our receipts without any additional expense.

Pittsburg and Connellsville Railroad.

A corps of engineers is now engaged in surveying the route between Cumberland and the Sand Patch tunnel, on the Pittsburg and Connellsville railroad, and it is the intention of the company to put this division of the road under contract as soon as practicable, and push it forward to completion with energy. On the Sand Patch tunnel, about 150 laborers are at work, and it is understood that more will be put on it soon. As a tributary to Pittsburg, it will undoubtedly be important, but as a route between Pittsburg and Baltimore, it will have no advantages over that now formed by the Pennsylvania and Northern Central roads. It will, at some day, possess an interest for Philadelphia, as a portion of a through line of railways between this city and the Ohio river.—All that is needed to effect this immediately, is the construction of a road between Chambersburg, the terminus of the Cumberland Valley railroad, and the Connellsville line, at Castleman's river.—By the recent consolidation of the Pittsburg, Fort Wayne, and Chicago railroad, the immediate completion of her line to Chicago is insured—and when the Pittsburg and Steubenville, the railroad around the river, the Pittsburg and Connellsville, and Chartier's Valley railroads are finished, Pittsburg will have railroads radiating to all points of the compass, leading to Chicago, Cleveland, Erie, Olean, Philadelphia, Cumberland, Baltimore, Wheeling, Steubenville, Cincinnati and St. Louis. Considering the effect of railways as seen at other places, it is safe to predict for Pittsburg a most brilliant future as the metropolis of Western Pennsylvania, Eastern Ohio and Western Virginia.—*Phila. Shipping List.*

Liabilities of Telegraphic Companies.

We copy the from a foreign paper the following decision touching the liabilities of telegraphic companies:

"A curious, and to all persons sending telegraphic despatches, an interesting trial, has just been disposed of at Cologne. Messrs. Oppenheim, bankers of Cologne, having received the earliest intelligence of Russia having accepted the Austrian propositions telegraphed to their agents at Frankfurt to purchase divers large sums in Austrian and other securities. By carelessness on the part of the telegraph employee, the word sell was substituted in the paper delivered to the agents, who sold forthwith; and the Messrs. Oppenheim, consequently, sustained a very serious loss. They brought their action, consequently, against the agents, who, in defense produced the dispatch as received by them. The Court, after a long deliberation, returned a judgment in favor of the latter, and condemned the Messrs. Oppenheim to pay the loss hitherto refused by them.—Both appellants and defendants meantime had instituted a process against the telegraph direction as a reserve, whichever way judgment might go. But the Court declared itself incompetent in the matter, and declared neither action could lay, as, according to the 41st article of the Telegraph Regulations of November, 1855, it was thereby declared that the Direction would not hold itself responsible for any errors or accidents that may or might occur in the transmission of dispatches.—The judgment of the Court, as it stands, goes therefore to show that all responsibility, losses, and the like, must fall upon those who send, and not upon those who receive dispatches; while, let the officials commit what errors they may, or be guilty of whatever neglect they may please, the direction stands free of all risk. This surely requires the interference of Government; for, as the regulations now stand, there is no security against the negligence of officials."

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	110,247	none	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscog. & Kennebec.	55	588,042	1,622,905	2,210,947	209,475	110,247	none	10	South Western	92	1,097,498	465,500	1,624,920	253,306		141,168	8
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	270,214	112,491	none	85%	Tennessee and Alabama.	30	246,486		679,906	In progr.			
Portland, Bangor & Portland.	51	1,367,000	119,237	1,486,327	233,234	120,834	none		Tennessee and Mississippi.	217	2,178,440	2,127,002	4,028,796	311,631		159,673	12
Boston, Concord & Montreal.	93	1,808,093	1,060,512	2,771,310	380,221	143,565	2	16%	Memphis and Charleston.	153	2,668,555	1,902,921	4,536,412	199,932		109,236	
Cheshire.	53	2,085,925	899,313	3,170,887	335,491	138,454	7	15%	Mobile and Ohio.	188	642,584		628,303	In progr.			
Concord.	35	1,500,000	8,242	1,412,576	370,529	138,299	2 1/2	40	Miss. Central.	55	2,030,425	671,645	2,657,565	In progr.			
Northern, N. H.	82	2,768,400	none	8,016,633	162,687	55,173	none	4	N.O., Opelousas & G.W.	111	1,000,000	1,500,000	2,600,000	In progr.			
Con't & Passumpsic Riv.	61	1,048,145	787,608	1,790,062	894,971	none	none	1 1/2	Vicksburg, Shreveport & Tex.	16	625,425	938,593	1,033,781	In progr.			
Rutland & Burlington.	120	2,233,376	2,662,396	8,463,366	820,119	214,793	none	59	East Tennessee and Ga.	161	2,819,330	1,497,081	3,842,694	316,090		112,177	none
Vermont Central.	117	5,000,000	3,550,236	8,463,366	489,754	140,377	6	75%	Nash. and Chattanooga.	96	1,302,804	2,235,939	3,738,753	264,973		138,994	18
Boston and Lowell.	27	1,800,000	825,635	2,188,595	89,917	8,740	none	63	Lexington and Frankfort.	29	430,055	158,099	637,071	93,263		43,635	6
Boston and Maine.	83	4,076,974	150,000	4,179,535	558,671	219,089	none	81%	Lexington and Danville.	65	694,444	52,734	747,178	In progr.			
Boston and N.Y. Central.	74	2,240,300	1,518,671	3,463,119	68,007	30,318	none	40%	Louisville and Frankfort.	254	868,339	77,294	613,231	In progr.			
Boston and Providence.	68	3,160,000	369,132	3,677,154	119,221	55,527	3	40%	Bellevue and Ind.	118	1,881,685	2,026,225	2,882,652	298,293		140,823	none
Boston and Worcester.	66	4,500,000	655,423	4,865,439	108,787	50,996	40	47	Clev., Col. and Cin.	141	4,647,020	1,229,857	4,613,722	129,295		732,066	9
Cape Cod.	47	681,900	280,593	997,252	647,261	305,996	40	68	Cleveland and Toledo.	200	2,678,426	2,689,301	5,124,629	736,272		390,986	10
Connecticut River.	52	1,501,110	273,241	1,802,244	681,163	225,071	none		Clev. and Mahoning.	103			628,533	In progr.			
Eastern, Mass.	90	2,653,400	153,700	3,766,998	198,491	66,535	6%	82%	Clev. and Pittsburgh.	133	2,780,744	3,043,992	5,637,466	681,677		309,518	57%
Schenectady.	57	800,242	225,585	968,521	683,499	295,738	6	82%	Cin. Hamilton & Dayton.	60	2,153,900	1,321,213	2,957,757	508,271		278,012	64%
North Eastern.	31	500,000	none	533,943	198,491	66,535	6%	82%	Cin., Wm. & Zanesville.	131	1,120,450	1,131,255	2,326,459	In progr.			12
N. Bedford and Taunton.	20	3,015,100	292,650	3,362,949	1,858,673	603,015	7	40	Columbus and Xenia.	58	1,484,550	149,000	1,481,733	566,366		187,518	10
Old Colony and Fall River.	77	2,232,541	1,033,670	3,269,727	294,780	75,760	2	70	Dayton, Xen. & Belpre.	63	437,838	422,688	860,496	In progr.			
Vermont and Mass.	156	6,150,000	5,960,420	10,495,905	311,423	138,079	10	23	Dayton and Michigan.	140	1,076,002	933,011	1,185,826	In progr.			
Western, Mass.	46	1,141,000	205,505	1,351,271	294,780	75,760	2	70	Dayton and Western.	35	310,000	500,000	733,769	In progr.			
Worcester and Nashua.	43	1,510,020	338,461	1,800,690	268,685	119,611	none		Easton and Hamilton.	42	454,690	904,489	1,155,135	171,929		65,000	20
Providence and Worcester.	72	2,356,000	939,000	3,313,932	339,196	71,427	none		Little Miami.	65	2,963,921	1,171,785	3,048,172	681,662		836,708	80
Hartford and N. Haven.	122	2,008,110	410,240	2,431,773	220,459	98,738	25		Mad River and L. Erie.	205	2,451,650	2,572,932	4,446,661	In progr.			15
Hartford, Prov. and Fishkill.	62	1,031,800	824,244	1,580,723	88,007	30,318	none		Central Ohio.	138	1,520,927	1,171,785	4,233,443	Recently opened.			
Housatonic.	67	1,031,800	2,376,803	5,876,803	88,007	30,318	none		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626		662,117	9
Naugatuck.	62	1,031,800	2,376,803	5,876,803	88,007	30,318	none		Pittsburg, Mans. & Cin.	60	371,350	31,000	390,933	In progr.			
N. York and N. Haven.	50	738,258	738,165	1,450,318	88,007	30,318	none		Sand. Mans. & Newk.	127	1,850,000	2,206,387	3,662,587	328,968		164,479	none
N. Haven and N. London.	56	809,200	1,073,673	1,584,383	88,007	30,318	none		Solo to Hocking Valley.	138	403,076	509,050	888,858	In progr.			
N. London, W. & Palmer.	66	2,122,800	1,073,489	2,697,153	88,007	30,318	none		Spring, Mt. Vernon & P.	113	1,000,000	950,000		In progr.			
Norwich and Worcester.	32	439,006	1,025,096	1,840,696	88,007	30,318	none		Tol. Wash. & St. Louis.	242	2,500,000	4,500,000		In progr.			
Albany Northern.	35	643,330	317,859	974,326	88,007	30,318	none		Cin., Log. and Chicago.	265	4,193,677	1,006,125	2,080,453	In progr.			
Black River and Utica.	100	1,487,874	1,501,183	2,819,066	88,007	30,318	none		Evansville & Crawfordsburg.	109	704,946	1,177,596	1,944,541	327,400		64,862	
Buffalo, Conn. and N. Y.	92	798,439	2,597,849	3,401,868	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Buffalo and N. Y. City.	99	1,300,000	1,040,000	2,494,364	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Buffalo and St. Line.	92	434,111	922,390	1,275,796	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Canandaigua and Elmira.	98	1,315,000	2,279,854	3,495,332	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Canandaigua & Niagara F's.	35	887,000	506,686	1,275,796	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Cayuga & Susquehanna.	144	8,768,496	9,250,562	12,737,898	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Hudson River.	95	1,875,143	668,949	2,544,092	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Long Island.	634	24,544,880	14,462,742	25,233,433	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
New York Central.	404	10,023,966	25,128,639	33,439,431	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
New York and Erie.	138	5,717,106	4,069,769	8,788,303	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
New York and Harlem.	118	1,635,022	4,406,874	5,470,714	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Northern, N. Y.	35	899,000	216,681	723,683	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Oswego and Syracuse.	29	467,000	294,189	749,883	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Potsdam and Watertown.	25	610,000	140,000	896,423	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Rensselaer & Saratoga.	46	500,000	396,800		88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Saratoga and Whitehall.	36	768,389	1,678,804	2,272,777	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Syracuse & Binghamton.	27	437,838	737,079	1,109,822	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Troy and Boston.	97	1,370,373	700,079	2,068,063	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Watertown and Rome.	64	1,000,000	1,619,000	2,619,000	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Belvidere Delaware.	94	8,000,000	11,407,200	19,407,200	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Camden and Amboy.	60	869,320	1,622,131	1,729,642	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Camden and Atlantic.	30	3,482,550	690,000	4,310,011	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
New Jersey Central.	83	2,000,000	2,296,176	3,683,149	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Morris and Essex.	44	1,157,805	375,000	1,636,505	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Albany Valley.	44	1,637,867	424,664	1,988,817	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Catskill, W. & Erie.	56	1,700,000	1,940,000	3,640,000	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Umberland Valley.	56	1,099,500	12,211	1,191,833	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Del. Lack. & Western.	109	3,051,622	3,884,702	6,022,687	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722	1,442,896	2,178,461	356,017		193,142	7
Erie and Northern East.	28	600,000	1,200,000	1,848,812	88,007	30,318	none		Ind. and Cincinnati.	68	1,213,722						

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. convertible	7	1st April, October	"	1868	97 1/2	97 1/2
Belleville and Indiana	500,000	Do. convertible	7	1st Jan'y, July	"	1868	85	85
Do. do.	200,000	Real estate, convertible	7	1st Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	1st Feb'y, August	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	1st March, Sept.	"	1861-64	82 1/2	85
Do. do.	300,000	2d do. convertible	7	1st March, Sept.	"	1865	71 1/2	72 1/2
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	91
Do. do. do.	445,000	2d do. do.	7	1st May, Novemb.	"	1869	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	1st Jan'y, July	"	1868	70	77 1/2
Cincinnati, Wilmington, and Zanesville	1,500,000	Do. convertible	7	1st May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	1st Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	1st Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	1st March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. convertible	7	1st Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	1st April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. convertible	7	1st April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	1st April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	1st March, Sept.	"	1863	85	85
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	1st April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	1st Jan'y, July	"	1873	80	80
Gaens and Chicago	2,000,000	Do. convertible	7	1st Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	1st May, Novemb.	"	1875	85	87 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	1st April, October	"	1868	87	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	1st April, 10 Oct.	"	1863	93	95
Jeffersonville	300,000	Do. 2d sec. conv.	7	1st April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	1st May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	1st Jan'y, July	"	1860-61	79	81
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	1st March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	1st May, Novemb.	"	1874	84	86
Lake Erie, Walbash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	1st Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. convert.	6 1/2	1st May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	6	1st April, October	Boat.	1860	100 1/2	101
Do. do.	600,000	Do. do.	6	1st March, Sept.	"	1869	102 1/2	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	1st Jan'y, July	N.Y.	1862	95	96 1/2
Do. do.	650,000	Do. 2d do.	8	1st April, October	"	1863	95	95
Do. do.	1,250,000	Do. 3d do.	8	1st June, Decemb.	"	1877	88	88
New Albany and Salem	500,000	Do. 1st section	10	1st April, October	"	1858-62	85	85
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	1st May, Novemb.	"	1864-75	85	85
Northern Cross	1,200,000	1st mortgage, convertible	8	1st Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	1st Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	1st Jan'y, July	"	1865-66	96	96
Do. do.	2,000,000	Income, convertible	7	1st April, October	"	1872	78	78 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	1st Jan'y, July	Phila.	1860	98 1/2	98 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	1st Feb'y, August	N.Y.	1875	85	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	1st May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,500,000	Do. convertible	7	1st Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	1st March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	1st Feb'y, August	"	1862-72	78	79
Do. do.	2,000,000	2d do. do.	8	1st Feb'y, August	"	1870	71 1/2	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	1st April, October	Balt.	1885	86	86 1/2
Do. do.	1,125,500	Do.	6	1st Jan'y, July	Balt.	1875	87 1/2	87 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	1st Jan. 10 July	N.Y.	1870	90	93
Erie Railroad	3,000,000	1st mortgage	7	1st May, Novemb.	"	1867	104 1/2	106 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	1st March, Sept.	"	1859	98	98 1/2
Do. do.	6,000,000	3d mortgage	7	1st March, Sept.	"	1883	97 1/2	99 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	1st Feb'y, August	"	1875	92	92 1/2
Do. do.	4,351,000	Convertible, Inscription	7	1st Feb'y, August	"	1871	86 1/2	87 1/2
Do. do.	3,500,000	Convertible	7	1st Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	1st Feb'y, August	"	1869-70	99 1/2	100
Do. do.	2,000,000	2d do. do.	7	1st 16 June, 16 Dec.	"	1860	87 1/2	89 1/2
Do. do.	3,000,000	3d do. convertible	7	1st May, Novemb.	"	1870	86 1/2	88
Illinois Central	17,000,000	Mortgage, convertible	7	1st April, October	"	1875	91	92
Do. (Free Land)	3,000,000	M/g 345,000 acrs-priv. 7 shares	7	1st March, Sept.	"	1860	103	105
Michigan Southern	1,000,000	1st mortgage, convertible	7	1st May, Novemb.	"	1860	92	95
New York and Harlem	1,800,000	Do. do.	7	1st May, Novemb.	"	1861-72	83	85
New York and New Haven	750,000	No mortgage, do.	7	1st June, Decemb.	"	1855-60	81	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	1st Jan'y, July	"	1873	87	89
Northern Indiana	1,000,000	Do. do.	7	1st Feb'y, August	"	1861	90 1/2	90 1/2
Do. Goshen Branch	1,500,000	Do. do.	7	1st Feb'y, August	"	1863	84 1/2	86
New York Central	8,287,000	No mortgage, do.	6	1st May, Novemb.	"	1863	90	90 1/2
Do. do.	3,000,000	No m/g conv. from June 57-59	7	1st 15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Panama, 1st Issue	900,000	Convertible till 1856	7	1st Jan'y, July	"	1866	100	102
Do. 2d do.	1,478,000	Do. do.	7	1st Jan'y, July	"	1866	100	102
Reading, issued 1843	1,573,000	Mortgage, convertible	6	1st Jan'y, July	Phila.	1860	89	90
1st do. do. 1844, '48, '49	1,300,000	Do. convertible	6	1st Jan'y, July	"	1860	89	90
Do. do. 1849	3,499,000	Do. convertible	6	1st April, October	"	1870	86 1/2	87

CITY SECURITIES.	Int'l payable.	Off'd	Ask'd	CITY SECURITIES.	Int'l payable.	Off'd	Ask'd
New York 7 per ct. 1857	Feb'y,	99	100	Milwaukee, 7 per ct. coup.	X	Divers	85
Do. 5 do. 1858-60	May,	94 1/2	96	New Orleans, 6 per ct. ep. R.R. X	Do.	Do.	74
Do. 5 do. 1870-75	August,	94 1/2	95	N. Orleans, 6 per ct. ep. municip.	Jan'y, July	81	84
Do. 5 do. 1880	November,	94 1/2	95	Philadelphia, 6 per ct. 1876-98	Jan'y, July	90 1/2	91
Albany, 6 per ct. coup. 1871-81	Feb'y, August,	97 1/2	98	Pittsburgh, 6 per ct. coup.	X	Divers	74 1/2
Alleghany, 6 per ct. coup.	Jan'y, July	97 1/2	98	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	85	85
Baltimore, 6 per ct. 1879-90	Quarterly	97 1/2	98	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	85
Boston, 6 per ct. coup.	X	97 1/2	98	Rochester, 6 per cent. coup. X	Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	100 1/2	St. Louis, 6 per ct. coup. Long X	Do.	78 1/2	79
Clev'd, 7 per ct. ep. W.V. 1879 X	Do. do.	101	102	Do. do. Municipal. X	Do.	80 1/2	81 1/2
Cincinnati, 6 per ct. coup. X	Divers	87	90	Sacramento, 10 p. ct. ep. 1862-74 X	Do. do.	71	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89	90	S.F. & O., 7 p. ep. 1865 pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Feb'y, August,	100	100 1/2	Do. 10 p. ct. ep. 1871 X	Do. do.	95	95
Detroit, 7 per ct. W.W. 1873-78 X	Feb'y, August,	100	100 1/2	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	50	55
Urbana, 8 per ct. ep. Long X	March, Sept.	101 1/2	102	Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	50	55
Jersey City, 6 p. ct. ep. W.W. 1877 X	Jan'y, July	94	96	Wheeling, 6 per ct. coup. X	Divers	87 1/2	87 1/2
Louisville, 6 per ct. ep. 1880-83 X	Divers	79 1/2	81	Do. 6 p. ct. ep. Mun. 1874 X	March, Sept.	81 1/2	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68	70	Zanesville, 7 do. X	April, October	97 1/2	97 1/2

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending August 20th, 1886.

BONDS.	
\$6,000 Little Miami, 6 per ct., 1st Mortg.	80
1,000 Covington & Lex., 6 per cent. 1st Mort	70
2,000 " " " 2d " " " " " " " "	65 (& int.)
5,000 Indianapolis & Cin. 7 per ct. 2nd Mortgage	80
3,000 City of Wheeling 6 per cent.	65
2,000 Ohio and Miss., 7 per cent., 1st Mortg.	66 1/2
1,000 Little Miami, June, 1886, Dividend Scrip.	80
300 Do. Dec., 1886, do.	83
STOCKS.	
20 Shares Little Miami	80 1/2
Do. do.	90
Cin. & Chicago	4
Hillsborough and Cincinnati	14
Indianapolis and Cincinnati	38
Cin., Ham. and Dayton	65
" " " b. 60 days	66
Covington and Lexington	14
Do. do. b. 30 days	14
Do. do.	16
Mad River and Lake Erie	12 1/2
Indianapolis and Cincinnati, a. 30 d.	58
Marietta and Cincinnati	14

By KIRK & CHEEVER.

For the week ending August 19th, 1886.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2nd Mort. 7 per ct.	66	
Ohio & Mississippi, 2nd Mort. 7 per ct. (Eastern Division)	48 1/2	
Indianapolis & Cin. 2nd Mort. 7 per ct.	82	
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	82 1/2	
Hillsboro' & Cin., 7 per cent. 1st Mortg.	48	
Covington & Lexington, 10 per ct. Income	54	
Indianapolis and Cincinnati Dividend	70	
Columbus and Xenia Dividend, due Jan'y 1, 1861	88	
Do. do. due July 1, 1866	85	
Little Miami, Dividend Scrip, issued June, 1866	79	
STOCKS.		
Bellefontaine and Indiana, 25.-Cin., Ham. and Dayton, 65.		
-Col. and Xenia, 82.-Cincinnati, 3 1/2.-Covington & Lexington, 14.-Dayton & Western, 17.-Eaton and Hamilton, 20.-Indiana Central, 50.-Indianapolis and Cincinnati, 58 1/2.-Little Miami, 89.-Mad River & Lake Erie, 15.-Marietta and Cincinnati, 15.-Ohio and Mississippi, 6.-Hillsboro' and Cincinnati, 15.-Peru and Indianapolis, 14.-Cincinnati, Wilm. and Zanesville, 12.		

Extract from De Coppet & Co's Money
Circular for the European Steamer of the
27th inst.

[TRANSLATED.]

NEW YORK, Monday, Aug. 25, 1886.

Our Stock market has not undergone any material alteration since our last advices of 19th inst. The active demand for money, then noticed, has if anything, moderated, without rates being changed. The last news from England to 11th inst., noticing rather more stringency in the money market, has remained without effect; but the continuance of a very limited demand for Stocks for European account contributes in leaving our market quite calm. We have, however, to notice some advance in the prices of the shares of several of the railroads, of which the continued increased receipts secure confidence as to future dividends. The demand for investment in Stocks has been very small. State Stocks—There has been a good demand for banking purposes for Missouri, at 1/4 advance, and for Virginia 6s at 1/2 decline. Some few Tennessee 6s have been done at a decline of 1/4, and Ohio 6s also show weaker prices. City Bonds—We know of no transactions worthy of notice. Railroad Bonds—There was a steady demand for Illinois Central Bonds—for the constructions at 3/4 rise; for the Free Land, with privilege, at 2 1/2, and for those without privilege at 1 per cent. advance. Some few New York Central Sixes were done at 3/4 improvement, and in Terre Haute and Alton Second Mortgage at steady rates. At private sale, we notice a few retail transactions in Galena and Chicago First and Second Mortgages, in Cleveland and Pittsburgh First Mortgage, on branches, and in Milwaukee and Mississippi Third Section, Railroad Shares—On these a general but moderate rise has been experienced. We notice a fair degree of activity in Erie, which has been favorably influenced by the report of the nine months' operations of the road—in Reading, New York, Central, in Illinois Central, in Milwaukee and Mississippi, in Michigan Central, Michigan Southern, and Cleveland and Toledo—the three latter having advanced 1 1/2 a 1 3/4. Money—The demand is rather less animated, and rates unaltered, at 7 for call loans, 8a

9 for first-class paper, and 9a12 for less known signatures.
DE COPPET & CO.

Marie & Kanz' Money Circular for the European Steamer of the 27th Inst.

[TRANSLATED EXTRACT.]

New York, Monday, Aug. 25, 1856.

The better feeling in the stock market, noticed at the close of our last circular of the 19th inst., has continued throughout the week, and though momentarily counteracted by the less favorable money news from abroad received by the Africa, still brought about an almost general though not very important rise in prices. The money market has been in and about the same condition as last week, and on account of the payments to be made within a short time by the U. S. Treasury on account of the appropriations for Government requirements, and the decrease in the exportation of precious metals, which will materially strengthen the specie basis of our banks, no change for the worse is looked for during the next time to come. The demand for our stocks from Europe has been light by the last mail, and the business in the leading railroad bonds, mostly bought for foreign account, therefore unimportant. State Stocks.—There has been a good home demand for banking purposes. Virginia advanced $\frac{1}{2}$, Missouri $\frac{1}{2}$; Tennessee 6s sold at $\frac{1}{2}$ decline, and Indiana 5s, at the former price. City and County Bonds.—St. Louis City and County bonds have again been dealt in to some extent, other bonds are very quiet. Railroad Bonds.—The demand has been liberal and the prices irregular. Erie 1871 bonds declined $\frac{1}{2}$, Erie 1883 bonds $\frac{1}{2}$, while New York Central 6s advanced $\frac{1}{2}$, Illinois Central $\frac{1}{2}$, and Illinois Central Freeland bonds 1 per cent.; some parcels of Milwaukee and Mississippi and La Crosse and Milwaukee bonds have also been bought for Europe at former prices. Railroad Shares.—The transactions have been pretty large, and the closing prices show an almost general advance. Erie rose $\frac{1}{2}$, Reading $\frac{1}{2}$, Michigan Central $1\frac{1}{2}$, Michigan Southern $1\frac{1}{2}$, Illinois Central $\frac{1}{2}$, Cleveland and Toledo $1\frac{1}{2}$, Galena and Chicago $\frac{1}{2}$. Money continues in fair supply at 7 per cent. on call. Discount is not quite so easy; we quote $7\frac{1}{2}$ a9 for first class paper, 10a12 for names less known. Exchanges.—The business is very limited and rates almost without change. Sterling 109 $\frac{1}{2}$ a $\frac{3}{4}$; Paris, 5.16 $\frac{1}{2}$ a5.15.

MARIE & KANZ.

Grand Trunk Railroad.

Montreal has of late been making rapid strides towards completing a good inland communication with the neighboring towns and cities. This is essentially necessary for her progress and advancement during the winter months, when all communication, except that by land, is at an end. Up to within a year or two, we have had to depend too much upon our cousins of the United States, during our season of closed navigation, and every movement that would place us on an independent position, should be looked forward to with pride and satisfaction. The ancient capital of the Province, not long ago, required two or three days, and sometimes longer to reach it during the winter, but now, by the aid of the railroad, the same journey is accomplished in a very few hours. The completion of the Grand Trunk road to Brockville was celebrated, and with good reason too, with much joy and enthusiasm. It was but the small beginning of a great road, that would put us in direct communication, binding us with iron bands, with the rapidly increasing cities of the West Province. Last year, to reach the city of Toronto, it was necessary to perform a long and tedious journey of some five or six hundred miles through American territory, but this year we are happy to inform our readers we will be under no such obligation. It is now confidently expected that the Grand Trunk Railroad to Kingston will be opened for public travel during the first week in October, and that the road through to Toronto will be ready for traffic early in November. This announcement will, we are confident, be received by our business men with

the greatest satisfaction; it will enable them to receive produce from the West during the entire season, and at a comparatively cheap rate. Surely, with the complete success of our ocean steamers, and the rapid completion of a great chain of inland communication, we may well feel proud, and look forward with satisfaction to the future of Montreal.—*Montreal Pilot.*

American Railroad Journal.

Saturday, August 30, 1856.

New York and Erie Railroad.

We give in another column, an abstract of the operations of this road for three quarters of the current fiscal year. The result shows net earnings for that period, equal to eight per cent. on the entire capital stock. The quarter embracing January, February and March, was operated at a loss, owing to the extreme severity of the season. The net earnings for July, August and September, will probably equal five per cent.

Such earnings, taken into connexion with the large increase of traffic and the excellent management of the road, has had an effect to add largely to the market value of the company's bonds, and should have a similar effect upon the stock.

Illinois Central Railroad—Exemption from Taxation.

The charter exempts this company from taxation, on the payment of a certain proportion of its gross earnings to the State. Doubts have been expressed whether this privilege is constitutional, and likewise whether it extends to protect the company from county and town as well as State taxes. At the last term of the Supreme Court in Ottawa, the case of McLean county against this railroad company was decided, and puts these questions at rest. The Court held that the Legislature has power under the constitution to accept a proportion of its income in lieu of all other taxes, and that the company were liable for none other, either for county or State, or any other purpose. This decision relieves the company from all local taxation, but requires from it a large proportion of its earnings.

Ventilation of Railroad Cars.

An invention by Mr. E. C. SALISBURY of this city, for the exclusion of dust from railroad cars, has been in use for some time past on several of our railroads with much success. The contrivance is a very simple one. The sides of the car are carried, by means of canvass, or a light frame work, within two or three inches of the track. To the platforms, what are termed *spring-platforms* are attached, which make a perfect union, or joint, when the cars are coupled. This spring-platform is also carried down to correspond to the sides of the car. This contrivance, as will be readily understood, prevents in a great measure the disturbance of the dust on the track, and renders it impossible for it to rise into the cars, for the reason that no current of air from beneath can enter them. All currents of air created are parallel to the line of motion. By Mr. Salisbury's contrivance, the whole train is virtually converted into one car, instead of being cut, as it now is, into as many parts as there are cars. Any person accustomed to travelling by railroad must be aware, that the dust by which he is so much an-

noyed, rises up through the open spaces between the cars. If this could be prevented, the nuisance would in a great measure be avoided. This object, Mr. Salisbury's contrivance seems very fully to accomplish.

It has also a merit of saving large sums to railroad companies as well as of ridding travellers of an intolerable nuisance. With its use, it is impossible for a person to fall under the cars on entering or leaving them. Among the most common accidents are those resulting from falling under a train when in motion, and which often subject railroad companies to very heavy damages.

It has also the further merit of deadening the noise of the train, so as to render entirely audible any ordinary conversation. The comfort from this source is hardly less than the relief from the dust annoyance.

Opposite the trucks are sliding panels, which allow access to the wheels for oiling, or for repairs, or examination.

We have seen testimonials favorable to the efficacy of Mr. Salisbury's contrivance from the highest authorities in railway matters. We have also heard it very highly spoken of by travellers.

Boston Made Locomotives.

We learn from the *Detroit Free Press* that the Detroit and Milwaukee Railroad Company have received and are placing on the track two more large-sized new locomotives, from the Boston Locomotive Works. Their names are "Shlawassee" and "Clinton." Including these two, the company have placed on the road, this season, eight new locomotives, of similar construction in all respects. The driving wheels are five feet in diameter, cylinders fifteen inches diameter, length of stroke twenty-two inches.

Railroad Earnings for July.

The earnings of the Central Railroad Company of New Jersey for the month of July, 1856, were \$51,034 51
For the same month last year..... 27,460 99

Increase..... \$23,573 52

The July earnings of the Chicago and Burlington Railroad were:

	Freight.	Passen.	Misc.	Total.
July, 1856....	\$129,458	\$45,211	\$1,614	\$176,283
July, 1855....	90,006	36,198	1,389	127,594

Gain in 1856.... \$39,452 \$9,013 \$225 \$48,689

The proportions of road composing the line are as follows:—

	Freight.	Passen.	Misc.	Total.
G. & C. U.....	\$18,260	\$4,096	.....	\$22,357
C. B. & Q.....	105,846	35,327	\$1,301	142,473
P. & Oquawka.	5,352	5,787	313	11,453

Total... \$129,458 \$45,210 \$1,614 \$176,283

Entire length of line, 210 miles.

Earnings per mile run in 1856 are \$839 44
Do. 1855 were..... 607 59

Gain per mile in 1856 \$337 46

The above statement shows a very gratifying increase over the earnings for the month of July, 1855. A large portion of the country along the line of this road remains to be improved, and when it is fully developed its earnings must be enormous. It is sure to be one of the best and most profitable roads in the Union.

The earnings of the Peru and Indianapolis railroad for July, 1856, were:

For Passengers	\$7,989 55
For Freights and Mail.....	4,872 46
	<hr/>
Total.....	\$12,862 01
For July, 1855	3,160 47

Increase 58 per cent.....\$14,701 54

The earnings of the Delaware, Lackawanna and Western Railroad Company for the month of July, 1856, and same month last year were as follows :

	1856.	1855.
Passengers	\$14,889 95	\$5,944 18
Freight—coal	48,944 71	24,005 62
Freight—merchandise...	17,649 40	12,173 05
Mail and Express	475 01	471 49
Service of locomotives and cars	632 90	2,022 64
Total	\$82,091 87	\$44,616 98
	44,616 98	

Increase \$37,474 89

The earnings of the Eaton and Hamilton Railroad for July, 1856, were:

For Passengers	\$6,218	95
For Freight.....	4,662	16
For Mail and Express.....	483	62

Total \$11,865 03

For July, 1855..... 8,837 59

Increase 28 per cent. \$2,527 44

The earnings of the Indiana Central Railroad for July, 1856, were :

For Passengers	\$25,542 71
For Freight	4,544 39
For Express.....	500 00

Total \$30,587 10

For July, 1855 21,173 70

Increase, 44 per cent.....\$9,413 40

Comparative receipts for 12 Western roads, for July, 1855 and 1856.

	1855.	1856.
Cin., Ham. & Dayton...	\$31,659 74	\$40,250 45
Cin., Wilm. & Zanesville	7,850 58	17,572 87
Clev., Col. & Cincinnati.	89,439 77	102,976 50
Covington & Lexington.	16,698 00	31,009 00
Dayton & Western	6,351 90	10,186 24
Eaton & Hamilton.....	8,837 59	11,365 06
Indianap. & Cincinnati.	24,523 37	40,426 48
Indiana Central.....	21,173 70	30,581 10
L. Miami and Columbus & Xenia.....	88,896 44	98,352 28
Mad River & Lake Erie	42,795 63	52,111 80
Ohio Central	40,000 00	53,511 01
Peru and Indianapolis..	8,160 47	12,862 01

\$366,187 19 \$496,210 93
Increase over 35 per cent.

Ventilation of Railroad Cars.

We invite attention to the following article from the Brookville Recorder in reference to Mr. RUTAN's method for ventilating cars. Mr. Rutan, as an amateur, has given great attention to the subject of ventilating dwelling houses. He is now engaged upon that of railway cars. The following is an account of his contrivance for this purpose:—

At the invitation of Sheriff Ruttan, of Cobourg, and S. Keefer Esq., of the Grand Trunk Railroad, we enjoyed the pleasure of a ride on Saturday last as far as Williamsburgh in a car ventilated on a plan just patented by Mr. Ruttan.

All who have travelled on railroads are aware of the annoyance arising from dust.—They also know that a mouthful of fresh air cannot be breathed in a crowded car unless by opening win-

dows, through which smoke and dust occasionally enter in quantities dense enough to all but suffocate the passengers. By Sheriff Ruttan's patent, those annoyances are likely to have an end.

It may be difficult to explain the principle of the new patent so as to make the reader comprehend it. At the end of the car on the roof, what is termed a receiving-box is placed. This box is provided with two pairs of self-acting valves—these valves are placed so as to receive a current of air from whatever direction the car moves in—the current opening one pair and shutting the other—the valves having all the appearance of small doors moved on hinges. The air enters by the open valves, and is forced downward through a couple of flues along the bottom of the car on each side. The air is thus carried over a tank in which is placed about 200 superficial feet of cold water. Over this tank are erected two upright dischargers resembling ornamented chimney tops. These dischargers have two openings, one towards each end of the car, placed about the height of a person's head when seated in the car. The quicker the car moves the greater the quantity of air forced into the receiving-box, from which it is propelled over the water in the tank, (where it leaves all the particles of dust) up the dischargers, and the air is then discharged towards both ends of the car. There is thus a constant supply of fresh air regularly kept up, the air in the car being discharged every two minutes when the car is going at 40 miles an hour. The foul air escapes at wire openings near the floor inside the car, and directly under the receiving-box, and is carried off by a chimney, after traversing the whole length of the car. Dust is prevented from entering the cars at the windows by the pressure of air inside, which pressure is constantly kept up by the air forced from the dischargers. Passengers by this invention enjoy a cool, comfortable ride, free from the unpleasantness attendant on breathing-smoke, dust, and foul air.

During winter the dischargers are removed, and a ventilating stove both heats the car and keeps the air pure, the heated air passing under the floor from one end of the car to the other, thus enabling the passengers to have their feet made comfortable by a constant stream of heated air.

On the short trip made in company with Messrs. Ruttan and Keefer, we had a very excellent opportunity of testing the invention, and we believe we express the opinion of all who witnessed that and a previous trial, when we state that Mr. Ruttan's patent is in all probability destined to be carried into general use in the railroads of Canada and the States, provided the invention can be put in operation at a reasonable expense.

The subject of ventilation has occupied Sheriff Ruttan's attention for a period of thirteen or fourteen years. He has spent thousands of dollars in experiments, and we sincerely hope that his present invention may meet all the desires of the public, and that the reward due to persevering labor may be speedily attained by the general adoption of Ruttan's patent for ventilating cars.

We may also mention that Mr. Keefer has made a suggestion to Mr. Rutan respecting the situation of the dischargers. At present they occupy the space of a seat each.—Mr. Keefer suggests to have them fixed close to the panelling of the cars, which would save the space occupied by them at present, and keep the current of air from discharging itself so near the heads of the passengers.

Vermont Valley Railroad.

At a meeting of the stockholders of the Vermont Valley Railroad, held at Bellows Falls on the 13th instant, the following gentlemen were chosen directors for the ensuing year: Hugh H. Henry, Chester, Vt.; Alex. Hamilton, jr., New York; Charles Chapin, Brattleboro, Vt.; G. R. J. Bowdoin, New York; Major Joel Page, Westminster, Vt.; B. B. Mason, Chicago, Ill.; Madison Sloat, Bellows Falls, Vt.

New York and Erie Railroad Company.
Transportation for the 9 months end'g June 30, '66

	EARNINGS.					EXPENSES.					Total Earnings...					Total Expenses...					RECAPITULATION.					Net Earnings...						
	October.	Nov'm'b'r.	December.	Quart. end'g Dec. 31.	January.	February.	March.	Quart. end'g March 31.	April.	May.	June.	Quart. end'g June 30.	July.	August.	September.	October.	November.	December.	Quart. end'g Dec. 31.	January.	February.	March.	Quart. end'g March 31.	April.	May.		June.	Quart. end'g June 30.	July.	August.	September.	October.
From Freight,....	376,340 84	406,884 15	457,841 86	1,239,416 55	807,787 22	275,553 65	342,386 03	\$925,736 90	2,165,158 32	454,808 08	416,477 02	858,866 78	1,225,286 83	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	3,890,890 08	4,674,892 48	
From Passengers,...	212,160 67	129,936 99	113,646 27	465,781 83	84,999 24	67,677 41	106,278 03	267,677 41	723,469 24	161,538 40	166,804 95	184,860 90	452,794 25	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	1,076,255 49	2,107,717 28	
From Miscellaneous	1,220 17	1,068 30	1,366 82	3,654 29	483 00	5,228 09	2,979 54	8,690 78	13,226 02	1,920 44	4,702 85	1,829 42	8,462 21	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	20,771 28	50,771 28	
From Mails,	9,719 07	9,719 07	9,719 07	29,157 21	9,719 07	9,719 07	9,719 07	29,157 21	56,814 42	9,719 07	9,719 07	9,719 07	29,157 21	56,814 42	9,719 07	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	9,719 07	56,814 42	
Total Earnings...	698,340 15	657,687 61	682,062 02	1,727,989 68	402,988 63	367,315 60	460,388 02	1,221,262 25	2,969,251 86	628,070 94	687,788 39	479,776 17	1,715,640 50	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	
EXPENSES.																																
Trans. Exp.,	264,895 57	248,603 63	271,437 21	784,436 41	276,723 46	257,121 67	259,555 73	793,400 90	1,577,837 31	278,368 61	268,755 72	280,291 52	802,410 85	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	2,375,780 83	4,751,561 66	
Rent of U'n'b. R.R.	6,950 00	6,950 00	6,950 00	20,850 00	6,950 00	6,950 00	6,950 00	20,850 00	41,700 00	6,950 00	6,950 00	6,950 00	20,850 00	41,700 00	6,950 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	6,950 00	41,700 00	
Int. on P'ort. Debt.	3,789 01	3,789 01	3,789 01	11,867 03	3,855 10	3,855 10	3,855 10	10,965 30	22,832 32	3,855 10	3,855 10	3,855 10	10,965 30	22,832 32	3,855 10	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	3,855 10	22,832 32	
Int. on P'ort. Debt.	144,964 17	144,964 17	144,964 16	434,892 50	144,964 17	144,964 16	144,964 16	434,892 50	869,785 00	144,964 17	144,964 16	144,964 17	434,892 50	869,785 00	144,964 17	144,964 16	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	144,964 17	869,785 00	
Int. on P'ort. Debt.	4,648 59	4,648 59	4,648 59	13,643 77	4,648 58	4,648 58	4,648 58	13,643 74	27,291 51	4,648 58	4,648 58	4,648 58	13,643 74	27,291 51	4,648 58	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	4,648 58	27,291 51	
Taxes																																
Total Expenses...	424,647 84	408,856 40	431,688 97	1,265,191 71	436,841 31	417,299 51	419,678 62	1,278,754 44	2,536,946 15	434,826 36	420,218 46	416,754 27	1,271,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	
RECAPITULATION.																																
Earnings,	698,340 15	657,687 61	682,062 02	1,727,989 68	402,988 63	367,315 60	460,388 02	1,221,262 25	2,969,251 86	628,070 94	687,788 39	479,776 17	1,715,640 50	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	4,674,892 48	9,349,784 96	
Expenses, &c.,	424,647 84	408,856 40	431,688 97	1,265,191 71	436,841 31	417,299 51	419,678 62	1,278,754 44	2,536,946 15	434,826 36	420,218 46	416,754 27	1,271,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	3,806,227 91	7,591,799 09	
Total Earnings...	173,692 81	138,732 11	150,373 05	\$462,797 97	38,652 66	49,323 91	40,684 40	\$42,492 19	\$420,306 78	193,244 58	167,574 93	88,021 90	\$443,841 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	\$868,666 52	1,738,412 41	
Net Earnings...																																
Losses																																

NOTE.—This statement does not include either the earnings or expenses of the Buffalo and New York City R. R.

The following is a statement of the earnings of this road for the first three quarters of the year.

Total earnings for 9 months ending June 30, 1856.....	\$1,674,892 48
Transportation expenses (50.82 per cent.).....	\$2,375,730 88
Rent of Union R.R.	62,550 00
Taxes p'd applicable to whole year	48,681 59
Loss on Lake Erie steamers, 1855.....	13,385 77
Amount paid D. L. & W. R. R. Co. for drawback on freight transport'd during year end'd December 31, '55.....	8,898 60
Transportation expenses incurred prior to Oct. 1, '55, since paid	20,500 97
Total expenditures (51.28 per cent.).....	2,529,747 76

Net earnings	\$2,145,144 67
Interest on float'g debt.	\$22,332 33
Do. on fund'd debt.	1,304,677 50
	1,327,009 83
Balance of net earnings, applicable to dividends, equal to 8.18 per ct. on \$10,000,000 of stock.....	\$818,134 84

South-Western Railroad.

We have been furnished with a printed slip containing the annual report of this company for the year ending 1st August inst.

The annual meeting took place at Macon on the 11th inst., when a semi-annual dividend at the rate of eight per cent. per annum was declared.

EARNINGS OF THE ROAD FOR THE YEAR.

Up freight, (Eastward)....	\$134,647.01
Down freight, (Westward)....	92,945.54
Total from freight.....	\$227,592.55
Through passengers.....	67,330.62
Way passengers.....	41,699.70
Total f'm passengers.....	109,030.32
U. S. mail.....	10,977.17
Car rent, &c.....	5,492.42
Total earnings.....	\$353,092.46
The current expenses of the year have been.....	150,827.31

Leaving a balance of net earnings of.....\$202,265.15

The following portion of the report of the President, will prove interesting to the stockholders of the company:

"Application was made by the President to the Georgia and Florida railroad company for a transfer to this company of the first ten miles of their road between Americus and Sumter city. That company declined to part with a portion of their road, but expressed a willingness to transfer their whole line. An agreement was drawn up looking to the incorporation of the whole line to Albany into this company, subject to the approval of this Board, and subject also, to the approval of the stockholders of the Georgia and Florida railroad company. This Board has, this day, approved the agreement, and it believes the same will be approved by the stockholders of the other company soon to assemble in convention.

"Mr. Virgil Powers, Chief Engineer, has been charged with the duty of surveying the contemplated extension of road to Cuthbert. With an adequate corps, he entered the field on the 12th inst. He has been instructed to survey, in the first instance, from a point on the Albany line about three miles below Sumter city, by the town of Dawson to the town of Cuthbert. Whether the line to Cuthbert will be located according to such survey, depends upon the reports of the Engineer, and upon the aid which the citizens of the new county of Terrell will give to the enterprise. If

the citizens of Dawson will subscribe for stock to an amount which the Board thinks reasonable, and the report of the Engineer shall justify the course, it will give the Board pleasure to build their road through Dawson. Otherwise, the road will be located without special reference to that place. The twenty miles of road, promised by this Board, will be put under contract promptly, and will be completed in the course of the coming year. Further extension to Cuthbert, and points beyond, depends upon the efforts which the people may make to carry out the views of the company. The Board hopes that those efforts may lead at once to the continuation of the survey from Cuthbert to Enfield, and to the speedy building of the road to that place.

"The road from Americus to Albany will be completed by the first day of November, 1857. By that day the twenty miles of extension towards Cuthbert will also be ready for transportation. For the purchase of the Albany line and the additional equipment called for by that purchase, the capital stock of the company will be increased four hundred thousand dollars, and for the completion of the twenty miles towards Cuthbert, the capital stock will be further increased about \$300,000. At this day, the capital stock of the company is \$1,120,100, and the bond debt of the company is \$141,000, making a total of capital stock and debt of \$1,534,100 for which the company holds its road and equipment, which cost \$1,734,539.52, all paid for, and \$20,000 in stock of other companies. If seven hundred thousand dollars be added to the capital stock, the road of the company will be one hundred and forty-seven miles in length, and its equipment ample for all purposes. The capital stock will then be \$1,820,100—the bond debt \$141,000. If the bonds be converted into stock, these amounts will be changed, but their total will remain \$2,234,100. The net income of the company for the year ending the 1st inst., has been \$202,265.15, a sum exceeding by over twenty thousand dollars, enough to pay eight per cent. on \$2,234,100. Now when it is considered that, before the increase of capital, we shall have a road to the important point, Albany, and a road within twenty miles of Cuthbert, it must be seen that the net revenue of the company must be largely increased. There cannot be any doubt, that beginning 1st November, 1857, with 147 miles of road and a capital and debt of \$2,234,100, the net revenue of the company will be \$275,000 per annum, an amount which will pay dividends at the rate of eight per cent. per annum and all interest, and leave an annual surplus of \$90,000 and over. The propriety of the contemplated purchase of the Albany line, and of the contemplated extension towards Cuthbert, is manifest.

"The surplus remaining from the earnings of road, after dividends at the rate of eight per cent. per annum, from the beginning of our road operations to the present time, has been, from year to year, expended on the road and equipment, and there has been further expended on the road and equipments the sum of \$30,082.00, received for forfeited stock. The total cost of road and equipments, as will be seen from the Treasurer's statement, is \$1,734,539.52. That total cost has been paid by stock and bond debt to the extent of \$1,534,100. The surplus earnings and the amount received on forfeited stock have paid the balance. The stockholders cannot fail to see the value of their investment, and the certainty of their receiving regular dividends at the rate always maintained hitherto—eight per cent. per annum. The Board believes that the rate of dividends can be hereafter increased. The foundation of that belief is presented in the preceding figures and remarks. That the South-Western railroad has been a successful enterprise—indeed, among the most successful enterprises in the railroad history of Georgia—must be admitted. It has hitherto paid eight per cent. the prospect for the future is that it will pay more—it has increased the value of landed property far more than its cost—it has improved the condition of the people generally, in their agriculture and their means of education—

and has in every way promoted their happiness and comfort. The half of the favorable effects to be produced by it have not yet been seen. When the affairs of the company, as exhibited in the annual reports, shall come to be attentively considered by the bondholders, they will avail themselves of the privilege granted by the Board, and convert their bonds into stock, and thus ere long there will be no company debt.

When the planters of the southwest, the great cotton producing region, shall look closely into the history of this road, they will find a place where they can invest their surplus capital with certainty of fair returns; they will give their labor cheerfully for our stock, and enable us to push on the work to those points which are yet remote from its beneficial influence.

Respectfully submitted,
R. R. CUYLER, Pres't.

Pennsylvania Coal Company.

The following is a summary of the annual statement just put forth by the Pennsylvania Coal Company.

Dr:	
To capital stock	\$3,200,000 00
To 7 per cent. mortgage bonds.....	600,000 00
To bonds and mortgages payable ..	99,576 40
To bills and accounts payable, &c.	314,215 28
Balance per last report. \$327,061 93	
Earnings of 1855-'6.....	342,364 08
Total.....	\$669,426 01
Less credited opening mines	\$28,077 30
Divid'd paid August 1, 1855	160,000 00
Divid'd paid Feb'y 18, 1856	160,000 00
	348,077 30
Balance.....	321,338 71
Total.....	\$4,565,140 39

Cr.	
By railroad and equipment.....	\$1,992,902 59
By real estate, docks, &c.	1,124,805 30
By canal boats, &c.	429,557 18
By barges and steamboats, "Pittston" and "Telegraph," &c.	55,736 24
By opening mines.....	291,502 95
By disbursements on account of business of 1856, &c.	261,991 28
By balance in hands of agents, &c.	15,172 35
By balances due from Delaware and Hudson Canal Company, on business of 1850 and 1851, not including interest, sundry, unsettled claims, &c.	25,608 13
By cash on hand May, 1856	28,167 91
By bills and accounts receivable....	195,268 09
By coal on hand, tools, &c.....	144,428 37

Total.....\$4,565,140 39
By balance \$321,338 71 |

The surplus, it will be seen, is about \$5,700 less than it was at the close of the previous business year, after paying 10 per cent. in dividends.

Railroad Across Mexico.

The Mexican Government have adopted the Ramsey route for an inter-oceanic railroad between the Gulf of Mexico and the Pacific, at Acapulco. Col. Albert C. Ramsey is authorized to form the company and take charge of the works. There is to be an office in New York and one in Mexico. All materials for the road are to be admitted free of duties. All mails, merchandise, and other articles of transit, are also free; and ships and steamers not to pay tonnage duties or port charges. The Government guarantees six per cent. on all moneys expended until the road becomes productive, and receives only as compensa-

tion for the concession the right to carry the Mexican mails and troops at half price. The company are to regulate the rates of freight and passage. It is said this privilege is the most liberal ever granted in Mexico or Central America.

Experiments in Reference to Consumption of Fuel on Pacific Railroad.

Jefferson City, August 1st, 1886.

EDITOR OF *Republican*.

Mr. William Wiggins, one of the engine-men on the Pacific Railroad has for some time been experimenting to see how far he could reduce the cost of running his engine, and until he had asserted that he could run through with the passenger train from St. Louis to Jefferson City on one cord of wood, other engine-men in the employ of the company ridiculed the proposition and I found on conversing with several men connected with Eastern railroads, that none of them believed it could be done.

Last Wednesday I had occasion to visit Jefferson City, and I determined to see the experiment tried and to see that it was fairly tested. I therefore requested Mr. George Trask, who is in no way connected with the running department of the road, and as you know, a reliable man, to go out to the machine shop and see the wood measured and put in the tank, to see that it was fairly measured, and that no other wood was aboard; to allow Mr. Wiggins to use sufficient wood in addition for one fire to run the train down to the depot (one and a-half miles) and directed that the train should come down early enough to allow the fire to burn down before the hour of starting. Mr. Trask saw the wood measured, rode down on the train, saw that no more was put on board, and the train stood at the depot eighteen minutes before starting, so that the fire had to be supplied with wood when we started. I then got on the engine to see that the test was fairly made, and rode all the way to Jefferson City.

The train stopped at all the way stations to put out the mail and passengers, and arriving at Jefferson City in seven hours (regular time) and burning one cord of wood, distance one hundred and twenty-five miles.

The train consisted of three passenger cars and one baggage and express car carrying 106 passengers, the mails, Adam & Co.'s Express, freight, and passengers' baggage.

In the first forty-five miles the maximum grade is forty-five feet to the mile, and there are two long grades to ascend, the remaining eighty miles varies from ten to twenty feet per mile, but it is all in an ascending grade, and the great amount of curvature on this road requires additional power to overcome the friction.

The wood used was ordinary oak-wood, and the engine was the "Mississippi No. 9" built by Rogers, Ketchum & Gaoevnor, of Paterson, New Jersey; weight of engine twenty-eight tons, size of driving-wheels five feet six inches. The engine is a very fine one. But the feat proves Mr. Wiggins to be master of his business, and if any other engine-man in the country can equal this, I should like to hear of it.

Respectfully

[Signed] WM. M. McPHERSON,
President of the Pacific R. R.

EDITOR OF *The Republican*.

The experiment on wood mentioned in my last communication has induced other trials. Mr. S. D. Campbell made the trip from St. Louis to Jefferson City (125 miles) with the "O'Sullivan No. 24" built by PALM & ROBERTSON, of St. Louis, drawing the passenger train consisting of four cars and arriving in time using only one cord of wood. The "O'Sullivan" weighs five tons less than the "Mississippi," but her drivers are six inches less in diameter. The success of Mr. Campbell and the "O'Sullivan" called for a second trial with the "Mississippi." Mr. Wiggins in charge, started with one cord of wood and had three-sixteenth of a cord left on arriving at Jefferson City, being at the rate of one cord of wood to one

hundred and forty-eight and two-fifths miles. It may be proper to state that the wood used on this occasion was good dry oak.

The result is creditable to the engine-man in charge and speaks well for the performance of the engines.

Respectfully,

[Signed] WM. M. McPHERSON.

—St. Louis Republican.

Gravitating Railroad.

A writer in the *Wilkesbarre Record of the Times* of the 13th inst., over the initials "C. O.," in discussing the project of a Gravitating railroad; from the Susquehanna river near Wilkesbarre, to the Delaware river near the Water Gap; there to connect with the Morris and Essex railroad, the New Jersey Central railroad, or the Belvidere Delaware railroad, or all three of said roads, gives the following interesting description of the Pennsylvania Coal Company's Gravitating railroad, which extends from the State Canal on the Susquehanna, at Port Griffith, near Pittston, across the Moosic mountain, to the Delaware and Hudson Canal at Hawley, on the Lackawaxen, a distance of 47 miles:

"This (Pennsylvania coal) road consists of two tracks—one for loaded and one for empty cars—the terminus of one track being the course and commencement of the other. The principle upon which the road is operated is (as the name imports) the very simple one of gravitation.

"Stationary steam engines drive the cars to the summit of a convenient hill by a second stationary engine, again to run forward in the same way. After attaining the head of the highest inclined plane, or 'summit' of the road, a 'level' much longer than the rest, is usually obtained.

"The loaded track of the Pennsylvania company's railroad, starting at the level of the Pennsylvania canal at Port Griffith, and ascending along the high ground on the eastern limit of the coal field, by six inclined planes, with their intermediate 'levels'—reaches, at Dunmore, the base of the Moosic mountain. This it ascends by six more planes, in quick proximity to the summit, whence it runs off with an uninterrupted level of thirteen miles, to the Salem turnpike—here the grade has brought it so low that another plane is necessary. The grade thus acquired carries it down the Middle Creek to the Lackawaxen. The planes are of different grades, adapted to the slope of the hills and the direction of approach. They will probably average 1,000 yards in length, with an ascent of about one foot in ten. The grade of the levels is invariably 44 feet to the mile—this having been practically ascertained to be the grade at which a loaded train will move by its own weight without danger of acquiring such velocity as to escape from the control of the conductor. On the empty track the grade is 50 feet per mile, in order to recompense the loss of power effected by the discharge of the coal. The engines on this road were manufactured by the Mattewan company on the Hudson. Those on the loaded track have three cylinders each, of 30 horse power. Those on the empty track, two cylinders, of the same power.

"These engines are, in most cases, located at the summit of the inclined planes, and are rigged with an endless wire rope, with links inserted at equal distances. The method of operating is very simple and rapid. Each train of twelve or fifteen cars is provided with two 'break' cars—the runner sits upon this 'break,' and thus controls the motion of the train. On arriving at the foot of an inclined plane, he rings the bell as a signal to the engineer, who at once puts the engine in motion, and the rope begins to run—disconnects four of his cars, and attaches to the front car a 'sling,' a short chain with a hook at each end. When the link of the endless rope passes around the 'shive wheel,' at the foot of the plane, he slips the other hook into the link, and is instantly in motion. Riding up with the first four cars, he stops at the head of the plane while a 'footman' attaches the rest, which are drawn at four different operations of the engine. The last four are drawn over the

head with impetus enough to start the others by concussion, and away they will go over another level. The fair running time of each trip of five cars over the inclined plane is generally about three minutes. Twenty trips an hour, and fifteen working hours a day, gives 1,500 cars per day as the absolute working capacity of the road. The average weight of each car on this road is 3,600 lbs., and the average of its coal 3,100 lbs. If we call the load of each car one and a half tons, we shall have a daily capacity of 5,200 tons. Allowing 300 working days in the year, we obtain 1,560,000 tons. The authorship of this simple and beautiful plan of road has been claimed for the late Josiah White, of Philadelphia; but I believe it is now on all hands conceded to James Archibald, Esq., so long the Chief Engineer of the Delaware and Hudson Canal company—now in charge of the Delaware, Lackawanna and Western railroad. Its advantages are:

"1st. The facility with which it can be adopted to a broken and mountainous country, of abrupt descents, where locomotive grades are unattainable.

"2d. The great reduction of cost of 'motive power,' which is the principal item of expense in operating a locomotive road.

"Its only disadvantage is that an accident to the machinery of any plane stops the whole road. This, however, is greatly mitigated by keeping duplicates of machinery constantly on hand; and on the Pennsylvania company's road a detention of more than forty-eight hours is a very rare casualty. This road is now worked at something over one-third its actual capacity, and is running to market an average per diem of 2,200 tons. In the original grading of the road, the surface of the ground at grade was followed as far as possible to make the first expense a minimum—very much, I think to the disadvantage of the road when viewed as a permanent work; for the curvature is in many places under 200 feet radius—whereas, 1,000 feet is now considered a minimum for all first class railroad, less than this being dangerous and unpleasant. The superstructure, also, of the Pennsylvania company's railroad is the old wooden rail, with strap iron, making always, with the best of care, an undulating and uneven surface, and requiring a number of hands constantly employed for repairs."

The North-Western Railroad Co.

This company have advertised, in some of the daily papers of this city, that "proposals will be received until the 10th day of September next, inclusive, for the graduation and masonry upon the line of their road extending from Freeport to Butler, a distance of about twenty-four miles."

The North-western railroad, in the official reports, is separated into three divisions, thus:

Eastern division, from Blairsville to Freeport.....	85¼ miles.
Middle division, from Freeport to Butler.....	24 "
Western division, from Butler to New Castle.....	30¼ "
Total length.....	89¾ "

The policy of the company, heretofore, has been to prosecute the work on the eastern division, under a contract executed with Messrs. Malone, Painter, Clark and Gonder, including graduation, masonry, bridging and roadway superstructure; on the middle division, but two sections have been worked, to wit, Nos. 52 and 59; on the western division, the ground is unbroken, except on one section near New Castle.

In their annual report, dated January 1, 1886, the Board of Directors say:

"It is a source of great satisfaction and encouragement to find that, with energy and promptitude, the thirty-five miles from Blairsville to Freeport may be completed and put in operation by the 1st of October, 1886."

To aid in the construction of this road, the city of Philadelphia subscribed for \$750,000 of the company's stock; all the instalments on this sub-

scription have been paid, and the city's funds expended. What the city may reasonably expect, therefore, is, that this outlay will be made available as soon as possible by the earliest practicable completion of the eastern division of the road, in conformity with the policy heretofore promulgated by the company.

And, if the company have recently added to their available means in a measure that will warrant the commencement of new work on the middle division, under lettings to be made under bids advertised for and to be received to September 10th, then the friends of the road, including the citizens and the city of Philadelphia, will evince an earnest and pervading satisfaction; but, if the proposed allotment of new work on the middle division is the consequence of a change in the policy of the company, without an increase of available funds since January 1, 1856, in amount sufficient to warrant new contracts for more than twenty miles of graduation, then at least, some of the friends of the road may hesitate to render an approving verdict.

As we have understood the matter, the contract with Malone, Painter, Clark and Gonder, was for the construction of the eastern division in readiness for the cars; and as this division connects at its eastern end with the Pennsylvania railroad, and at its western end with the Allegheny Valley railroad, it could reciprocate business in passengers and freight with those two roads, immediately on its completion.

If, however, the work of graduation only is to be completed, it would seem as if the contract with the firm named had been annulled, and that only the work covered by sub-contracts executed by that firm—not by the company—is to be progressed with under some new arrangement. The next inference is that, assuming this to be so, funds otherwise available to lay down the road superstructure on the eastern division, are to be transferred and disbursed for graduation on the middle division; so that, if the funds yet required by the company be not forthcoming from some quarter, the expenditures made by the corporation will soon be spread over two divisions, or 59½ miles of unfinished road, rather than upon one division or 35½ miles of finished road.

We had supposed that it was the policy of all the railroad companies that have received subscriptions from the city of Philadelphia, to so concentrate their available means upon a part of their respective routes, as to finish and open for public use consecutive sections of road.

Thus, the Pennsylvania railroad company opened their road, link by link—the first opening comprising sixty miles of road from Harrisburg to Lewistown.

The North Pennsylvania railroad company constructed and opened nineteen miles of road to Gwynedd, and will, without further aid from the city, open fifty-five miles of road to Bethlehem.

The Sunbury and Erie railroad company opened forty miles of road from Sunbury to Williamsport.

The Hempfield railroad company are pushing forward to completion—having part of the track already laid down—thirty-two miles of road from Wheeling to Washington.

If, then, the North-western railroad company forecast their means over 59½ miles of road, instead of completing and making available 35½ miles of road, which, with the same means, might be put into satisfactory use, and they may place themselves in a position less capable of justification, upon grounds of safe policy, than any other company to which the city has rendered aid by subscribing for shares of railroad stock.

And nothing is more certain, than, when the city shall have first re-established her own municipal credit, and shall enjoy current revenue from tax and other sources at least equal to current outlay, if she chose again to consider the policy of increasing her subscription to particular roads, the last to receive such aid will be the company that was least judicious in the disbursement of a first subscription.

The North-western railroad is an excellent commercial scheme for this community, and we wish to see it constructed throughout its whole length; it has much in its location and in its foreshadowed prospects to commend it to corporations owning finished roads, and possessing the means, if they had the will, to guarantee the bonds of the North-western company and make them available in market; in fitting time, perhaps, this may be done; meanwhile, we think, that which should be the leading object of the company, will be best subserved by hurrying on to completion the eastern division of their road, and thereupon, take rank among the operating roads of that State; and then, with one division in use, await a propitious opportunity to gather more means to renew the work of construction west of Freeport, and carry forward to completion the two remaining divisions of their road, which, when finished throughout, will open to Philadelphia a direct route to Cleveland and points beyond.—*Penn'a Railroad and Mining Register.*

Henderson and Nashville Railroad.

We were out on the line of this road several days ago, some twelve or fifteen miles from the city. The contractors have quite a large number of hands employed upon the work at this end, which enables them to push it forward with great rapidity. The ultimate success of the enterprise is no longer doubted by the people of this section, while new confidence and energy is being infused into the stockholders and its friends every day. From the known ability of the President and Board of Directors, and their business character, none can doubt the early completion of the road, and more especially when they hear that the company is meeting its liabilities promptly as they fall due.—Twenty-seven miles of the line will be ready for the iron some time early in the fall, when the laying of the track will be commenced immediately. The Tennessee portion of the road is all under contract, and a large number of hands are at work. They have ample means to complete their portion of the road without any embarrassment whatever to the company.—*Henderson Com.*

SALE OF THE Syracuse & Binghamton R.R.

SUPREME COURT.—David Headley & Horace White, Trustees for the First Mortgage Bondholders of the Syracuse and Binghamton Railroad Company, against the Syracuse and Binghamton Railroad Company and others.

In pursuance of a judgment of foreclosure and sale, entered in this action on the first day of August, 1856, there will be sold by me, or under my direction, at the Syracuse House, in the city of Syracuse, on the 20th day of September, 1856, at 10 o'clock in the forenoon, "All and singular the corporate property and franchises of the said Syracuse and Binghamton Railroad Company, consisting of all the lands, tracks, lines, rails, bridges, ways, buildings, piers and wharfs, erections, fences, walls, fixtures, privileges, franchises, rights and real estate whatsoever, and all the tolls, income, issues and profits to be had from the same, and all the railway depots or stations, with the buildings thereon, together with all the locomotives, tenders, cars, carriages, tools and machinery owned by said Syracuse and Binghamton Railroad Company, or any way belonging or appertaining to said road and used thereon, between the city of Syracuse and village of Binghamton, including 13 locomotive engines, tenders and fixtures, 10 locomotive lamps, 10 first class passenger cars, 3 second class passenger cars, 2 mail baggage and express cars, 3 baggage cars, with stoves and lamps in each, 80 box cars, 34 platform cars, 40 gravel cars, 8 hand cars, 1 large snow plow; also one stationary engine and boiler, 2 kettles, 1 wheel press, 1 upright drill, 40 feet line shafting, 8 bands and pulleys for same, 3 forges and bellows, 3 anvils and all the tools in the shop at Syracuse, and along the line of said road, and materials on hand for repairs and use of said road; also, 30 tons of iron rails, 20 tons of railroad chairs, 10 tons of rail spikes, 16 frogs, 8,000 cords of wood at various points along the line of said road, 12 hand trucks, 8 platform scales, 19 stoves, and all the furniture, books and blanks at the several stations and buildings along the line of said road; 120 lamps of various kinds, in use on trains, at stations, shops, and switches along the line of said road; also, the office furniture, consisting of two large desks, two tables and cases of pigeon holes, 3 iron safes, one draughting table, one case of drawers, 4 stoves, one ticket case and tickets in same, one regulator, sundry blanks, blank books and stationery for use of said Company."

A more complete inventory of property and description of premises to be sold, together with the maps and profiles, will be exhibited on the day of sale, and also the terms of sale will then and there be made known. Dated August 4th, 1856.

E. DAVIS NOXON, Referee.
DAVIS & LEACH, Attorneys.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

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NOTICE TO MACHINISTS.

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Milwaukee & Horicon R. R.

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They are secured by a mortgage upon, and are a first lien upon forty-two miles of the road between its junction with the La Crosse and Milwaukee Railroad in the Village of Horicon, in the County of Dodge, and the Village of Berlin, in the County of Marquette, together with all the rolling stock, depot grounds, and all other property of the Company, and by a sinking fund sufficient to extinguish the whole mortgage debt of the Company before the maturity of the Bonds.

Should there be a failure on the part of the Company, or neglect to make the annual deposit to the sinking fund as specified, the Trustees, Robert H. Lowry Esq., Cashier of the Bank of the Republic in the city of New York, is authorized and directed to foreclose the mortgage in same manner as if default was made in the payment of principal or interest on said Bonds, thus putting it out of the power of the Company to evade this obligation. The road is now completed to the village of Waupun, fifteen miles to its junction with the La Crosse and Milwaukee Railroad, a point sixty-six miles north-west from Milwaukee, and has been in operation since the 20th of February last, and is so situated, geographically, that it will always be without competition, as no other road can be constructed to compete for the business that is justly tributary to it without being much more circuitous and distant, besides being much more costly in construction. The fifteen miles of road have earned in the three months ending May 26th, over \$12,400, which is a much larger amount in proportion to its length than was earned by the Milwaukee and Mississippi Railroad in the corresponding months in the year 1854, the first year that road was opened to Madison—and this amount was much less than it would have been had it not been for the great fall in produce which prevented farmers from sending their grains forward to market. When the road has earned an amount net equal to eight per cent. per annum on this issue of bonds, they will be receivable by the Controller as securities for banking purposes, and as the State increases in wealth and banking capital there will be a home demand for these bonds. Copies of the Charter of the Company, and the Bond and Mortgage, and the Resolutions of the Board of Directors authorizing their execution, may be obtained at the office of the auctioneers, and capitalists are invited to examine the exhibit of this Company and see on what foundation it relies for a business second to none in the flourishing State of Wisconsin, and which makes these securities as desirable as any in the market for investment. 234 J. B. SMITH, President.

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Chief Engineer Alleghany Valley Railroad, Pittsburgh, Pa.

Roberts, Solomon W.,

Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

J. S. Sewall,

CIVIL ENGINEER, ST. PAUL MINNESOTA.

Charles L. Schlatter,

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J. S. Shipman,

Civil Engineer, 63 Trinity Building, 111 Broadway, N. Y.

Straughan, J. R.,

Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,

Chief Eng'r Bytown and Prescott Railway, Prescott, Canada.

Steele, J. Dutton,

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Charles B. Stuart,

Consulting Engineer, 22 William str., New York.

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INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

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July 24th, 1886. Sm.

Illinois Central R. R. Co. FARM LANDS FOR SALE.

THE ILLINOIS CENTRAL RAILROAD COMPANY IS NOW PREPARED TO SELL OVER TWO MILLION OF ACRES OF FARMING LANDS, in tracts of 40 acres and upwards, on long credits and at low rates of interest.

These lands were granted by the Government to aid in the construction of this railroad, and include some of the richest and most fertile prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The road extends from Chicago, on the north-east, to Cairo at the South, and from thence to Galena and Dunleith, in the north-west extreme of the State, and as all the lands lie within fifteen miles on each side of this road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to eastern and southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, etc., afford a substantial and growing home demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, etc.

Economy in cultivating and great productiveness are the well-known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed, or stone picked off, as is generally the case in cultivating new lands in the older States. The first crop of Indian corn, planted on the newly broken soil, usually repays the cost of plowing and fencing.

Wheat sown on the newly turned soil is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a-half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to \$2.50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, etc., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the road, and is a cheap and desirable fuel. It can be delivered at several points along the road at \$1.50 to \$4 per ton; wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota should bear in mind that lands there, of any value, along the water courses and for many miles inland, have been disposed of—that for those located in the interior, there are no conveniences for transporting the produce to market, railroads not having been introduced there. That to send the produce of these lands one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this Company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of these lands is carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this Company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in the cost of transportation, especially in view of the

facilities furnished by this road, and others with which it connects, the operations of which are not interrupted by the low water of Summer, or the frost of Winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, &c. Contracts for deeds may be made during the year 1886, stipulating the purchase money to be paid in five annual instalments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

INTEREST WILL BE CHARGED AT ONLY THREE PER CENT. PER ANNUM.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be understood that at least one-tenth of the lands purchased shall yearly be brought under cultivation. Longer credits, at 6 per cent per annum, may be negotiated by special application. Twenty per cent. from the credit price will be deducted for cash. The Company's construction bonds will be received as cash.

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They will be 12 feet by 20 feet, divided into one living and three bedrooms, and will cost, complete, set up on ground chosen anywhere along the road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash, and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean-time, the rapid settlement of the country will probably, have increased their value four or five-fold. When required, an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the railroad lands, throughout the State—also, the cost of fencing, price of cattle, expense of harvesting, threshing, etc., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

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Philadelphia, Wilmington & Baltimore Railroad.

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WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m., for Dunkirk and Buffalo.
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These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,
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NEW YORK

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- 6th. The least noisy pavement to use or reside near.
- 7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; and \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUSS PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

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The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVEETH & ROBINSON,

General Managers for the Iron Pavement and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

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HON. H. F. FRENCH, Associate Judge, Superior Court, Essex, N. H.
HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 36.]

SATURDAY, SEPTEMBER 6, 1856.

[WHOLE No. 1,064, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, September 6, 1856.

American Central Railway.

Several months since a convention was held at Fort Wayne, Indiana, by the friends of the following lines of railroad in Pennsylvania, Ohio, Indiana, Illinois and Iowa—viz.: the Venango; Clinton Line; Clinton Line extension; Tiffin and Fort Wayne; Fort Wayne and Mississippi; Western Air Line, and Philadelphia, Fort Wayne and Platte River Air Line Railroads. The proceedings of this convention have been published under the supervision of the Secretary of the Convention.—We give a synopsis of them for the purpose of presenting the condition of the several lines above named, both with regard to their finances, and the progress made in construction, as well as the general and particular objects sought to be accomplished. It is claimed that all of the above roads are only parts of one great line traversing the Eastern and Western States upon a route best fitted to be a great line of intercommunication at the same time that it is a direct prolongation upon the best route for a railroad to the Pacific. We commence by giving a synopsis of the statements made by the representatives of each Company:

Col. S. R. Curtis, of Keokuk, Iowa, being called upon to report the prospective Western extension of railroads, and the peculiar connection of the

roads here represented with the Pacific Railroad, stated that it was now universally conceded that our railroads must, at no distant day, be prolonged westward, so as to unite them with the waters of the Pacific. The subject of a road to the Pacific had become the most important one now before Congress. Arguments in its favor were daily increasing in number and force. The topographical features of the continent were broad valleys separated by ranges of mountains, which entered from the narrow Isthmus of the south in branches, and extended in various chains to the north. The principal valleys were the Atlantic slope, the Mississippi valley, the Salt Lake valley, and the Pacific slope. The principal mountain chains separating these valleys were, the Alleghanies, the Rocky mountains and the Sierra Nevada. Of these valleys, the Mississippi occupies about four-fifths of the great plateau. Several lines of railroads have already passed the Alleghanies, reached the Mississippi, and are now pressing westward to the great chains that separate it from the Pacific. Although the broad slope of the Rocky mountains presented no serious obstacles to a railroad, yet the mountain ranges, such as the Sierra Madre and Sierra Nevada in the far west, must control their general direction. The cheapest route will be on the valleys of those rivers which afford the convenience of better grades, soil, fuel, water, etc. The question of the best route was still an open one. A candid view of the subject would narrow down the question of routes to three, viz: the Gila, lat. 32°, the Platte valley, lat. 41°; and the Northern, or Stephens' route, lat. 47°. That which most interested the convention, however, was the Platte valley route. The points and distances from the navigable waters of the Missouri to those of the Sacramento, were as follows:

From Council Bluffs City to Bleak Hills.....	491¼ miles.
From Bleak Hills, by Lodge-Pole Creek and south fork of Platte, to Bridge's Pass (Ft. Bridge).....	847 "
From Fort Bridge, via Salt Lake City and Humboldt valley, to Madelin Pass.....	829 "
From Madelin Pass to Ft. Reading, on the Sacramento.....	182¾ "

Total distance, as measured.... 1850½ miles.

This line follows the Platte River valley, Salt Lake valley and Humboldt valley. The following points are taken from the reports of various exploring parties, and serve to show the coincidence of this line with a true parallel—that of 41°.

Council Bluffs City.....	Lat. 41° 20'
Fort Kearney (on the Platte).....	" 40° 18' 21"
Forks of Platte (near Ash Hollow).....	" 41° 17' 18"
Divide on Lodge-Pole Creek.....	" 41° 21' 45"
Fort Bridge, on Green River.....	" 41° 18' 12"
Salt Lake City.....	" 40° 45' 37"
Mud Lake, in Humboldt valley.....	" 40° 41' 48"
Madelin Pass (Sierra Nevada).....	" 40° 44' 12"
Ft. Reading, on the Sacramento.....	" 40° 30' 02"

This route is central, and better supplied with wood, coal and water than any other. Pioneer settlements are also commenced at various points. Iowa has seven lines in progress, converging toward Council Bluffs; that from Davenport being finished to Iowa City, 75 miles west of the Mississippi. Nebraska has passed a charter to encourage the extension from Omaha, her capital, opposite Council Bluffs, following up the Platte to the western boundary of her territory. The Legislature of Utah has recommended this as the best route for a Pacific railway, and California has started her first locomotive up the Sacramento valley to the Madelin Pass.

Dr. J. Bell, of the Philadelphia, Fort Wayne and Platte River Air Line Railroad, stated that this company was organized in 1853, under the general railroad law of Iowa, with full power to construct a road from Tool's Landing, opposite New Boston, on the Mississippi river, via Wapello, to Council Bluffs City on the Missouri, opposite Omaha City, the capital of Nebraska. This road runs through the centre of the best tier of counties in Iowa—is very nearly an air-line—the soil is very rich, and settlements already extensive.—The line crosses the coal fields at the Des Moines river. The country abounds with every species of material necessary for the construction of a railroad. The preliminary surveys have been made, 42 miles are under contract, and about 300 hands at work. The curves and grade will be exceedingly favorable, and its cost will compare favorably with any road in the west.

Gen. E. A. Whipple stated that the Western Air Line railroad company, was authorized, by virtue of a special act of the Legislature of Illinois, pass-

ed February 9, 1853, to construct a railroad from New Boston, on the Mississippi, to Lacon, on the Illinois river, and from thence to the Indiana State line, in the direction of Fort Wayne. The financial condition of the company was good.

Lott S. Bayless, Esq. stated that the Ft. Wayne and Mississippi railroad company derived the requisite rights, franchises, etc., for the building of a road from Ft. Wayne to the Illinois State line, from the general railroad law of Indiana, passed March, 1853. The company was organized March 12, 1853. There has been \$300,000 of stock subscribed—payable in land and cash. The entire length of the road, from Ft. Wayne to the west line of Indiana, is 120 miles—passes for 60 miles from Ft. Wayne west through a heavy timber country, with a rich and fertile soil, much of which is under a high state of cultivation. The line crosses Eel river at Liberty Mills, 32 miles west of Ft. Wayne. Manchester and Millersburg are within three miles of the road, and five flouring mills, with 14 run of stone, in successful operation, are within five miles of this point. From Liberty Mills, west, this road will pass through Rochester, Winnamac, Francisville and Rensselaer, all of which are flourishing towns. The road has been prepared for letting. The maximum grade is 45 feet per mile. The estimated cost of preparing the road-bed for the iron—including side tracks, track-laying and contingencies, from Ft. Wayne to Liberty Mills, is about \$457,380, or \$14,000 per mile. The entire cost of the road in running order will not exceed \$26,000 per mile.

R. G. Pennington, Esq., President of the Tiffin and Fort Wayne Railroad, stated that this road, extending from Tiffin, Seneca Co., O., to Fort Wayne, was 102 miles long, of which 85 were in Ohio, and 17 in Indiana. This road has one tangent of 90 miles; the maximum grade is not over 40 feet to the mile, with few streams to cross. The road passes through Pleasantville, Leipsic, Norwood, Milrose, and New Haven, in Indiana, and connects at Fort Wayne with the Fort Wayne and Mississippi, Fort Wayne and Chicago, and the Lake Erie, Wabash and St. Louis Railroads on the West, and with the Clinton line extension and Mad River roads, on the east, and 14 miles west of Tiffin with the Fremont and Indiana road. The whole line was under contract, with about 50 miles graded, and with ample means provided to complete the track ready for the iron. It was expected to be in operation by March, 1857. The company was organized in 1853. This road is so straight, the grades so level, and the work done so substantial, that the greatest speed might be attained with the greatest safety.

Prof. H. N. Day, stated that the Clinton Line and Clinton Line Extension railroads constituted connecting links in the above chain—reaching from the Atlantic cities to the Missouri, more than 1,200 miles, and 3,000 miles to the Pacific, and radiating through connecting lines of road to all the centers of commerce and population west of the Alleghanies. The Clinton Line road is 55.4 miles in length, extending from Hudson, Ohio, to the Ohio and Pennsylvania line. Forty per cent. of the grading, masonry and bridging had been done, and contracts had been closed for the completion of the road-bed not already under contract, and also for the superstructure and equip-

ment. The estimated cost of the road, including equipment, station buildings, fencing, telegraph, etc., was \$1,700,000. The Extension road, running from the Clinton line, at Hudson, to Tiffin, is 93.84 miles long. The cost of this road, based upon the contract prices, is estimated at \$3,200,000, including equipments, etc. After expending about \$70,000 on the eastern division of this road, it was abandoned on account of financial embarrassments, and the operations of the company were confined to the western division, from Tiffin to New London, on the Cleveland, Columbus and Cincinnati railroad, about 41 miles, this division being of easier construction, and forming in connection with other roads, a very promising line to Cleveland. The entire road was under contract, the western division to be completed in about a year, and the eastern in a year afterwards. The maximum grade on these roads is 40 feet to the mile, excepting at the crossing of the Cuyahoga river, which has been fixed at 45 feet for about four miles. The minimum radius of curvature is 2,300 feet. When these roads and the Tiffin and Fort Wayne were completed, it left the Venango road as the only link to be constructed, together with a few miles of the Sunbury and Erie, to form a through intercourse between Ft. Wayne, Philadelphia and New York.

Ralph Clapp, Esq., speaking for the Venango railroad, showed its connection at Ridgway, Penn., with the Sunbury and Erie railroad, and followed its course to its connection with the Clinton Line railroad at the State line; contrasted its low grades, long curves, straight lines, and diminished distance with the three or four great leading thoroughfares from New York, Philadelphia, and Baltimore to the West, and claimed that as a link in the great national highway, it was second to none. This road was chartered March 30, 1853, by the Legislature of Pennsylvania, and a supplement of enlarged powers was passed April 20, '53. The charter is a very liberal one. The route commences at Orangeville, on the Ohio State line, and runs to Ridgway, in Elk county, Pa., the proposed point of connection with the Sunbury and Erie. The route is through the finest pine, timber and coal lands in the State. Maximum grade, 52.8 feet. No curve less than 900 feet, with a bridge over French Creek at Franklin, 200 feet long, and one 800 feet long over the Alleghany river, two miles above Franklin.

The prospects of the Sunbury and Erie railroad, as given in a letter to the convention by Robert Faries Esq., Chief Engineer, were very flattering. They were running 40 miles, and expected in the course of a year to reach Lock Haven 26 miles further west, and have 40 miles more to the mouth of the Susquehanna, graded ready for the superstructure, which will be laid early in the season of 1857—making 106 miles of completed road west of Sunbury. Eighty-two miles of the western end had been previously put under contract. The maximum grade of this road is 52.8 feet per mile, which occurs only at a single point, in overcoming the Roselay summit, 21 miles east of Ridgeway; ascending grade, going east only $4\frac{1}{2}$ miles, descending grade, 14 miles. Over all other portions of the line the maximum is 10 feet going east, and 17 going west. The proposed connections by this route with Philadelphia, New York and Baltimore, are as follows: to Philadel-

phia by the Catawissa, Little Schuylkill, and Reading railroads, now in operation the entire distance from Williamsport, 187 miles. Maximum grade going east, 33 feet per mile, all of which occurs on the Catawissa road. The route to New York diverges from the Philadelphia line near the junction of the Catawissa with the Little Schuylkill road, thence by the Lehigh Valley and New Jersey roads to Jersey City, a distance of 227 miles from Williamsport. This is all complete and in operation, except 14 miles, from the diverging point to Mauch Chunk, which will be finished the coming year. The maximum grade in no case going east exceeding 33 ft. per mile. The route to Baltimore follows the Sunbury and Erie, from Williamsport to Sunbury, 40 miles; thence by the Northern Central railroad to Baltimore, 139 miles. Of the entire distance from Williamsport to Baltimore, 125 miles are in operation. On the remaining 54 miles, from Sunbury to Bridgeport, the grading and masonry are about two-thirds finished, and it was supposed that the entire connection would be perfect in the course of a year. The maximum grade between Williamsport and Harrisburg is less than 10 feet per mile. From thence to Baltimore, when certain projected improvements are carried into effect, the maximum grade will not exceed 50 feet.

The Pittsburg and Erie Company under a charter granting them branching privileges are building a road from the eastern terminus of the Clinton line at Kinsman, through Jamestown, Meadville, Cambridge, &c., to a point on the New York State line, where it is intersected by the Erie and New York City railroad, now nearly completed from that point to the New York and Erie road, at Great Valley station, 49 miles east of Dunkirk. Thence to New York the distance is 411 miles. The maximum grade has been fixed at 40 feet per mile. The portion of the route in New York State some 48 miles, is nearly graded, 33 miles being now ready for the iron. The portion in Pennsylvania has made less progress, only 6 out of 81 miles being completed. The line to Boston diverges at Binghamton by what is called the "Albany and Binghamton Railroad." This road is 144 miles long, has been definitely located, with no grade to exceed 50 feet, a liberal local subscription secured, the entire work let to a responsible firm of contractors, and a considerable amount of the grading and masonry done.

It will be seen from this statement that while this great chain of railroads will compare favorably, in point of grades, with the existing routes from the West to the three prominent Atlantic cities, in comparing the distance a still greater superiority is apparent. From a common point in Ohio the travel and business from Chicago and Cincinnati can reach New York over this line with 94 miles less travel than via Buffalo and Albany, while by the same route, Philadelphia is 38 miles nearer than New York, and Baltimore 14 miles nearer than Philadelphia.

The following are the general conclusions which terminate the report of the convention.

In contemplating the construction of this line of road, a few facts and conclusions naturally arise, to which the attention of the merchant, mechanic, agriculturist, manufacturer and traveler is invited. The points of greatest wealth and population will be brought into close connection. As

a great national highway, traversing the centre of the continent, its entire length, from east to west, this combination of roads is presented as forming an important part of such line; and, viewed in any aspect it is without a parallel, being unrivalled as to distance, grades, curves, and location.—These roads are all in course of construction, and some of them in a great state of forwardness. The following views and statistics are presented, showing its claims to the particular consideration of the whole country.

1. *It is a great national thoroughfare in its character and relations.*

From New York and Philadelphia to Council Bluffs, on the Missouri, is a distance of between 1,200 and 1,300 miles. It was thought that the great west was reached, when the New York and Erie road was completed to Dunkirk, where, by the restrictive action of the Legislature, this road was made to terminate. The New York Central road was also built to connect the Hudson River with Lake Erie. The trade and commerce of the great west can reach these roads only by the circuitous route of the Lake Shore road. The Pennsylvania Central and Baltimore and Ohio roads were built—the one to connect Philadelphia, and the other Baltimore, with the Ohio river. Both these roads have connections with roads tending westward, but their course is long and indirect, and wanting in that uniformity of gauge and construction which is an essential qualification in forming constituent links in a great east and west railway. Their high grades, short curves and tortuous course, while they exhibit the skill of the engineer in surmounting innumerable difficulties, yet impair their claims to be considered parts of a continuous highway east and west. The surface of the country naturally contracts all the lines of railroads running between the east and west within the limits of the narrow isthmus between Wheeling on the Ohio, and Cleveland on Lake Erie—a space of little more than 100 miles in extent. The New York and Erie and the New York Central roads, must take a circuitous route southwards, and the Pennsylvania Central and Baltimore and Ohio, a circuitous route northward from their termini, in order to reach the Mississippi and Missouri at proper points. The line of roads forming the *American Central Railway*, is located upon the dividing ridge between the Lake and the Ohio, in a direct course, with tangents from 30 to 220 miles. This route was selected as early as 1830 by Col. De Witt Clinton, Jr., United States Top. Eng., as the proper one for a railroad from the Atlantic to the Mississippi, and on his map indicated its protraction as far as Council Bluffs. The distance by this route is nearly 200 miles less than by any other known lines, with easy curves, gentle grades and an unbroken gauge. The Bridges' Pass, as mentioned by Col. Curtis, is the nearest practicable line, shifting between 42° and 88°, on a great curve, starting at Council Bluffs, lat. 41°, bearing a little north to Bridges' Pass, lat. 42°, and thence south to San Francisco, lat. 38°. It is opposite the centre of eastern population, west of our great commercial cities, with their accumulation of property, population, commerce and agricultural wealth. It is central in view of Pacific territories, and nearest a straight line from New York and Philadelphia to San Francisco—the three great commercial emporiums of

this continent. The climate upon this route is most favorable for man's greatest exertions, and travel and transportation can at all seasons be secure from the deleterious effects of a severe climate. Water, fuel and settlements are found at convenient distances. It is universally conceded that a railway across the continent is a great national necessity. The surveys of Fremont, Stansbury, Beckwith and others, have proved that such a road is not only practicable, but that the cost of the work ought not to be urged against the project. It is indispensable to the wants of commerce and the national defense, which, in case of war, cannot afford to encounter the risks and difficulties of a long and dangerous voyage on both oceans.

The Secretary of War, in his late annual report says: "That by the usually traveled routes, it would be impossible, with any means heretofore used, to furnish the amount of supplies required for the defence of the Pacific coast," while in the "first year of a war with any great maritime power, the communication by sea could not be relied upon;" and as to the expense of transporting munitions of war, etc., says they would, "at the rates that were paid on the Northern Frontier during the last war with Great Britain, exceed \$60,000,000 per annum," and he also says that, "in point of fact, supplies for such an army as would be required, could not be transported across the continent" without the aid of a railroad.

2. *It is unsurpassed in its local characteristics.*

It follows the belt of largest migration and settlement, of highest culture and greatest productivity. In Pennsylvania it passes through the finest anthracite and bituminous coal lands in the State. It encounters the iron and lumber regions of the north-west counties with numerous furnaces and saw mills. The full development of these resources will add largely to the business of the road. In Ohio it runs through a densely populated, highly cultivated, rich and productive territory, with Cleveland, Sandusky, Toledo and Chicago on the north, and Pittsburgh, Steubenville, Columbus, Dayton and Cincinnati on the south.—The vast surplus productions of this region, and which are increasing every year in a ratio beyond calculation, will necessarily be thrown upon this road. Not only is distance saved, but delays and expenditures avoided in transshipments at inconvenient points. The States of Indiana, Illinois and Iowa will also contribute their surplus, which cannot now, for want of proper communication with the great eastern markets, compete with the more eastern States of New York, Pennsylvania and Ohio.

3. *The low grades and direct course of this line of road is unsurpassed.*

The Sunbury and Erie road crosses the Alleghany mountains with less divergence and with lower grades than either of the three great roads. The Venango road is very direct in its course, with no grades above 52.8 feet, and that only for a few miles, and with no curves over three degrees. The Clinton Line and its Extension is remarkable for its evenness of surface and low grades. Upon the Tiffin and Fort Wayne road, the surface of the ground requires no grading, except to throw up a road-bed to protect it from the water. It has one tangent of 90 miles out of 102, its entire length. Next is the Fort Wayne, Lacon and Platte Valley

road, 580 miles, with tangents from 30 to 220 miles long, and with grades for hundreds of miles not exceeding 15 feet to the mile. The distance by these roads to Council Bluffs from New York is 1298 miles, and from Philadelphia 1260 miles—being 171 miles shorter than by any existing line. It crosses no navigable waters but the Mississippi and Missouri.

4. *It commands, by means of intersecting roads, the best connections with the leading centres of business in the West, not on its own line.*

After crossing the Pennsylvania State line, it meets at Bristol, 17 miles from the line, the Ash-tabula and New Lisbon road—in progress; 26 miles further west, near Aurora, it intersects the Cleveland and Mahoning road. At Hudson, 55 miles from the State line, it intersects the Cleveland and Pittsburgh, 25 miles from Cleveland.—The distance by this route to New York is 637 miles, against 603 by Lake Shore and Dunkirk, to Philadelphia 499, to Baltimore 485. At Hudson it also meets the Painesville and Hudson, and the Cleveland, Zanesville and Cincinnati roads; the distance from New York to Zanesville being 625 miles, and to Cincinnati 735, against 857 by Cleveland and Dunkirk. At Litchfield, 33 miles from Hudson, it meets the Cleveland and Cincinnati Short Line road 201 miles from Cincinnati. At New London, 53 miles from Hudson, it intersects the Cleveland, Columbus and Cincinnati road, 47 miles from Cleveland and 208 from Cincinnati. At Norwich, 20 miles further, it intersects the Sandusky, Mansfield and Newark road. At Tiffin, 41 miles from New London, it intersects the Mad River and Lake Erie road, and the Cleveland and St. Louis Air Line road. At Fort Wayne it meets the Chicago and Fort Wayne road, 146 miles from Chicago. From Chicago to Cleveland by Fort Wayne and New London, is 335 miles, or 20 miles less than by the Southern Michigan and Cleveland and Toledo. To New York it is 854 miles; by the Lake Shore 958. At Fort Wayne the chain also intersects the Lake Erie, Wabash and St. Louis road. It also meets the Southern and Fort Wayne road at this point. West of Fort Wayne, in Indiana, it intersects the Cincinnati, Logansport and Chicago road. It crosses the New Albany and Salem road 35 miles east of the Illinois State line; 19 miles west of the State line it intersects the Chicago branch of the Illinois Central; 30 miles further west, it intersects the Mississippi and Chicago; 30 miles further, the main stem of the Illinois Central, and 48 miles further the Central Military Tract road.

From this enumeration of lines of railroad traversing or terminating in this chain it will readily be seen that its radiations reach to all the leading points of trade in the great valley.

The practicability of this line, its necessity and its prospective earnings and profits give it an importance that will early secure its completion.

A highway on such a route will be a glorious national monument, that will command the admiration of the world, as one worthy of this great people, and will serve to develop the rapid changes of this eventful age. In the construction of such a work there should be concentrated the entire strength, energy and power of the nation; differences should be regretted and forgotten, and united influences should rejoice in the completion of the greatest work in the world.

The Ray Car Spring.

Below we give a number of testimonials from competent persons favorable to the working of the above spring, which is now in use on a large number of railroads.

CHICAGO & ROCK ISLAND R. R. CO.
Superintendent Car Repairs Office.
CHICAGO, July 18th, 1856.

Sir—In answer to your inquiries I will state to you that I have Mr. Ray's Volute Springs in use under a Freight Car. I use 8 springs in the center motion. They give me entire satisfaction, so far as they have been in use (3 months). I like them much better than Rubber for several reasons.

(Signed) D. S. WILSON,
Sup't Car Repairs.

NEW YORK & NEW HAVEN R. R. CO.
Office of Car Department.
NEW HAVEN, August 18th, 1856.

This certifies I have used Mr. Ray's Patent Steel Springs since December, 1854, and like them in preference to Rubber or anything else now in use for Car Springs. They are simple and durable, and I would recommend them to all.

(Signed) H. T. DOUGLASS,
Foreman Car Repairs.

OFFICE HOUSATONIC R. R. CO.
BRIDGEPORT, August 23d, 1856.

This may certify that we have some of Ray's Patent Car Springs under some of our Freight Cars for the last 18 months, and I consider the spring one of the best in use. I think they will give satisfaction to any Railroad Company that will give them a trial.

We have lately put them under one of our Passenger Cars which rides as easy and well as any Car we have.

(Signed) CHAS. HUNT, Pres't and Sup't,
Housatonic R. R. Co.

BRIDGEPORT, August 23d, 1856.
Housatonic Railroad Repairs Shop.

This is to certify that we have Ray's Patent Volute Car Spring under some of our Freight Cars and one Passenger Car, and they are the best and easiest Spring I have ever seen, simple in their construction and not liable to get out of order. We have been using them for the past 18 months with success.

(Signed) H. WINSLOW,
Master Mechanic.

OFFICE NEW YORK & NEW HAVEN R. R.
37 Canal street,
NEW YORK, August 25th, 1856.

F. M. RAY Esq.

In relation to Springs of your Patent, I can say that we have them in constant use since about December, 1854, and we are increasing the number as the India Rubber Springs require removing. I find them one of the best Springs in use both for easy riding and cheapness in price.

Yours truly,

(Signed) JAMES H. HOYT, Sup't.

NEW YORK & NEW HAVEN R. R.
Assistant Sup't's Office.
NEW HAVEN, August 18th, 1856.

This is to certify that this Company have eight sets of Ray's Patent Volute Springs in constant use. The first set were put on a Passenger Car, December 16th, 1854. The others put under from

time to time as the Company required them, and to all appearance at the present time as good as when first put into use. The motion of the Spring is preferable to the Rubber and it is not affected by the changes in the weather as our experience during the last winter will show. The cost is about half as much as the Rubber or Elliptic Spring. We are now putting them on new trucks, as we are satisfied they are the best Springs in use.

(Signed) E. S. QUINTARD,
Assistant Superint't.

BRIDGEPORT, August 25th, 1856.

Having had long experience in manufacturing Springs, my attention has been drawn to Ray's Car Spring now in use on a railroad with which I am connected. I have frequently witnessed the operation of the Springs and consider them far superior to any Railroad Car Springs now in use.

(Signed) S. TOMLINSON.

Marietta and Cincinnati Railroad.**STOCKHOLDERS' MEETING.**

The annual meeting of the stockholders of the Marietta and Cincinnati Railroad Company was held in Chillicothe on the 20th of August. The sixth annual report of the President and Directors was presented and read. From it we learn that 37 miles of the road have been opened for business during the year, making 155 miles now in operation by this Company and the Hillsboro' Company (now consolidated, or united by a perpetual contract,) of which 134 miles form part of the main trunk line from Cincinnati to Marietta.

The road has been running, as far east as Athens since May, and the work of construction from Athens to Marietta is rapidly approaching completion. The grading of 15 miles will be finished during the present month, and that of nearly the entire line in September. Track-laying from Athens eastward, and from the Ohio river westward, will be commenced in September, and completed in November.

There was expended upon the road during last year—

In Construction	\$915,721 37
For Iron Rails	256,951 57
Rolling Stock	94,398 34
Right of Way and Land Damage	11,055 87
Depot Buildings and Water Stations ..	17,202 22
Shops and Machinery	14,670 59

The Receipts of the year are as follows, viz:—

From Passengers	\$77,743 50
From Freight	110,738 22
From Express	1,772 82
From Mail	5,834 91

Total

The receipts exceed those of the previous year over 90 per cent.

The expenses were as follows, viz:

Maintenance of Way	\$42,459 15
Motive Power	58,708 86
Maintenance of Cars	5,691 25
Conducting Passenger Depot	11,063 74
Do. Freight do.	13,947 56

\$131,870 56

The cost of "Maintenance of Way," has been largely swelled by the extra cost of repairs upon the imperfect road-bed of the eastern end of the line when opened; the consequence of being compelled to lay the track during the extreme cold weather of last winter, in order to reach particular points at a given time.

Motive power is charged with considerable items not properly belonging to the business of the year, in consequence of considerable expenditures upon the engines that had been for some time used in construction without receiving the

necessary repairs. This account will not, however, be considered very large, compared with the business done, when it is remembered that nearly one-half the engine service of the year was upon construction.

Ten new locomotives have been purchased during the year, and five more are now building, by Niles & Co., of Cincinnati. The Directors speak of the power and speed of these engines, and the economy with which they may be run, in terms of high commendation.

The prospects of the road for a large and profitable mineral traffic, and an extensive through business upon the opening of the road to the Ohio river, are discussed in the report at considerable length.

Two remarkable facts are stated in the report, to wit: that while the machinery of more northern roads suffered severely during the extreme weather of last winter by the breaking of wheels and axles, on this road not a single wheel nor axle was broken, and with but two or three exceptions the trains made their regular connections; and that not a passenger has received serious injury since the opening of the first division.

Directors for the ensuing year.—The election resulted in the unanimous choice of the following Directors for the ensuing year, viz:

N. L. Wilson, John Madeira, M. S. Cook, Chillicothe; John Mills, Beman Gates, Wm. S. Nye, Marietta; Douglas Putnam, Harmer; Hugh Smart, Greenfield; Wm. B. Cutler, Constitution; A. B. Walker, Athens; Alphonso Taft, Jonathan Niles, S. B. Kelys, Cincinnati.

At a meeting of the Directors, held the same day, the Board organized, and proceeded to the election of officers, as follows:

President—NOAH L. WILSON,
Vice President—BEMAN GATES.
Treasurer—JOHN MADEIRA.
Secretary—S. W. ELY.
Solicitor—WM. S. NYE.
Chief Engineer—HENRY C. MOORE.

Lebanon Valley Railroad.

The *Lebanon Courier* says: "This company have commenced the construction of the buildings necessary for the accommodation of their business at Lebanon. The passenger station will be located at the south-east corner of Walnut street, fronting on the railroad, sixty-six by thirty-three feet, surrounded by a platform. It will be a frame building, painted and sanded, and will have the necessary conveniences for a ticket office, telegraph office, reception rooms, &c.

The freight station will be located on the south-western corner of Picegrove street, fronting the railroad, and will be one hundred by fifty feet, with double tracks and all the modern conveniences. It will also be frame, painted and sanded.

There will be a large water tank, and necessary fixtures, connected with the station houses. An engine is being constructed by Mr. Kirk, of Reading for the purpose of raising water to supply the various demands of the road. The work has been commenced, and will be pushed with energy, so as to be finished before winter sets in."

New Castle and Darlington Railroad.

The *Pittsburg Gazette* says: The grading and bridging of the New Castle and Darlington railroad, on its entire length, about 13½ miles, has been let to Messrs. Jos. Chamberlain & Co., of Cleveland. These gentlemen are old and experienced contractors, of ample capital to secure the successful progress of the work, and have agreed to complete the road within one year from the 1st of September next. The road connects with the Pittsburg, Ft. Wayne and Chicago road at Darlington, and opens to our commerce the populous towns in the rich valleys of Beaver, Mahoning and Shesango. Its construction is of great importance to Pittsburg, and will permanently secure the traffic of the region contiguous to New Castle to our merchants, which otherwise may be diverted to our great injury in a commercial point of view. The Directors design to appeal for some additional aid,

to our citizens, and as their wants are small, not exceeding \$30,000 or \$40,000, it is to be hoped that they will find no difficulty in obtaining so considerable a sum for an object of so much importance as opening a speedy communication with our northern counties.

East Tennessee and Virginia Railroad.

The Knoxville Register announces that the cars on this railroad have reached Russellville, in Jefferson County, about 50 miles above Knoxville; at that point track-laying will cease for the present. A considerable amount of grading is yet to be done above Russellville. The Virginia and Tennessee road is expected to reach the State line by the 1st of October next, and then the track-laying on the East Tennessee and Virginia road will commence at that point and proceed in this direction, until the connection is made at Russellville.

The distance between Russellville and the State line is about 70 miles. The road is expected to be completed during the ensuing year.

Atlanta and Lagrange Railroad.

We have received the report of the company for the fiscal year ending July 1st, 1856, from which we learn that the receipts have been:

From passengers.....	\$148,829.68
Freight.....	109,250.35
Mails.....	20,543.76
	\$278,123.74

And the expenses have been:

For conducting transportation.....	\$30,422.69
Motive power.....	33,876.66
Maintenance of way.....	26,451.23
" cars.....	13,592.42
	104,343.00

Leaving net profits for the year.....	\$173,780.74
Deduct balance of interest acc't.....	13,957.84

Balance net profits, after paying expenses and interest.....	\$159,822.90
From this two dividends have been declared, of \$4 per share each.....	58,044.80

Applicable to reserved fund.....\$101,778.10

The reserved fund, with the exception of \$61,607.78 cash on hand, has been expended in road and outfit account, and for securities to be employed as a sinking fund. The company owes no floating debt. Of the bonded debt, amounting to \$225,000, \$26,000 has been purchased. As the balance of this indebtedness could not be purchased except at a premium, it was deemed best to make the outfit complete, and invest the remaining surplus in such securities as may be converted when the privilege of paying the bonds accrues, which will be in July, 1857. By a clause in the bonds, the company may redeem them at any time after July 1, 1857, and before their maturity, which will be in July, 1862, by giving six months' notice. With the means already provided and the rapidly accruing surplus, the balance of the bonded debt amounting to \$199,000 can be easily controlled. The stockholders have been paid half-yearly interest, at the rate of seven per cent. from the date of payment for their stock, to the time when the road was completed, and since the completion of the road they have received half-yearly dividends at the rate of eight per cent. As the company has no floating debt, and the bonded debt can be easily met, it has become a subject of inquiry among the stockholders as to the proper disposition of the large surplus profits, which have accumulated from net earnings; and which have been mostly appropriated to road and outfit

and may be legitimately represented by stock in whole or in part. The Directors recommend that the stock should not be raised beyond a prudent limit, but should remain a reliable eight per cent. stock, with ample reserved fund for renewal and contingencies.

The gross receipts have been \$27,047.50, and the net profit from the operations of the road, \$12,586.99 more than last year; while the net profits, including interest account, have increased \$21,763.89. The current expenses of working the road have been 37½ per cent. of the gross receipts—being an increase of 1½ per cent. over the ratio of expenses for the previous year. This increase is mainly owing to the doubling of the daily passenger trains, requiring twice as many engines, and a proportionate increase in cars and employees. The item of maintenance of way, includes the cost of 18,000 new cross-ties, which were ordered to replace those rendered unsafe by decay. By the opening of the Opelika Branch, this road has obtained all the travel and most of the freight between Atlanta and Columbus, while at the same time the competition of another route from Montgomery to the seaboard has deprived it of some business which it would otherwise have had. The present equipment of the road consists of 13 locomotives, 6 passenger, 2 baggage, and 105 freight and platform cars and a good supply of gravel cars. Two additional passenger cars have been ordered, and the company has in process of construction, by Messrs. Rogers, Ketchum & Grosvenor, of Paterson, N. J., a new locomotive engine, which is expected to arrive about the first of October.

The company have built, during the past year, a new engine house at West Point, and measures have been taken to replace the freight houses at Palmetto and Grantville, which are fast becoming unfit for use. The Superintendent recommends the enlargement of the engine house and shops at Atlanta, which are also used by the Georgia Railroad and Banking Co., and a passenger house at West Point for the joint accommodation of this and the Montgomery and West Point railroad, the expense to be shared by the two roads.

The frequent obstruction of the track by cattle has induced the company to commence a system of fencing, by which, it is hoped, a recurrence of accidents from that cause will be prevented in future. It is also recommended that the trestle bridges at the crossings of the Yellow Jack, Beach and Flat Creeks be rebuilt, in the same or a more permanent manner.

The following is the report of the Treasurer for the year ending July 1, 1856:

To the road and its outfit—including	Dr.
real estate.....	\$1,145,939.44
Interest and dividends.....	268,176.25
Road expenses.....	306,956.72
Bills receivable.....	51,765.64
Suspense acc't.....	483.25
Balance cash on hand.....	61,607.78
	\$1,834,923.08
By capital stock paid in.....	Cr.
Co. bonds.....	\$725,560.00
Income from road from March 1, '51,	199,000.00
to July 1, 1856.....	909,703.80
Rents of real estate.....	581.70
Due individuals.....	132.58
	\$1,834,923.08

Connection of the Illinois Central Railroad with the Canal Basin.

The long talked of connection of the Illinois Central railroad with the southwestern terminus of the Illinois and Michigan canal at this place, has at length become a fixed fact. The City Council and the company have finally come to an understanding with each other, and the connection is to be made immediately—the track having been already surveyed and laid out. The side track leaves the main trunk at a point about 150 feet from the present depot building, winds around the Rock Island road near the first railroad bridge.

This is an important event for our city, as well as for the company itself. The direct connection of this road with the canal, is but the carrying out of the requirements of the charter of the former, and will at the same time add largely to the revenues of both these great works; in the prosperity of each of which our State Treasury is directly interested. All that La Salle now requires, to place her as a business point second to none in the State but Chicago, is the improvement of the Illinois river, and the rendering of the navigation of that stream reliable the season through. There is good reason to believe that this event is in a speedy way of accomplishment.

Then, as head of navigation of one of the most important navigable streams of the Union; as the terminus of the great canal which connects the waters which flow into the Gulf of St. Lawrence with those which empty into the Gulf of Mexico; as the terminus both of the great Central railroad and its Galena branch; connected by the Rock Island road with Lake Michigan and the Mississippi river; the centre of a coal basin which will yet yield its millions of tons per annum, and of an agricultural country unsurpassed in the world,—who but must predict a glorious future for La Salle?—*La Salle Press*, 13th.

Locomotive for the Hempfield Railroad.

The Taunton Manufacturing Company, of Taunton, Massachusetts, have placed upon the Philadelphia and Baltimore Railroad, a beautiful coal burning locomotive called the "Virginia." It is intended for the Hempfield Railroad, but will be run on the Philadelphia road for a few weeks to show its superiority as a coal burner. It is supplied with Dimpfel's boiler. It weighs 24 tons, and the entire workmanship connected with it is beautifully finished, and at the same time very substantial. The scarcity and high price of wood on most of the railroad routes, make the question of coal burning locomotives a very interesting one to Railroad Companies, and the builders of engines seem to be devoting their talents and energies to produce a boiler which will answer the purpose perfectly.

Chicago to Liverpool.

The Dean Richmond, with a full cargo from Chicago, direct for Liverpool, sailed from hence yesterday morning for Liverpool. When she arrives at the latter port, she will have made one of the most extraordinary voyages which any vessel has ever made. She will have passed through four immense inland seas—the largest in the world—from the bottom of Lake Michigan, through Lakes Huron, Erie, and Ontario. She will then have descended a river for nearly five hundred miles, and will then have crossed about three thousand miles of the ocean. But what is most worthy of remark is, that from fifteen hundred to two thousand miles of this navigation—for we are not referring to any authority for exact measurements—has been made in an inland navigation, separated from the ocean by the most extraordinary natural barriers, including the Falls of Niagara, all of which have been made capable of being passed by a vessel large enough to sail the Atlantic by artificial means, employed by a comparatively obscure colony of about 2,000,000 of population.—Four great ship canals had to be passed before the fresh water craft could float on salt water.—*Montreal Herald*, Aug. 16.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	1,533,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.				
Androscog. & Kennebec	55	538,042	1,022,905	2,210,947	209,476	110,247	none	10	South Western	92	1,097,490	466,500	1,624,920	253,306	141,168	8		
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600		112,491	8	86 1/2	Tennessee and Alabama	50	246,480		679,906	In progr.				
Portland, Saco, & Portsmouth	51	1,367,000	119,237	1,486,327	270,214	120,834			Tennessee and Macon		170,981		175,740	In progr.				
Boston, Concord, & Montreal	93	1,808,093	1,059,512	2,771,510	233,234	143,505	2	15	Memphis and Charleston	217	2,179,440	2,127,002	4,028,796	311,681	169,872			
Cheshire	53	2,085,925	899,313	3,170,687	380,221	134,454	6	74 1/2	Mobile and Ohio	153	2,658,555	1,502,921	4,536,412	199,932	109,236			
Concord	35	1,500,000	8,242	1,412,676	335,919	134,454	6	74 1/2	Miss. Central	189	644,584	none	629,308	In progr.				
Northern, N. H.	82	2,768,400	none	3,016,633	370,529	138,299	2 1/2	39 1/2	N.O. Opelousas & G.W.	65	2,930,225	671,465	2,657,568	In progr.				
Conn't & Passumpsic Riv.	61	1,048,146	787,608	1,780,062	162,697	65,173	none	4	Vicksburg, Shreveport, & Tex.	111	1,177,000	none	1,077,598	In progr.				
Rutland & Burlington	120	2,233,376	2,662,396	5,275,428	394,971	214,793	none	1 1/2	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.				
Vermont Central	117	5,800,000	3,550,236	5,463,266	489,754	140,377	6		Nash. and Chattanooga	10	625,425	988,568	1,033,781	In progr.				
Boston and Lowell	27	1,900,000	925,635	2,185,696	489,754	140,377	6	74 1/2	Govington & Lexington	98	1,302,804	2,235,939	3,738,753	264,973	138,694			
Boston and Maine	83	4,076,974	150,000	4,176,535	50,917	8,740	none	10	Lexington and Franklin	29	430,054	168,099	637,071	93,263	43,635	6		
Boston and N.Y. Central	74	2,240,300	1,613,671	3,463,918	50,917	8,740	none	63	Lexington and Danville	66	694,444	627,734	747,178	In progr.				
Boston and Providence	65	3,160,000	359,132	3,677,154	558,671	219,689	none	81	Louisville and Franklin	254	806,939	77,294	613,231	In progr.				
Boston and Worcester	68	4,600,000	980,593	907,252	119,221	65,527	3	49 1/2	Bellevue and Ind.	118	1,881,636	2,029,925	2,862,862	298,293	140,823	none		
Cape Cod	47	681,690	273,241	1,802,244	286,653	103,787	5 1/2	40	Clev., Col., and Cin.	141	4,547,020	122,857	4,618,722	1,290,295	732,066	9	101 1/2	
Connecticut River	60	2,683,400	2,047,737	4,021,016	647,281	305,998	none	66 1/2	Cleveland and Toledo	200	2,076,425	2,689,301	5,124,626	736,272	396,986	10	73 1/2	
atton, Mass.	60	3,540,000	138,700	3,765,998	681,163	225,071	none		Clev. and Mahoning	103			928,533	In progr.				
atburg	30	800,342	245,585	988,621	198,491	65,533	6 1/2		Clev. and Pittsburg	123	2,780,744	3,043,992	6,537,466	581,877	309,818	66		
North-Eastern	57	1,015,000	202,650	3,362,949	683,499	295,738	6	83	Cin., Hamlin & Dayton	60	1,553,900	1,821,213	2,987,757	508,271	278,012	64		
N. Bedford and Taunton	57	3,150,000	1,093,670	3,209,727	286,726	87,313	none	6 1/2	Cin., Wilm., & Zanesville	131	1,120,450	1,181,265	2,326,459	In progr.				
Old Colony and Fall River	77	2,232,541	5,960,420	10,495,090	1,869,673	633,013	7	88 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,733	356,366	187,518	10	12	
Vermont and Mass.	155	5,101,000	205,565	1,521,271	294,780	76,760	2	44	Dayton, Xen., & Belpre	63	437,838	422,658	860,496	In progr.				
Western, Mass.	43	1,141,000	338,481	1,806,696	311,430	138,057	70		Dayton and Michigan	140	1,076,902	893,011	1,185,826	In progr.				
Worcester and Nashua	43	1,101,020	989,000	3,318,932	730,012	352,799	10	23	Dayton and Western	35	310,000	500,000	733,769	In progr.				
Providence and Worcester	72	2,356,000	2,040,665	4,000,869	258,685	119,611	none		Easton and Hamilton	42	454,690	904,489	1,156,135	171,929	65,000	20		
Hartford and N. Haven	122	2,008,110	414,240	2,431,773	339,196	71,427	none		Little Miami	65	2,983,921	1,171,785	3,648,172	681,562	336,708	89		
Hartf'd, Prov. and Fishkill	67	1,031,800	524,244	1,580,723	220,459	93,768	none		Mad River and L. Erie	206	2,451,650	2,572,932	4,446,661	In progr.				
Housatonic	62	3,000,000	2,876,803	5,376,803	884,306	338,877	none	25	Central Ohio	138	1,620,927	3,485,076	4,283,443	Recently opened.				
N. York and N. Haven	60	738,258	735,165	1,450,818	88,007	30,318	none		Ohio and Penn.	187	2,451,700	3,219,090	6,670,700	1,111,626	662,117	9		
N. Haven and N. London	66	509,200	1,073,673	1,594,833	124,044	66,430	none		Pittsburg, Mayfield & Cin.	50	371,350	31,000	399,933	In progr.				
N. London, W. & Palmer	68	2,122,300	873,489	2,997,153	304,236	88,458	2 1/2	25	Sandy, Manat. & Newk.	127	1,350,000	2,206,357	3,562,357	328,958	164,479	none		
Norwich and Worcester	32	439,005	1,625,098	1,840,695	117,716	9,904	none		Scioto & Hocking Valley	135	403,975	500,000	888,858	In progr.				
Albany Northern	35	643,330	317,859	974,823	In progr.				Spring, Mt. Vernon & P.	113	1,000,000	960,000		In progr.				
Black River and Utica	100	1,487,871	1,501,183	2,819,096	172,476	66,333	none		Tol. Wabash & St. Louis	242	2,500,000	4,530,000		In progr.				
Buffalo, Conn. and N. Y.	92	798,439	2,567,849	3,401,868	288,392	31,896	none		Cin., Log. & Chicago	256	4,196,679	1,006,125	2,080,433	In progr.				
Buffalo and N. Y. City	90	1,300,000	1,040,000	2,494,864	679,750	355,763	10		Evansville & Crawfordsv.	109	706,945	1,177,959	1,844,541	127,400	64,552			
Buffalo and St. Line	47	434,111	922,393	1,275,796	174,089	69,506	none		Ind. and Cincinnati	88	1,213,723	1,442,869	2,736,461	556,012	127,400	7	60	
Canandaigua & Niagara F.	95	1,315,000	2,279,854	3,495,832					Indiana Central	66	611,400	1,261,179	1,907,911	350,176	134,376	50		
Cayuga & Susquehanna	144	3,756,466	2,309,362	12,737,898	1,812,087	603,946	none	28	Ind., Clev. & Pittsburg	83	826,828	1,099,400	1,831,225	226,058	93,010	none		
Hudson River	95	1,875,145	668,949	2,555,986	301,793	116,462	none	20	Jeffersonville	60	1,014,252	694,000		206,844	94,318	none		
Long Island	534	24,154,860	14,462,742	38,523,913	5,663,581	3,102,126	8	85 1/2	Madison and Indianapolis	87	1,647,700	3,336,816	1,205,000	288,146	112,880	none		
New York Central	404	10,023,968	25,126,669	33,439,431	5,488,993	2,627,118	none	88 1/2	New Albany and Salem	288	2,635,121	5,281,438	6,643,189	645,827	371,402	none		
New York and Erie	138	6,717,100	4,069,769	8,758,203	1,335,677	234,126	none	15 1/2	Penn. and Indianapolis	73		588,314		150,000	90,000	none	16 1/2	
New York and Harlem	118	1,633,022	4,069,874	6,470,714	620,153	135,754	none	1 1/2	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10		
Northern, N. Y.	35	399,000	216,681	723,683	126,540	59,982	3 1/2		Chicago and Rock Is'd	182	3,141,000	237,155	5,214,162	In progr.				
Oswego and Syracuse	29	467,200	294,189	749,683	In progr.				Chicago and St. Louis	220			1,077,312	In progr.				
Potomac and Watertown	35	610,000	140,000	806,423	241,149	82,600	7		Chicago, Burl. and Quincy	58	1,430,100	1,684,736	2,884,622	722,580	379,821	20		
Potomac & Saratoga	25	500,000	395,600		71,909	21,089	none		Central Military Tract	88	1,202,500	1,138,050	2,920,241	471,399	219,588			
Saratoga and Whitehall	40	768,389	1,578,804	2,272,777	159,494	22,503	none		Chie. St. Paul & F'd do Lac.	178	2,300,000	1,325,000	3,625,000	In progr.				
Syracuse & Binghamton	27	487,830	377,079	1,109,422	156,363	55,184	none		Galena and Chicago	259	5,441,500	3,318,039	7,742,614	2,315,786	1,192,042	22	107	
Troy and Boston	94	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	77	Illinois Central	627	2,271,060	19,416,392	20,374,446	1,532,118	527,962			
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,634	none		Peoria and Ottawa	93	669,889	812,454	1,388,342	In progr.				
Watertown Delaware	94	3,000,000	11,407,300	8,636,523	201,127	961,941	12	124	Ohio & Miss. (Wst. Div.)	147	1,780,295	8,292,403	4,870,588	Recently opened.				
Camden and Amboy	60	369,350	1,522,181	1,729,842	122,417	60,080	none		Terre Haute and Alton	178	2,281,420	1,256,000	8,587,424	In progr.				
Camden and Atlantic	30	3,482,850	690,000	4,310,111	861,514	500,747	10	121	Detroit and Milwaukee	185	838,000	1,128,994	1,966,989	In progr.				
New Jersey	63	2,000,000	2,268,176	3,683,149	393,728	171,608	none		Mich. Central	282	6,032,444	5,996,013	10,698,156	2,216,283	879,666	10	90 1/2	
New Jersey Central	63	1,157,805	375,000	1,036,550	229,341	96,267	6		Mich. South'n & N. Ind.	476	6,928,900	6,819,224	11,645,208	2,410,000	875,000	10	88 1/2	
Morris and Essex	44	1,637,867	342,564	1,988,317	Recently opened.				Green Bay, Mil. & Ch.	155	764,075	442,726	1,193,706	In progr.				
Allegany Valley	63	1,700,000	1,940,000	3,640,000	219,253	62,450	none		Milwaukee and Miss.	106	1,820,428	2,677,899	3,578,757	691,843	417,443	17	74	
Cataw. Wil. & Erie	56	1,099,500	12,211	1,191,833	146,381	66,994	none		Milwaukee & Watert'n	72	354,861	132,000	514,238	In progr.				
Coneland Valley	109	3,051,622	3,884,702	6,022,667	628,911	239,263	6	80	Milwaukee and Horicon	16	654,200		854,109	In progr.				
Del. Lack. & Western	206	600,000	150,000	750,000			10		Milwaukee & La Crosse	61	1,351,832	532,131	1,883,963	In progr.				
Erie and North East	33	600,000	1,200,000	1,348,812	89,538	53,335	none		Racine and Miss.	47	921,906	380,715	1,289,321	In progr.				

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$638,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	97 1/2	97 1/2
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east sec.	7	March, Sept.	"	1861-64	82	85
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1866	71	72 1/2
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1868	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	70	77 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	86
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861	91	96
Cleveland and Pittsburgh	900,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	63	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Gaens and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	94 1/2	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	93	95
Jeffersonville	300,000	Do. 2d sec. conv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	81
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconvertible	6	2 May, 2 Nov.	"	1863	80	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100 1/2	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	102	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	95	96 1/2
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	95	95
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	88	88
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	88	88
Northern Cross	1,300,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	86	86
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79 1/2	79 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	98 1/2	98 1/2
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	85	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71 1/2	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1865	86 1/2	87
Do. do.	1,128,500	Do. do.	6	Jan'y, July	Balt.	1875	87 1/2	87 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan'y, 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104 1/2	106 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	94	96
Do. do.	6,000,000	3d mortgage, convertible	7	March, Sept.	"	1863	95 1/2	96 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	92 1/2	92 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86	86 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98 1/2	99
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	86	86 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	66 1/2	67
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90 1/2	91
Do. do.	3,000,000	M'gs 345,000 acrs.-priv. 7 shars	7	March, Sept.	"	1860	97	100
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1869	92	95
New York and Harlem	1,000,000	Do. do.	7	May, Novemb.	"	1861-72	80	84
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	80	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	90 1/2	91
Do. do.	1,500,000	Do. do.	7	Feb'y, August	"	1868	84	84 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89 1/2	90
Do. do.	3,000,000	No m'gs conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	100	102
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	100	102
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88	90
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88	90
Do. do. 1849	3,468,000	Do. inconvertible	6	April, October	"	1870	86 1/2	87

CITY SECURITIES.	Int'l payable.	Off'd.	Asked.	CITY SECURITIES.	Int'l payable.	Off'd.	Asked.
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	Divers	80
Do. 5 do. 1858-60	May,	95	97	New Orleans, 6 per ct. p. R.R. X	Do.	Do.	77
Do. 5 do. 1870-75	August, and	95 1/2	97	N. Orleans, 6 per ct. p. municip. X	Jan'y, July	83	86
Do. 5 do. 1890	November,	94 1/2	95 1/2	Philadelphia, 6 per ct. 1876-98	Jan'y, July	89	90
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	97	100	Pittsburgh, 6 per ct. coup.	X	Divers	74
Alleghany, 6 per ct. coup. X	Jan'y, July	96	97	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	85	85
Baltimore, 6 per ct. 1879-90	Quarterly,	97 1/2	98	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	85
Boston, 5 per ct. coup. X	April, October	97	99	Rochester, 6 per ct. coup. X	Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	100	100 1/2	St. Louis, 6 per ct. coup. Long X	Do.	78	79
Clev'rd, 7 per ct. p. W.W. 1879 X	Do. do.	101	103	Do. do. Municipal X	Do.	80 1/2	81 1/2
Cincinnati, 6 per ct. coup. X	Divers	87	89	Sacramento, 10 p. ct. p. 1862-74 X	Do.	71	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	80	80	S.F. & P. 10 p. ct. p. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. p. 1871 X	Do. do.	95	95
Detroit, 7 per ct. p. W.W. 1873-78 X	Feb'y, August	100	102 1/2	Do. 10 p. ct. pay. N.Y. 1875 X	Jan'y, July	82	87 1/2
Elmucue, 8 per ct. p. Long X	March, Sept.	101 1/2	101 1/2	Do. 6 per ct. p. N.Y. 1875 X	Do. do.	82	87 1/2
Jersey City, 6 per ct. p. W.W. 1877 X	Jan'y, July	91	96	Wheeling, 6 per ct. coup. X	Divers	87	87 1/2
Louisville, 6 per ct. p. 1880-83 X	Divers	78 1/2	80	Do. 6 p. ct. p. Maa. 1874 X	March, Sept.	81 1/2	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	65	70	Worcester, 7 do. X	April, October	97 1/2	97 1/2

Cincinnati Stock Sales,
By KIRK & OHEVER.

For the week ending August 26th, 1886.

BONDS.

	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	85
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	48
Indianapolis & Cin., 2d Mort. 7 per ct.	82 1/2
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	82 1/2
Hillsboro' and Cin., 7 per ct. 1st Mort.	47
Covington & Lexington, 10 per ct. Income	54
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	85
Do. do. do. due July 1, 1866	85
Little Miami, Dividend Scrip. issued June, 1856	79

Bellevue and Indiana, 25.—Cin., Ham. and Dayton, 65.
—Col. and Xenia, 82.—Cincinnati, and Obre., 8 1/2.—Covington & Lexington, 14.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 58.—Little Miami, 89.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 15.—Ohio and Mississippi, 6.—Hillsboro' and Cincinnati, 15.—Peru and Indianapolis, 14.—Cincinnati, Wilm. and Zanesville, 12.

By HEWSON & HOLMES.

For the week ending August 27th, 1886.

BONDS.

\$4,000 Little Miami, 6 per ct. 1st Mort.	80
8,000 Covington & Lex., 6 per ct. 1st Mort.	70
8,000 " " " 2d " "	68
5,000 Hillsboro' and Cin., 7 per ct. 1st Mort.	45 (& int.)
1,300 Columbus & Xenia, Dividend, 7 per cent. due in 1860	90
2,000 Ohio & Miss. 7 per ct. 2d Mort.	47 1/2
1,550 Ind. & Cin. 7 per cent. Dividend	75
916 Cleveland and Pittsb., Dividend Scrip.	60
1,000 City of Cincinnati, 6 per cent.	90
697 Little Miami, June, 1856, Dividend Scrip.	80

STOCKS.

80 Shares Little Miami	89
200 " Marietta and Cincinnati	18 1/2
150 " Danville and Newcasle	5
80 " Covington and Lexington	14
5 " Cin., Ham. and Dayton	65
20 " Dayton and Western	17 1/2
50 " Mad River and Lake Erie	13
100 " Cin. & Chicago	4
250 " Ohio & Mississippi	5 1/2
37 " Do. do.	6
100 " Do. do.	5 1/2
24 " Indianapolis and Cincinnati	66
65 " Eaton & Hamilton	20
50 " Indianapolis and Bellefontaine	20

Extract from De Coppel & Co.'s Money Circular for the European Steamer of the 2d inst.

[TRANSLATED.]

NEW YORK, Tuesday, Sept. 2, 1886.

The character of our stock market is not much changed since our last advices of 25th August.—The weekly returns of our Banks show a gradual contraction of loans and discount. There is a moderate increase to-day in the demand for money, which, however, is not difficult to procure, and the rates of discount are without material alteration. While all the inactivity already noticed continues to prevail, the amount of business is limited; what is done is restricted to a limited circle of operators, and with the exception of three or four securities, there is a general weakness in prices. It seems evident that a principal cause of this state of things is to be found in a vague fear of the propagation to this city of yellow fever, which since nearly two months has made its appearance in the neighborhood. The city has remained up to the present time unusually healthy for the season, but right or wrong the effect of this fear is to induce every one to abstain entering upon new engagements.

State Stocks.—There has been a fair business done in Virginia 6s, at a decline of 1, and in Kentucky 6s; Missouri 6s have advanced 1 1/2 per cent., with large transactions; they are in active demand for the Sinking Fund of that State, which has furnished means to about \$1,500,000 to \$1,700,000. City and County Bonds.—The only transactions of any amount to notice are in St. Louis County 6s at a fraction decline. Railroad Bonds.—Erie 7s of 1859 and 1863, and Illinois Freehold Bonds, are quoted, ex-interest 1st September.—There has been some demand for Erie 7s, 1875 without alteration of price. The dealings in Illinois Central Construction have been moderate at 7 1/2 decline. Besides this, transactions, as well as the Stock Exchange as privately, are insignificant. Railroad Shares.—With small transactions, Chicago and Rock Island have risen 1 1/2, and Pan-

ama declined $4\frac{1}{2}$ per cent. In other shares a moderate decline has been general. There was a fair amount of business in Erie down $\frac{1}{2}$, in Reading down $\frac{1}{2}$, and in Cleveland and Toledo and New York Central without material alterations. Money remains in good demand at 7 for call loans. Paper is less freely offered at 8 $\frac{1}{2}$ according to class and length. DE COPPET & CO.

Marle & Kanz' Money Circular for the European Steamer of the 3d inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, Sept. 2, 1856.

The past week commenced with marked activity and firmness, but during the last few days the market has relaxed again into its former dullness, closing with a downward tendency; the indisposition on the part of capitalists seems to prevent the market from receiving any lasting impetus towards a rise.

Most of the leading speculative stocks show a decline, which in Reading and Panama is quite important, while Western road shares exhibit more steadiness, and in several instances even an advance.

Investment Stocks, with few exceptions, are very firm, though the purchases have been small for home demand, and even for European account, the orders from that source having proved very limited. Money has continued without change.

State Stocks has been dealt in to some extent, especially Missouri, in which purchases for the Sinking Fund have been made, causing an advance of $1\frac{1}{4}$ per cent. Kentucky 6s sold also at an advance of 1, while Virginias declined $\frac{3}{4}$. California New Loan sold first at 75, later again at 70.

City and County Bonds—About \$50,000 St. Louis County Bonds were sold at a slight reduction, other bonds inactive.

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 3d inst.

NEW YORK, Tuesday, September 2d, 1856.

The improved tone of the Stock marked noticed in our last report of the 19th ult. continued for some days, but during the last week the tendency has been towards renewed dullness, and the course of prices rather irregular. Money continues in active demand, and there is a perceptible decrease in the supply, which, although not so decided as to advance the rates of interest, is still sufficient to induce holders of stocks to sell freely, while from the same cause the disposition to purchase is materially diminished. The orders from Europe by the late steamers have been very limited, and the rather unfavorable advices regarding money matters in London have added to the existing dullness. The favorable character of the recent bank statements and decreasing shipments of specie are, however, regarded as encouraging features, and have the effect of sustaining prices to some extent.

For State Stocks there is a fair demand. Considerable sales of Virginia 6s were made at 93 $\frac{1}{2}$, but they have since had a downward tendency, and the closing quotation shows a decline of 1 per cent. during the fortnight. Missouri 6s have advanced two per cent. There have been sales of Kentucky 6s at 102 $\frac{1}{2}$ to 103; Tennessee 6s at 92; Ohio 6s, 1870, at 105, and 1875, at 107; Louisiana 6s, at 92, and Indiana 5s at 82 $\frac{1}{2}$ to 83 $\frac{1}{2}$. It is stated that funds for payment of the California State interest, due 1st July last, will be received by the next mail from San Francisco.

The market for City and County Bonds continues quiet, and we have no change in prices or important transactions to notice. Some small sales of New York City 6s of 1859 have been made at 97. In Railroad Bonds the transactions for the fortnight have been limited. New York Central 6s are firm, and have sold at 90. Of the 7 per cent., the Convertibles have been sold at 102 $\frac{1}{2}$ to 103 $\frac{1}{2}$, and the new issue at 100 $\frac{1}{2}$ to 101. Of Erie Railroad Bonds there have been small sales at 99, with coupon due 1st inst., for 3d mortgage, 92 $\frac{1}{4}$ for

Sinking Funds, and 86 $\frac{1}{2}$ for Convertibles of 1871. Illinois Central Construction Bonds have sold to a moderate extent at 90 $\frac{3}{4}$ to 91 $\frac{1}{4}$, closing at about former rates. Free Land Bonds are scarce, and the last sales were at 103 $\frac{1}{2}$ with, and 94 without privilege, with coupons due 1st inst., an advance of 3 per cent. on each. Railroad Shares, after a general slight improvement, have, in most cases, receded to the prices current at the date of our last report. The principal exceptions are, a decline of 1 per cent. in Reading, and 3 in Panama, and an advance of 1 in Cleveland and Toledo, 3 in Chicago and Rock Island, $1\frac{1}{4}$ in Michigan Southern, and $1\frac{1}{2}$ in Michigan Central Railroad. Of New York Central Railroad, there have been considerable sales at 85 $\frac{1}{2}$ to 86 $\frac{1}{4}$, closing at 85 $\frac{3}{8}$, and of Erie Railroad at 58 $\frac{1}{2}$ to 60 $\frac{3}{4}$, closing at 58 $\frac{1}{2}$. Illinois Central Railroad Shares have sold at 109 $\frac{1}{4}$ to 109, and the rights at 114 $\frac{1}{2}$ to 113 $\frac{1}{4}$. The exports of specie for the two weeks ending 30th ult., were \$1,296,971, and the receipts of gold from California for the same time, \$1,465,157. Although the supply of money is less abundant, loans on call are still readily obtained at 7 per cent., and first-class paper discounts at 8 $\frac{1}{2}$ per cent. The market for foreign exchanges is firmer.

Below we give an extract from the circular of ROBT. BENSON & CO., received per the steamship Persia:

Very little of interest has occurred during the past week. Money has been more plentiful, and the greater ease has been more marked to-day than in the early part of the week. In the general discount market the rates are a little under the minimum charge of the Bank of England, and for short loans on securities the extreme rates of interest can scarcely be obtained. The weather during the whole week has been very unfavorable for our harvest. This has checked the more buoyant tone of feeling that might otherwise have been looked for in our stock market, which has generally been very inactive during the week.

Consols have remained almost stationary, and we to-day quote them at 95 $\frac{1}{2}$ to 95 $\frac{3}{4}$ for money, and 95 $\frac{3}{8}$ to 95 $\frac{1}{2}$ for 10th Sept.

We have not heard of any transactions in United States or State stocks. In railroad bonds there has been some business, but generally at rather low prices. There have been transactions in Pennsylvania 1st mort. bonds at 90 $\frac{1}{4}$, and 2d mort'ge sterling bonds at 96. Erie 3d mort. at 87 $\frac{1}{2}$ to 87 $\frac{3}{4}$, ex-coupon, and the sinking fund bonds at 84 $\frac{1}{2}$. Michigan Central 1869 bonds at 91 $\frac{1}{2}$ ex-coupon, and the bonds of 1860 at 94 $\frac{1}{2}$. Michigan Southern and Northern Indiana sinking fund bonds at 81. Illinois Central 6s bonds at 83 $\frac{1}{4}$ (4s. 2d per \$1); 7s at 84 $\frac{1}{2}$, and the Free Land bonds at 93 with privilege. The shares of the company have been sold at 5 $\frac{1}{2}$ premium.

Chicago, St. Paul and Fond du Lac R. R.

The Chicago, St. Paul and Fond du Lac Railroad is now completed, and in operation from Chicago to Janesville, where it forms a connection with the Milwaukee and Mississippi road, thus opening a new avenue for trade and travel into the heart of Wisconsin.

Railroad Earnings.

The receipts of the Hudson River railroad for August, 1856, were.....\$151,120 44
August, 1855.....149,688 11

Increase.....\$1,432 33

Comparative statement of receipts of the Great Western (Ca.) R. R., for four weeks ending Aug. 29, 1855-'6:—

	1855.	1856.
Passengers.....	\$94,654 40	\$124,788 46
Mails, &c.....	5,094 10	6,339 58
Freight.....	35,364 03	53,696 79
	\$135,112 53	\$184,824 83
		135,112 53

Increase in 1856.....\$49,712 80

The earnings of the Terre Haute and Richmond railroad were:

For July, 1856.....\$39,857 95
For July, 1855.....17,928 55

Increase (nearly 125 per cent.).....\$21,929 40

American Railroad Journal.

Saturday, September 6, 1856.

Milwaukee and Horicon Railroad.

The sale of the Bonds of this company advertised for Monday last, was not proceeded with. Only 10,000 were sold, at from 70 to 71.

Prices of Railroad Securities.

Although the market value of railroad securities of all kinds has for a long time been, and still remains at very low figures, there is now no doubt that their real value is, and has for some time past been steadily improving. Taking earnings as a test of prices, the latter should have advanced very largely. The earnings of our railroads generally, exceed nearly thirty per cent. those of the past year, while the rapid progress of the country, and the tendency of its internal commerce to take the railway in preference to any other mode of conveyance, give promise of an equal ratio of increase for some years to come. After the construction of a railroad, some time must elapse before the business of the country can leave the old channels and modes of transportation for the new; and still longer time before new business which in the end becomes the chief source of income, can be developed. The public, therefore, have become discouraged with many lines of road on account of the unpromising commencement of their operations, which is aggravated still more by the necessity of applying all the earnings toward the completion of the road, or the payment of floating debts. The process we have described; very many of our roads have been going through; a process which has almost entirely discredited their securities, while in fact it has all the time been rendering them the more valuable.

With such a widely extended country, each portion of which is devoted to the production of a particular staple, and which must necessarily receive from other and distant sections, or from abroad, most of the articles that go into consumption, the gross earnings of our roads must be very large; sufficiently so, with good management to remunerate their cost. In fact there seems to be no complaint that the earnings of our roads are not all, and more than was expected, but that the stockholders derive no benefit from them. What has taken place, was to a certain extent inevitable, under the circumstances. But lapse of time is placing the finances of most of our companies in good condition and is teaching the proper management of their roads and developing their traffic. There is no doubt that they are managed vastly better than they were two or three years since. With rapidly increasing traffics, with gradual relief from their financial embarrassment, and with a wider experience in reference to their management, our railway securities are every day becoming more valuable. This fact must in time tell upon prices, though we must not expect to witness any very rapid improvement.

The Locomotive.

No. 7.

By THEODORE KRAUSCH, *Civil and Mechanical Engineer.*

We come next to consider the water scale, a contrivance necessary to the security of the boiler. This arrangement is designed to indicate with accuracy the *niveau* of the water volume.

The influence of a constant water line on the production of steam as well as the danger resulting if that line be too low, have already been mentioned. To secure the former, and to guard against the latter condition is the object of this scale.

The most simple arrangement in use and the most common is a set of gauge cocks, 3 or 4 of which are screwed into the boiler iron; the first, indicating the lowest water line, at about 3 inches above the crown sheet of the fire box, while the others are placed above at distances apart of from 1½ to 2 inches, as the quantity of water used or the proportions of the boiler may demand.

This scale is reliable if the water boil tranquilly, but where its agitation is considerable as in the case of high pressure boilers and especially the locomotive, its application is decidedly dangerous, since, under such circumstances water will be ejected at nearly every cock when opened. At best only the lowest and highest water line can be determined.

Another arrangement is the transparent gauge; a glass tube, of which the upper end communicates with the steam while the lower is in connection with the water volume in the boiler. The advantage of this scale is the accuracy of its indications; the agitation of the water in the tube is slight, but the brittleness of the glass forms a difficulty in the way of its general use. The best gauge would, of course, be one in which we possessed this advantage without the objectionable feature; this has been accomplished by a simple expedient, which is a rectangular brass tube having an oblong opening on one side, to be covered by two plates of strong glass. The ends communicate with the interior of the boiler as in the case before mentioned. Thus while the indications are correct, the construction is compact and cheap and the cock is rendered unnecessary. All danger from the brittleness of the glass is practically obviated because the inside plate cannot be affected by the temperature of the atmosphere.

We have now discussed those parts of the locomotive connected with the security of the boiler; we come next to consider those features that relate to the combustion of fuel and therefore to the production of steam. The grate, the tubes, the chimney, and the blast pipe; each affects the other to such a degree that, if each one should be taken as a separate subject, an independent illustration would be impossible.

Let us regard for a moment the process of combustion and the properties of the different kinds of fuel which are used to transform the water into steam.

In combustion, there ensues a rapid intermingling of the gases of the fuel with the oxygen of the atmosphere. This fuel, for locomotives, may be wood, coal, coke, or peat, the carbon from which is the principal element of combustion. And the heat is produced as soon as this gas eliminates the oxygen of the atmosphere which contains of it 23 per cent. The fuel may contain an

extraordinary quantity of hydrogen, in which case it forms an element in estimating its capacity for generating caloric.

The remainders, more or less, resulting from combustion, consisting of the ashes and some evaporated gases are, of course, a loss of caloric.

The *warming power* of any fuel, therefore, depends on the amount of combustible material but chiefly carbon it may contain.

The relative value of the different kinds of fuel named has been ascertained by eminent chemists to be as follows:

Perfectly dry wood yields.....	3,600 units of caloric.
Wood containing 20 per cent. of water yields.....	2,800 " "
Average coals.....	7,500 " "
Coke (clear).....	7,050 " "
Coke containing 15 per cent. ashes.....	6,000 " "

The quantity of oxygen necessary to the combustion of one pound of these materials may be stated as follows:

Perfectly dry wood.....	102 cubic ft.
Wood containing 20 per cent. water..	82 " "
Average coals.....	274 " "
Clear coke.....	227 " "
Coke containing 15 per cent. ashes..	250 " "

To supply the quantity of oxygen thus demanded, the fuel is placed upon an open grate, which allows the admission of the atmosphere. This grate is an arrangement of iron bars running parallel to the axis of the boiler, and placed at such distances apart as may be required by the fuel in use. Atmospheric air passes through the open space between the bars.

The force of the draft is determined by the quantity of fuel to be consumed in a certain time.

Locomotive engines are always provided with a contrivance for producing an artificial draft. In stationary engines, it is sufficient that we construct a high chimney for the escape of the smoke, the difference in weight between the escaping gases and a corresponding column of the atmosphere giving the velocity that constitutes the draft in this case. A little calculation will show how ineffectual this draft would be on the locomotive furnace. Suppose, for instance, we demand the production of 120 lbs. of steam per minute; then 45 pounds of wood must be consumed per minute or ¾ lb. per second. A pound of wood requires 82 cub. ft. of air for its proper combustion; hence $82 \times \frac{3}{4} = 61.5$ cub. ft. of air which must be drawn through the grate in one second of time. Let the grate surface be 16 sq. ft.; the area of the air space will be about 8 sq. ft., and the air will pass through the grate with a velocity of 7.7 feet per second. This velocity will be increased when the air has been heated in the fire by which it is expanded at the rate of 1.270th of its primary volume for every degree (centigrade scale) of heat.

If now the boiler enclose steam of 7 atmospheres' pressure, the temperature of which is 166.45°, we may assume with certainty that the temperature of the air passing through the tubes will be at least the same. The primary volume of air, therefore, increases an amount equal to $\frac{61.5}{270} \times 166.45 = 37.95$ cub. ft. or 3-5th of its original space. Hence the velocity of its escape-

ment be proportionally increased. In addition to this source of increased velocity in the draft is to be noted the fact that the area of the tube cross sections amounts to only about one-half the air space of the grate and the area of the chimney way is still less.

To draw this increased volume through the contracted channel thereby increasing the velocity of its passage we have the ingenious design of Mr. HACKWORTH—the Blast Pipe.

Railroad Commissioner.

William J. McAlpine, Esq., has been reappointed Railroad Commissioner on behalf of the Railroad Companies.

Dayton and Michigan Railroad.

We learn that the iron for laying the track of the D. & M. R. R., to Sidney, has been purchased, paid for, and is now being delivered at Piqua. It is expected that the cars will be running to Sidney by the first of October at farthest. The whole line, we are assured, will be completed to Toledo, where it intersects the Toledo and Detroit Railroad, early next season. The company has ample means, and the requisite amount of enterprise to ensure the early completion of this important route.

The Dayton and Michigan road is now doing a prosperous business between Dayton and Piqua.

American Association for the Advancement of Science.

Below we give a very able and instructive paper read by Major Emory, before the American Scientific Association, giving a general description of the country lying between the waters of the Mississippi and the Pacific ocean. After referring to the boundary line between the United States and Mexico, Major Emory goes on to say—

In this respect it is fortunate that two nations which differ so much in laws, religion, customs, and physical wants, should be separated by lines marking great features in physical geography.—The boundary is embraced in the zone separating the tropical from the temperate and more northern regions. Here waters unite, some of which are furnished by the melting of northern snows, while those from the south are supplied from mountains watered by tropical rains. To the north of this zone the showers of the tropics cease to refresh the earth; and within it, all the flora and fauna which characterize the northern and temperate regions almost disappear, and are entirely supplanted by those of the tropics. It is, indeed, a neutral region, having peculiar characteristics so different as to stamp upon vegetable and animal life features of its own.

The most remarkable and apparent difference between this region and the States of the Union generally, and that which perhaps creates as much as any other one cause, the difference in its botanical and zoological productions, is the hygrometric state of the atmosphere. For while the plants and animals assume new forms in life, the crust of the earth, the soil and the rocks, are everywhere familiar and have many types—indeed, fac similes—over the rest of the American continent. It is very arid; but this is also the character of all the country north of the tropics and west of 100 degrees meridian of longitude, until you reach the last slope to the Pacific—a narrow belt seldom exceeding 200 miles in width, and sometimes not more than ten. The zone extending from the Gulf of Mexico to the Pacific, embracing the boundary, contains a large proportion of arid lands; yet this dry region is perhaps narrower on the line of the boundary than on any portion of the continent.

north of it within the limits of the United States, and is occasionally refreshed by showers in the summer season; and so far presents an advantage over the arid belt to the north.

A general description of the topographical features of the country along the boundary between the United States and Mexico—traversing the whole breadth of the continent—cannot be made comprehensive without presenting in the same view the great outline of the continent itself.

It is well known, the most extensive feature in the continent is the plateau or table land, which traverses this country from the unexplored region of the north to its southernmost extremity, ranging in width from five miles to one thousand, attaining its greatest elevation in the Andes of South America, its least elevation and breadth on the Isthmus of Panama and in Central America, and its greatest breadth about the parallel of 38 degrees north latitude. On the northern portion of the continent this plateau attains its greatest height in Mexico, where it is ten thousand feet above the level of the sea. Its lowest depression is along the line of boundary, about the parallel of 32 degrees north latitude, where it is about four thousand feet above the sea. Thence it ascends again and preserves an elevation varying from seven to eight thousand feet, to near the 49th parallel, where it is again depressed. This plateau, both in North and South America, occupies the western side of the continent, and is traversed by ranges of mountains, the highest peak of which in North America is Mount Elias, seventeen thousand feet above the sea; and in South America is Mt. Aconcagua, twenty-one thousand five hundred feet above the sea. The climatic feature in this plateau within the United States is excessive dryness and great changes in temperature between day and night, often as much as 65 degrees of Fahrenheit.

The principal ranges of these mountains in North America, naming them in the order of their proximity to the coast of the Pacific ocean, are—first, the Cordilleras of California and Oregon, or the coast range of mountains. Second, the Sierra Nevada, (which, as its name denotes, is a ridge of mountains and craggy rocks covered with snow.) Third, the Sierra Madre, another range of mountains, which were supposed to separate the water flowing into the two oceans. And, fourth, the Rocky mountains.

The idea conveyed by the name, Sierra Madre, is very generally adopted by the Mexicans; yet I doubt very much if any continuous ridge or chain of mountains can be found which separates the waters flowing into the Pacific from those flowing into the Atlantic. I am also quite well satisfied that the mountains known as Sierra Madre, in New Mexico, are not the same range as those known by that range in Chihuahua and Sonora, and that both are distinct from the range west and south of Monterey, of the same name; but the coast range—the Sierra Nevada and the Rocky mountains—preserve a very considerable continuity throughout the limits of the United States. The coast range follows the generally north-west direction of the beach of the Pacific coast, and for a very considerable distance rises abruptly from the sea. Along the whole coast it is in view of the navigator, presenting an imposing and ever-changing panorama. It may be said to terminate at Cape San Lucas, the southern extremity of Lower California.

It is the slope towards the sea of this range of mountains which forms the western border of the arid region, and is, in my opinion, the only continuous agricultural country west of the 100th meridian. There are many detached valleys and basins affording facilities for irrigation, where the cereals, the vine and all the plants which conduce to the comfort of man, are produced luxuriantly, but they form the exception rather than the general rule, and are separated by arid plains and mountains.

The Sierra Nevada, the Cascade range and the Rocky mountain ranges preserve a general parallelism to each other, and to that of the coast range.

Commencing at the north, they can be traced continuously until we reach within a few degrees of latitude of the region of the boundary, where occurs, in all except the coast range the remarkable depression in the continent, or rather absence in the continuity of the ranges of mountains hereafter to be described.

The Sierra Nevada in latitude 33 degrees north, branches—one great division uniting with the coast range, and forming the elevated promontory of Lower California, and representing when figured on the map the appearance of the letter Y, (Tulare valley resting on the fork of the letter); other branches of spurs are thrown off in a south-east direction, crossing the Gila at the mouth and many miles above, and traversing the newly acquired territory in the meridian of Santa Cruz and Tucson. That range, together with the Sierra Madre and the Rocky mountains, about the parallel of 32 degrees, lose their continuous character, and assume what are graphically described in the Western country as lost mountains which have no apparent connection with each other.—They preserve, however, their general direction, north-west and south-east, showing that the upheaving power which produced them was the same, but in diminished and irregular force. They rise abruptly from the plateau and disappear as suddenly, and by winding around the bases of these mountains, it is possible to pass through the mountain system in this region, near the parallel of 32 degrees, almost on the level of the plateau; so that if the sea were to rise 4,000 feet above its present level, the navigator could cross the continent near the 32d parallel of latitude. He would be on soundings of uniform depth from the Gulf of California to the Pecos river. He would see to the north and to the south prominent peaks and sierras, and at times his passage would be narrow and intricate. At El Paso he would be within gunshot of both shores.

Passing to the south of this parallel, in about that of 31 degrees, we find the plateau rising rapidly to the table lands of Mexico; the ranges above described are no longer traceable; and the plateau gives evidence of having been disturbed by tremendous plutonic forces, and the mountains assume a loftier and more rugged and diversified appearance. As I have said before, the Sierra Madre range of mountains cannot be traced distinctly with our present information. The Rocky mountains, near the head waters of the Rio Bravo, throw off spurs which lead to the confusion, and make it difficult to separate this range from that called in New Mexico, the Sierra Madre.

It may be a question whether the Rocky mountain range is not divided by the Rio Bravo, and if so, that which I have designated as the Sierra Madre of New Mexico will in that case become a spur of the Rocky mountains. The geological formations to which I shall presently refer, seem to favor this hypothesis. If that hypothesis be true, the Sierra Madre of New Mexico and the Rocky mountain system are the same, and are only divided by the Rio Bravo. But this is a question which does not affect the general topographical description of the country, and may be disregarded here. What I have described refers more particularly to the country west of the Rio Bravo del Norte.

The Rocky mountain system, commencing in the north, beyond the source of this river, and beyond the limits of the forty-ninth degree of north latitude, is the distinguishing feature of the country east of that river, until we reach the great plains lying between the base of those mountains and the valley of the Mississippi. The axis of maximum elevation preserves a general parallelism to the Sierra Nevada range. Its principal chain, after passing the thirty-sixth parallel of latitude, becomes less elevated, and finally terminates in the Organ mountains, near El Paso, reappearing again in the south and east, and becoming at last merged with the great mountain masses in Mexico.

Another branch of these mountains diverges

about the head of the Pecos, and running south, with unequal elevation, crosses the Rio Bravo between the 102d and 106th meridian of longitude, forming the great bend in that river, and producing one of the most remarkable features on the face of the globe—that of a river traveling, at an oblique angle, a chain of lofty mountains, and making through these, on a gigantic scale, what is called in Spanish America a canon—that is, a river hemmed in by vertical walls.

These mountains, to the south of the river, expand in width and height, attaining a great elevation in the neighborhood of Monterey, Saltillo and Buena Vista, and from one side of the Bolson Malpino; and it is my impression that these mountains are identical with what is there called in Nuevo Leon, the Sierra Madre.

A third, but subordinate range, branches from the main chain about the same parallel as that last described, and terminates in the Llano Estacado, on the Stake plains, from which issues the Red River and other rivers of Texas. From the foot of the Llano Estacado, the country falls, sometimes by steps, but most generally by gentle slopes, to the shores of the Gulf of Mexico, the crust only broken in a few places by the washing of streams and by the protrusion of igneous rocks.—This igneous protrusion, composed of greenstone or basalt, is traced from the San Seba mountains by the head of the Leona, to Santa Rosa, in Mexico, where it unites with the main ridge at an angle of about forty-five degrees. The point where they unite is rich in silver mines. At Santa Rosa the Spaniards had sunk extensive shafts, and made a tunnel a mile and a half in length, which was not then complete when the revolution of 1825 broke out, and since then all extensive operations have been suspended, and the country rich in minerals and in the production of the cereals and of tropical plants, has been a prey to the incursions of bandits and Indians.

It has been observed that these metalliferous rocks generally occur at such places where two systems unite, or where some unusual disturbance or change in the geological structure takes place. Hence we may expect to find these silver bearing rocks along the boundary line where the upheaving force, after passing under the bed of the Gila river, begins again to reappear to the south.

The remaining mountain feature of North America—the Alleghany—is referred to here only to illustrate by comparison the mountain system of the western part of the continent. That chain, grand as it is, sinks into insignificance when compared to those which I have attempted to describe. It is nearly at right angles to the western chain of mountains, is less elevated, and sheds its waters, as is well known, clear on both sides on the one side into the Atlantic, and on the other into the Mississippi and the Gulf of Mexico. On both sides the slopes are comparatively gentle, and the soil fertile and refreshed by frequent showers, yields in abundance all that contributes to the wants of man; and on the western side of this slope, between it and the desert border of the Rocky Mountains, such an expanse of fertile country exists as can be found in one body nowhere else on the face of the globe, producing all the fruits of the earth, including those found in every zone, from the boreal regions to the tropics. Persons who are familiar with its character, as most who read this memoir will be, will scarcely be able to comprehend, still less to believe the character to the more western and less favored regions described in this report. In the fanciful and exaggerated description given by many of the character of the western half of the continent some have been, no doubt, influenced by a desire to favor particular routes of travel for the emigrants to follow; others, by a desire to commend themselves to the political favor of those interested in the settlement and sale of the lands; but much the greater portion by estimating the soil alone, which is generally good, without giving due weight to the infrequency of rains or the absence of the necessary humidity in the atmosphere to produce a profitable vegetation; but be the mo-

tive what it may, the influence has been equally unfortunate, by directing legislation and the military occupation of the country, as if it was susceptible of continuous settlement, from the peaks of the Alleghenies to the shores of the Pacific.

Between the two most distinctly marked ranges of mountains before described, the Rocky Mountains and the Sierra Nevada, a succession of minor ranges occur, some of which are many hundred miles in extent, while others appear like isolated mountains rising above the general level of the plateau. Most of them preserve a general system of parallelism, others present their maximum elevation, forming very considerable angles with the general direction, and all, when traced upon a map, exhibit lines varying from right lines to every degree of curvature. The whole system, plateau and mountain, seems to have been produced by a succession of forces analogous to each other in direction, but differing in intensity, and occurring at long intervals. The prevalence of granite and other unstratified rocks throughout the Sierra Nevada suggest the probability of its being the oldest range of mountains. The identity of its rocks generally with those of the Alleghany Mountains mark these two distinct and detached chains as contemporaneous. The rocks marking these mountains are of the description commonly traversed by gold and copper veins, as is the case in Oregon, California, Virginia and North Carolina.

Travelling eastward from the Pacific along the bed of the Gila, we encountered similar rocks in a chain of mountains as far east as the Pimo village. This chain, characterized also by the presence of gneiss, mica and Takose slate, has been traced as far south as the present boundary, where it crosses the Santa Cruz river, between longitude 110 and 111 degrees; and in that neighborhood we saw everywhere the remains of gold mines from which the operators had been driven by the Apaches.

Pursuing our course eastward along the boundary from the meridian of 111 degrees, we cross the San Pedro, the Guadalupe, and the San Luis range of mountains, in the order in which they are named, the middle range being chiefly characterized by silicified aggregates, granitic lava and immense masses of conglomerate or breccia. Precisely the same formation is found in the Canon of the Gila, some distance to the north, about the meridian of what is called in my reconnaissance of 1846, Disappointment Creek. And no doubt when future surveys shall develop a more minute knowledge of the physical geography of the country, each of these ranges of mountains will find their equivalent to the north and to the south. With the present information I shall not even attempt to connect them conjecturally.

Hypothetical geography has proceeded far enough in the United States. In no country has it been carried to so great an extent, or been attended with more disastrous consequences. This pernicious system was commenced under the eminent auspices of Baron Humboldt, who, from a few excursions in Mexico, attempted to figure the whole American continent.

On the same kind of unsubstantial information, maps of the whole continent have been produced and engraved in the highest style of art, and sent forth to receive the patronage of Congress, and the applause of geographical societies at home and abroad, while the substantial contributors to accurate geography have been overlooked and forgotten.

The San Luis range of mountains—a distant view of which is given from the Ojo de los Animas—rise abruptly from the plains about three leagues north of the parallel 31 deg. 20 min., and as they run south assume by far the most formidable appearance of any range on that parallel west of the Rio Grande. They are called in Sonora and part of Chihuahua the Sierra Madre mountains; yet they do not fulfil entirely the conditions implied by that term, for I am informed that the waters flowing from their base towards the Pacific coast often take their rise to the east of these moun-

tains, and flowing through chasms impassable for men, fall down the western slope in rapid descent, producing sublime and picturesque cascades.

It was not in my power to explore this range to the south, but I was informed by persons worthy of confidence that throughout its whole extent, as far south as the parallel of Mazatlan, it was impassable for wagons, and there was no probability of ever finding, south of 31 deg. 20 min., a line for a railway.

The report of its impracticability for wagons was confirmed by the fact that the Camino real (highway) established by the Spaniards to connect Chihuahua and Guymas, makes a great circuit, and passes to the north of 31 deg. 20 min., and within what is now the territory of the United States.

This stupendous range of mountains which drops so abruptly a few miles north of the boundary, as if to make room for the highway which is to connect the Pacific and Atlantic States, no doubt re-appears to the north in the neighborhood of the Gila; but our information is not yet sufficient to establish the connection. I am quite satisfied of one thing, however—its equivalent is not to be found in what is called the Sierra Madre in New Mexico. Pursuing our course still eastward, we pass over wide plains bounded by detached ranges of mountains, of metamorphic and other limestones, associated with igneous rocks, rich in silver and lead, and at El Paso we encounter the western flank of the third great mountain chain, the Rocky Mountains, known in that particular locality as the Organ Mountains, and at intervals of about eighty miles we cross two other ranges,—the Eagle Spring and the Limpia range of mountains. These three chains of mountains appear to be spurs of the Rocky Mountains, and are characterized by the presence of carboniferous limestone, greatly disturbed by igneous protrusions of what Professor Hall characterizes as of "comparatively modern origin." And throughout this whole region the carboniferous and metamorphic limestone is not unfrequently traversed by rich seams of argentiferous lead ore. Between the San Luis range and the Organ Mountains, the first of the Rocky Mountain range, the metamorphism of the rocks is so complete, and the irruptive lines so frequent, and their protrusion above the crust of the earth so detached, it is impossible to say with our present information where the one begins or the other ends, or whether they do not all belong to the same system. It is between these two ranges, upon the banks of the Janos River, that we discover the first evidences of that vast cretaceous formation which has been traced from the 108th to the 101st meridian of longitude, and as far north as the Great Salt lake, and south to the 25th parallel of latitude. The western limit of this formation, discovered by the boundary survey, is the basin of the Janos River in Chihuahua, and its easternmost limit San Antonio in Texas. How far it extends north and south has never been ascertained; but it has been traced in one direction as far as the Big Salt Lake of Utah Territory. Granite, and its associated gold bearing rocks, occur sporadically throughout the Rocky Mountain chain and its spurs; but the distinguishing feature, in an economical point of view, is the prevalence of carboniferous limestone, with which is found associated argentiferous galena. Silver mines of richness have been discovered, and some of them worked to a limited extent, in the mountains about Tucson, at Barancas, Presidio del Norte, Wild Rose Pass, in the Organ Mountains, and other localities. Gold mines have been worked at the Calabosas, on the Santa Cruz river, and in the mountains of New Mexico, on both sides of the Rio Bravo. It will not be extravagant to predict the discovery of many localities where silver mines can be worked to advantage throughout the whole region where carboniferous limestone exists, extending on the line of boundary from the great bend of the Rio Bravo, in Texas, to the meridian of the San Luis range. Should this conjecture prove true, we shall have then in abundance the only commodity in which

we are now deficient, and for which we are at all dependent upon any other country. Another argentiferous region of exceeding richness, and I think one wholly disconnected from the other, is in the basin west of the Santa Cruz river, between that river and the Gulf of California. Veins of metal were discovered injected through a coarse sandstone.

I have stated that the eastern portion of the continent with which we are familiar, is entirely different in its physical geography from the western, and among the distinguishing features of the first was the Alleghany chain of mountains, which sheds its waters clear from the summit to the ocean. That is to say, water once above the surface at any point continues to flow in that position until it reaches tide water. Between the two great chains which I have attempted to describe, occupying the western portion of the continent there are other chains of mountains so numerous that it is impossible to describe them by words; some are continuous, some are detached ridges, others isolated peaks, rising from the plateau almost with the uniformity and symmetrical proportions of artificial structures. Between them are found basins which have no outlet to the ocean, but are the receptacles of the drainings of the surrounding water-sheds. Of these the most extensive is the Great Salt Lake in Utah Territory; and the most remarkable for its historical associations, and present importance is the valley of the City of Mexico.

This succession of basins forms a prominent feature in the geography of North America, extending two-thirds the length of it and quite one-third the breadth of it. They belong to what has been appropriately designated as the basin system of North America. Those found near the boundary are Santa Maria, Guzman and Jaqui, all to the south of the boundary and within the limits of Mexico. The first is fed by the waters of the river Santa Maria, which runs in a northern direction, and Guzman by the river bearing the several names, Caras Grande, San Miguel and Janos, the general course of which is also from the south to the north, and the waters of Lake Guzman and Lake Santa Maria are said to unite in seasons of unusual freshets. The waters of the Rio Mimbres, near the same meridian as Lake Guzman, which take their rise near the Santa Rita del Cobre, run towards that lake, but they disappear in the plain to the north of the boundary, before reaching it.

The waters of these lakes or inland seas are brackish at all times, but in seasons of drought, which last two-thirds of the year, they become excessively salt and wholly unpalatable. Their shores are covered with lacustrine deposits, and are usually unsuited to cultivation. The waters of these vast basins are not all locked up, however, by the mountains. Three great rivers, with their tributaries, have made their way in different directions, to the ocean, cutting in their passage gigantic chasms in the mountains. These rivers are the Columbia, the Colorado of the West, and the Rio Bravo. Another river, the Gila, drains this plateau, cutting the mountains nearly at right angles; which, although a tributary of the Colorado, joins it near its mouth, and at an elevation so little above the sea that it may, in a general description, be considered a separate and independent drainage.

Another feature of this basin system remains to be described, which is also common to all the rest of the mountain regions occupying the plateau and the region lying east of the Rocky Mountains.

Between the ridges of mountains the traveler occasionally encounters vast plains, which, when the sun is above the horizon, producing the phenomena of mirage, presents to him all the appearance of the sea. The plain bounds the view, and the line of the horizon is broken into waves resembling in appearance the edge of the Gulf stream when seen from the deck of a vessel ten or fifteen miles distant. The plains are clothed with vegetation of a scrubby growth, incapable of af-

fording subsistence to any but a class of small animals, such as antelopes, prairie dogs, and rabbits; most generally, however, in the southern part of the United States, these plains are clothed with a luxuriant growth of grama, the most nutritious of all the grasses. Sometimes they are destitute of all vegetation, except the *lavrea Mexicana*, the *zucca*, the *cartus*, and other spinose plants, and are paved with minute fragments of basalt, agate, and other hard rocks. Occasionally in these plains we encounter sand dunes, called by the Spaniards *medanos*, extending over a large area of country, and encircling what might at first sight be supposed the shores of dried-up lakes. But an examination of the sand with a microscope of sufficient power dispels this idea. The grains seem to be angular and are not rounded with the attrition of water. An extensive formation of this kind occurs between the Rio Colorado of the West and the base of the Sierra Madre, and extends many miles along the western coast of the Gulf of California. Another very extensive waste of sand lies to the south of the Arkansas river; a third is traversed by the Platte river; and a fourth which has come under my notice, less in extent, lies to the south of the Rio Bravo, in the State of Chihuahua, on the road from El Paso to the city of Chihuahua.

The plains or basins which I have described as occurring in the mountain system, are not the great plains of North America which are referred to so often in the newspaper literature of the day, in the expression "News from the Plains," "Indian depredations on the Plains," &c. The plains proper is the extensive inclined surface, reaching from the base of the Rocky Mountains to the shore of the Gulf of Mexico, and the valley of the Mississippi; and they form a feature in the geography of the Western country as notable as any other. Except on the borders of the streams which traverse these plains in their course to the valley of the Mississippi, scarcely anything exists deserving the name of vegetation. The soil is composed of disintegrated rocks covered by a loam an inch or two in thickness, which is composed of the exuvia of animals and decayed vegetable matter. The growth on them is principally a short but nutritious grass, called Buffalo grass (*Lysteria dactyloides*). A narrow strip of alluvial soil supporting a coarse grass and a few cotton wood trees, marks the line of the water courses, which of themselves are sufficiently few and far between. Whatever may be said to the contrary, these plains west of the 100th meridian are wholly unsuited to sustaining even a pastoral population, until you reach sufficiently far south to encounter the rain from the tropics. The precise limit of these rains I am not prepared to give, but think the Red river is perhaps as far north as they extend. South of that river the plains are covered with grass of larger and more vigorous growth. That which is most widely spread over the face of the country is the grama or mezquite grass, of which there are many varieties. This is incomparably the most nutritious grass known. South of the Red river, also, the plains are not unfrequently covered with a growth of mezquite trees (*algorobia*), of which there are many varieties. This tree varies in size according to the character of the soil and the quantity of rain. It is usually from fifteen to thirty feet in height, crooked, gnarled, and armed with thorns. The wood is hard and full of knots, and is unfit for purposes of carpentry, but in other respects it fulfills many of the economical uses of life. It is excellent firewood and makes good posts, being very durable. It exudes a gum which is equal to gum arabic, but to the traveler its most important quality is the fruit which it bears—a nutritious bean, much relished by animals, and not wholly unsuited to the tastes of man.

The vegetation of the mountain and basin region, while it differs materially in the germs and species of plants, according to the locality, possesses, nevertheless, a general similarity which is striking and peculiar. I have described that of the plateaus or levels as consisting of a diminutive

growth of shrubs, but as we ascend from these to the height of the surrounding mountains we pass through a succession of floral products, varying in character according to the elevation to which we ascend, until we reach an Alpine Flora. North of the parallel of 32 degrees this appears at the height of about 6,000 feet above the sea. In situations protected from the winds we usually find at those heights pines and cedars, and at a less elevation different varieties of oak. Wherever this region is traversed by water courses cotton wood, and occasionally sycamore, grow on the edges of the streams. There are throughout this region, on the sides of the mountains, growths of pine, oak, and cedar, which are quite extended, and present a frostlike appearance; but nowhere until we begin to descend the Pacific slope and get within the influence of the humidity from the ocean, do we encounter timber at all approximating in size or luxuriance of growth the forests with which we are familiar in the basin of the Mississippi and the eastern slope of the Alleghenies. The Pacific slope—including the waters of the Sacramento and its tributaries, the Columbia and its tributaries below the Cascade range, and Puget Sound and its tributaries—it is not my intention to describe in this general sketch, further than to say that, refreshed by frequent streams and fogs from the ocean, it presents a different and more inviting picture than the country to the east of it.

It is on this slope that we find that stupendous growth of red wood, the accounts of which appear almost fabulous. We find here, too, in all that region north of Monterey, considerable adaptation both in soil and climate to the production of the cereal plants. About Santa Barbara, in parallel 34 deg. N. latitude, the mountains run to the sea; thence the coast deflects sharply to the east, and below or south of this point, the trade winds, which sweep along the Pacific coast, charged with humidity, for nine months in the year, from as far north as the Aleutian Islands, seem to diminish in force and finally die away at the lowest extremity of California. The mountain range at Santa Barbara cuts off these humid winds from the land to the south of them; and it is my opinion that on the Pacific slope beyond this point, and until we reach the region of the tropical rains, no crops can be raised with anything like certainty without irrigation. Below them the agricultural character of the country is much the same as that of the mountain and basin system, and this character is retained along the coast until we reach the parallel of Mazatlan, where the tropical rains begin to be felt in great force. For the four months (July, August, September, and October) during which I kept a meteorological record at Camp Riley, the rain fell in sufficient quantity to be measured. The mean height of the barometer for that period was 29.853, the thermometer 68.37, and the mean duration 68 deg. 1 min.

There are considerable portions of the extensive mountain system which I have attempted to describe where wheat and rye can be raised without irrigation; but these portions are exceptions to the general rule, and I think I am safe in stating that as a general rule throughout this vast region corn, cotton, and vegetables cannot be produced without irrigation; and, furthermore, the limits of the ground which can be brought under the effects of irrigation are very circumscribed. The town of El Paso, in lat. 31 deg. 44 min. 15.7 sec. and lon. 106 deg. 29 min. 5.4 sec., is considered, and justly so, one of the garden spots of the interior of the continent. A meteorological record was kept at Frontera, a few miles north of this point, for two years, by Assistant Chandler. The whole quantity of rain for one year was only 6.4 inches. From this it will be seen how very dry the climate is, and how unsuited for agricultural purposes according to the notions entertained of farming in the Eastern States. The settlements about El Paso are irrigated by the Rio Bravo, and are happily not dependent upon rains for their fertility.

Whatever population may now or hereafter occupy the mountain system and the plains to the east must be dependent on mining, or grazing, or to the cultivation of the grape. The country must be settled by a mining and pastoral, or wine making population; and the whole legislation of Congress, directed heretofore so successfully towards the settlement of lands in States east of the 100th meridian of longitude, must be remodelled and reorganized to suit the new phase which life must assume, under conditions so different from those to which we are accustomed.

Louisville and Nashville Railroad.

The entire line of this road is under contract, with the exception of about twenty-five miles immediately south of Green River. North of Green River, including the bridge, the whole road to the Rolling Fork, thirty-one miles from Louisville, the point to which the cars are running, is under contract, and a large force will soon be in successful operation. The President states that the means of the company, rating the securities on hand at what has been considered a fair cash value, are sufficient to grade the whole road. If iron can be purchased with the avails of mortgage bonds, then the obvious policy would be to press the entire grade; but until the company are satisfied that can be accomplished, it will be the policy to complete for business as much of the road as the means on hand will accomplish.

Albany Railroad Bridge.

The Commissioners appointed by the Legislature of New York, to locate a bridge across the Hudson river, at Albany, made a decision on Thursday, 21st inst.; its western terminus is on Quay street, midway between Maiden lane and Exchange street. In the centre of the basin it will be 55 feet from the north side of the State street bridge. Curving thence northwardly, it will cross the river so as to cut the lower corner of the old wooden Hudson River Railroad depot. The site chosen is the place where the ferry boats of the Boston and Hudson River railroad cross, within a few rods of the Central road, and near the centre of the city. It is a point easily accessible to all the public offices, hotels, and the business community, and for public convenience it is probably the best location which could be selected.

Alabama and Tennessee Railroad.

We learn from the *Selma Sentinel* that the Alabama and Tennessee Railroad Company has made a contract with the Messrs. Meaher to deliver five hundred tons of railroad iron at Selma by the 10th of September. The *Sentinel* says: "Arrangements are made for laying the iron right away. This 500 tons will carry the road some six miles beyond Columbiana and by the time this is laid, the balance of the iron will be up from Mobile. We feel cheered at this move. Now there is no doubt about the road crossing the Coosa river, and that very soon.—With a good force at track-laying the Coosa can be crossed by the 10th of November."

Railroad Earnings for July.

The earnings of the Cincinnati, Wilmington and Zanesville Railroad were:

For Passengers	\$6,429 53
For Freight	10,800 59
For Mails	842 75
Total	\$17,572 87

LOCOMOTIVES for SALE.

TWO first class Locomotives, 22 and 25 tons, 4 feet 8½ in. and 4 ft. 10 in. gauge.

For sale by

GEO. W. BILLINGS,
66 BROADWAY, N. Y.

Covington and Cincinnati BRIDGE.

PROPOSALS will be received between the 10th day of September and the 1st day of October, 1886, at the office of the Covington and Cincinnati Bridge Company, at Covington, Ky., for the cutting of stone and laying of 30,000 perch of masonry in the towers, anchorage, and abutments of the Covington and Cincinnati Suspension Bridge. All materials will be delivered by the Company. None need apply but experienced mechanics, who will superintend the work in person and without sub letting. Also proposals received for the foundation of the towers. The work is to be commenced forthwith. Plans and specifications to be seen at the office after the 10th day of September.

RICHARD A. RANSON, President.
JOHN A. ROEBLING, Engineer. 4136

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1886.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1886.

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned on the 1st of October at noon, for the construction of two new Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appurtenances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

H. B. WELLES & CO.,
8132 No. 4 WALL ST., New York.

Railroad Chairs and Spikes.

ORDERS taken at fixed sterling prices for Wrought Iron Chairs, of any pattern, and Spikes, to be manufactured in England.
NATLOE & CO.,
99 and 101 JOHN ST., New York City.

SALE OF THE

Syracuse & Binghamton R.R.

SUPREME COURT.—David Hoadley & Horace White, Trustees for the First Mortgage Bondholders of the Syracuse and Binghamton Railroad Company, against the Syracuse and Binghamton Railroad Company and others.

In pursuance of a judgment of foreclosure and sale, entered in this action on the first day of August, 1886, there will be sold by me, or under my direction, at the Syracuse House, in the city of Syracuse, on the 20th day of September, 1886, at 10 o'clock in the forenoon, "All and singular the corporate property and franchises of the said Syracuse and Binghamton Railroad Company, consisting of all the lands, tracks, lines, rails, bridges, ways, buildings, piers and wharfs, erections, fences, walls, fixtures, privileges, franchises, rights and real estate whatsoever, and all the tolls, income, issues and profits to be had from the same, and all the railway depots or stations, with the buildings thereon, together with all the locomotives, tenders, cars, carriages, tools and machinery owned by said Syracuse and Binghamton Railroad Company, or any way belonging or appertaining to said road and used thereon, between the city of Syracuse and village of Binghamton, including 13 locomotive engines, tenders and fixtures, 10 locomotive lamps, 10 first class passenger cars, 3 second class passenger cars, 2 mail baggage and express cars, 3 baggage cars, with stoves and lamps in each, 80 box cars, 34 platform cars, 40 gravel cars, 8 hand cars, 1 large snow plow; also one stationary engine and boiler, 2 lathe, 1 wheel press, 1 upright drill, 40 feet line shafting, 8 bands and pulleys for same, 3 forges and bellows, 3 anvils and all the tools in the shop at Syracuse, and along the line of said road, and materials on hand for repairs and use of said road; also, 80 tons of iron rails, 20 tons of railroad chairs, 10 tons of rail spikes, 16 frogs, 8,000 cords of wood at various points along the line of said road, 12 hand trucks, 8 platform scales, 10 stoves, and all the furniture, books and blanks at the several stations and buildings along the line of said road; 120 lamps of various kinds, in use on trains, at stations, shops, and switch-ers along the line of said road; also, the office furniture, consisting of two large desks, two tables and cases of pigeon holes, 3 iron safes, one draughting table, one case of drawers, 4 stoves, one ticket case and tickets in same, one regulator, sundry blanks, blank books and stationery for use of said Company."

A more complete inventory of property and description of premises to be sold, together with the maps and profiles, will be exhibited on the day of sale, and also the terms of sale will then and there be made known. Dated August 4th, 1886.

B. DAVIDSON NOXON, Referee.

DAVIS & LEACH, Attorneys. 6133

NATHAN LANE & CO.,

No. 69 Wall Street, and 91 Beaver Street, near Pearl,
NEW YORK,

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Engineers of highest character and professional attainment, and competent Superintendents can be recommended or supplied to railroad companies for immediate service on surveys and construction and on management.

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THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and fire sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a FIRST CLASS PASSENGER ENGINE.

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Also a second hand Engine of smaller capacity, for sale as above. 251

Railroad Spikes.

THE Subscribers are manufacturing Railroad Spikes with SWETT'S Patent Improved Machines; and are prepared to execute orders for any quantity, on the most favorable terms. These Spikes are made of the best quality of iron, and, for shape and finish, are superior to any others. Railroad companies and others in want, are respectfully solicited to order a sample before purchasing elsewhere. All orders will receive prompt attention.

SWETT, ELLIOT & CO.

Pittsburgh, Pa., August 25, 1883.

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Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 p.m.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	6 00

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From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER Sup't.

New York and Erie R. R.

On and after Thursday, August 7, 1886, and until further notice, PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m., for Dunkirk.
MAIL, at 8½ a.m., for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Oswego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m., for Dunkirk.
ROCKLAND PASSENGERS, at 3½ p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGERS, at 4 p.m., for Newburgh and Middlesex and intermediate stations.
NIGHT EXPRESS, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.
EMORY, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted. These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

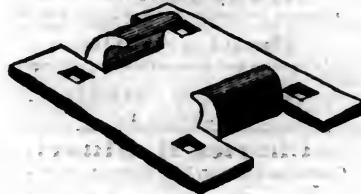
D. C. McCALLUM, General Sup't.

Augustus Schwaab,

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IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible positions on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

NEW YORK Wrought Iron Railroad Chair Company,



THIS Company is prepared to receive orders for the manufacture of Wrought Iron Railroad Chairs of the best material, on a new and superior model, and by improved patented machinery.

The thickness of the Lips of the Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge;—so that a less weight of metal may be used and a strength required equal, if not superior, to that of a heavier Chair of uniform thickness.

Our arrangements are now complete for executing work promptly, and all orders from responsible parties will be filled on short notice.

These chairs are used by the following companies:

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New Orleans Opelousas and Great Western R. R. Co.,
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Mississippi Central R. R. Co.,
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Illinois Central R. R. Co., &c., &c.

Address JACOB ROWE, President,
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Chairs and Fastenings.

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Long experience in the manufacture of these goods enables them to produce an article of superior quality and finish. They are in use upon a large number of roads in the country and are highly approved.

Orders filled promptly, and at the lowest prices.

J. HOPKINSON SMITH,

Baltimore, Md.

Please direct the name in full.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HEN SHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1886.

3m.

NEW YORK

IRON PAVEMENT AND STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,
ROOM 16.

TO THE

MUNICIPAL AUTHORITIES OF THE SEVERAL
CITIES OF THE UNITED STATES,

AND TO

RAILROAD COMPANIES

AND OTHERS INTERESTED.

THE above-named Company, established in the City of New York, offer you 1a

ROBINSON'S IRON PAVEMENT.

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

in substitution for any existing pavement. This price is over \$4 per square yard less than the first laid down in Boston cost that city; AND \$1 LESS PER YARD THAN THAT RECENTLY LAID DOWN IN BOSTON COST; AND IS \$1 PER SQUARE YARD LESS THAN THE RUB PAVEMENT HAS COST, that has so beautified, yet rendered most dangerous and expensive to man, and beast, and vehicle, a large extent of Broadway, and some other streets of New York city.

This pavement is also the best and cheapest for all railroad tracks, where horses are employed, and for all highway railroad crossings, now usually made of plank, which are subject to constant disorder and repair.

Lighter and less expensive patterns (averaging from \$1 TO \$3 PER YARD) are furnished for walks in public parks and grounds, also for wide walks, private lanes, yards, foot-ways, collars, and approaches to stables—each being most permanent, cleanly, and ornamental.

In every case ENTIRE SATISFACTION WILL BE GUARANTEED to all purchasers with whom contracts shall be made for laying down this pavement.

FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

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HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SATURDAY, SEPTEMBER 13, 1856.

[WHOLE No. 1,065, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorized European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, September 13, 1856.

Quincy and Palmyra Railroad.

The articles of association by which this company were organized under the General Railroad Law of Missouri, were filed in the office of the Secretary of State on the 8th of March last.

At a meeting of the directors held at Palmyra on the 15th of April, the Company was organized by the election of Samuel Holmes, Esq., as President.

Col. Wm. H. Sidell, late of the Northern Cross Railroad, was appointed Chief Engineer.

At a subsequent meeting of the board held on the 5th of July, the report of the engineer was presented and accepted, from which we learn that the road proposed to be constructed by the company from the west bank of the Mississippi opposite Quincy, Ill., to Palmyra, Mo., is for the purpose of getting a direct railroad connection with the Hannibal and St. Joseph Railroad, which passes through Palmyra, and thence west to St. Joseph on the western border of the State. The peculiar importance of this connection comes from the fact that Quincy is now the Mississippi terminus of a finished line of roads through Chicago from the Atlantic cities, and will soon be the terminus of other lines through Toledo, along the southern shore of Lake Erie, as also of others through the middle of all the States east of Illi-

nois. To effect these last connections but 30 miles of road is required, and measures to construct these are in progress. From Quincy to Palmyra is only about 12¾ miles, and has no peculiar difficulties of construction to give a good and secure road, with grades so easy as to be within the ruling grades of the Hannibal and St. Joseph Railroad, with which it is to connect. After a thorough examination of the route, the following line was laid: Beginning at the Ferry-house opposite Quincy, a ridge called Hickory Ridge was found, which ran in the right direction; this was nearly three miles long with but two or three depressions. Beyond its extremity the Fabius river was crossed, below its fork, rendering but one bridge necessary, having a span of 160 feet. Beyond this river is an open prairie bottom on which the line continues until it reaches North river which is crossed by a bridge of 120 feet span, at a height just sufficient to pass the water; thence it follows up the slope of North river valley by easy ascending grades, of which the maximum is 42 feet to the mile, all the way to its junction with the Hannibal and St. Joseph road, just west of Palmyra, excepting that for the purpose of getting a small piece of level ground for a depot, 2,000 feet of 63 ft. grade is interposed, which is the same grade as that of the Hannibal road at the place where the junction is made, and in fact the ruling grade of that road, and which it joins on a course continuous with its general direction out from Palmyra to the west, so that to the eye it seems the main line pursuing its direct course to the west, straight from Quincy.

The route selected, via North River Valley, is 12.77 miles long, joins the Hannibal road three quarters of a mile west of its depot, and beyond the great curve on that road, maintains the general direction of that part of the road west of Palmyra, avoids interference with city regulations and town property, and has no steeper grade than 42 feet to the mile, except as before stated.

The grade has a descent from Palmyra east toward the Mississippi, the total descent to the bottom land being 181 feet; across the bottom land the grade is level, except a very gentle rise and fall to cross the bridges. The sharpest curve on the line has a radius of 1,200 feet.

The total cost of building the road on the route selected is estimated as follows:

Grading, masonry and bridging	\$165,160
Track, including 1¼ mile of siding	140,000
All other expenses, including two depots, land damages, office and legal expenses, engineering, &c.	48,600
	\$343,660

No estimate is made for rolling stock, as arrangements may possibly be made with connecting roads by which none may be needed.

The distance to Quincy from Palmyra is 2¼ miles less than to Hannibal.

This road is more than a mere local work to connect two places; it is a link in the grand chain connecting the east and the far west. It joins together other works nearly or quite complete, extending far away in both directions, and if built will benefit these works, let them extend as far as they may. It has not only its own proper business, but also all that may be brought over it from connecting roads. The Quincy and Palmyra road is in fact a continuation of the Northern Cross road, running from Quincy, its western terminus, to Galesburg, where it intersects the Chicago, Burlington and Quincy road; and thence by various roads leading out of Chicago to New York and Boston. Next by way of Springfield and Toledo and the south shore of Lake Erie, to the same Atlantic cities; also with chains running through all the State capitals, Indianapolis, Columbus and Harrisburg to Philadelphia and Baltimore, and across all these east and west lines, the natural lines of trade, innumerable other roads running north and south, serve as feeders. On the west is the Hannibal and St. Joseph road, which crosses the whole width of Missouri, 200 miles, to its western boundary at the Missouri river. These roads are all either actually built, or what little remains unfinished, is in such a state of forwardness, as to render their completion prior to that of the Quincy and Palmyra certain. Quincy is next to Chicago the most considerable city in Illinois. It is the most western city in that State, and has a large and unusually active population; it has manufactories, foundries, machine shops, etc., which supply all the surrounding country, while its packing business and its dealings in grain, pro-

visions and cattle are very heavy; it has the best line of boats on the Upper Mississippi, and its river commerce is superior to that of any place north of St. Louis.

The following are the Directors named in the articles of association: Wm. P. D. Claybrook, Ed. McCabe, Lloyd P. Hallack, James W. Kniesly, Henry S. Lipscomb, Thomas Redmond, Samuel Holmes, Nehemiah Bushnell, Sylvester Thayer, Amos Green, Newton Flagg, James M. Pitman, and Hiram Rogers.

Iron of Lake Superior.

The superiority of Lake Superior Iron over that obtained from any other locality has been often proved in our columns, to our readers, but our attention has again been called to it by the article in another column from the pen of one of our fellow townsmen, whose scientific knowledge has contributed not a little to the interest of our columns, and the enlightenment of our readers. The article in question speaks for itself and we will now only refer to tenacity and strength of our iron as compared with that of other localities.—The following results obtained by Prof. W. B. Johnson, will show the exact position of the different metals:

	Strength in lbs. per sq. in.
Iron fm Salisbury, Ct., by means of 40 trials,	58,000
do Sweden, do 4 "	58,084
do Centre Co. Pa., do 15 "	58,400
do Lancaster Co. Pa. do 2 "	58,061
do McIntire, N. Y. do 4 "	58,912
do Engl'd, [cab bolt] do 5 "	59,105
do Russia, do 5 "	76,069
do Carp River, Lake Superior, determined by Maj. Wade, do	89,582

Thus it will be seen that the Lake Superior iron is about one-third better than all other kinds but one, and that one kind is far inferior. There is no doubt but that when once the most perfect mode of manufacturing it is attained by experience it will prove better than the above estimate, but even should it not, the present position which it occupies is a sufficient guarantee of its excellence.

In speaking of this the *Buffalo Express* says some of this iron was recently tested in Shepherd's Foundry in that city, with a view to try its tenacity. A piece of rolled iron, of the thickness of ones wrist, was subjected to various processes, and, after bending it across an anvil, twisting it in opposite directions, and in fact employing upon it all possible force and skill, the experimenters were compelled to acknowledge that they never before had known any iron capable of such stubborn resistance to breaking forces. The fracture of the pig metal glistens like steel, and the fibre of the rolled bars is tougher than that of any other iron known to the trade.

Of the different qualities found here it is not necessary to speak, as it varies in the same mines, yet it can be reduced to about the same average in nearly all of them. We learn on good authority that the Eureka ore, which has generally been considered of inferior quality, makes the best iron manufactured at the Wyandotte Mills. And that it improves the other ores materially when mixed with them. The increased demand for the Jackson and Cleveland Mountain ores, is sufficient ground for the assumption that they are the best to be obtained without the aid of the comparison given above, but with the addition of scientific tests there is no longer room for doubt. It has frequently been placed in the most trying places, and subjected to the severest tests, but we have yet to learn that it has been found wanting. A chemical analysis of the ores of this region make them yield about seventy per cent., though in many instances they will far exceed that, and of the quality we need no further evidence than that heretofore given in our columns.

Important Improvement in Steam Boilers.

We have great pleasure in stating that our enterprising townsmen, Messrs. Shortridge, Howell and Jessop, of the Hartford steel works, have just perfected an improvement in the manufacture of steam boilers which supplies several important desiderata. The novelty, the credit of which, we believe is due to Mr. Howell, consists, briefly, in the substitution of steel in the place of iron. To the general reader this change of material implies little or no merit, but the practical man will perceive at a glance the true value of the achievement. Iron for boilers is open to several objections. It is not the best conductor of heat; it does not afford the requisite strength; it is liable to internal as well as superficial oxidation. In all these respects steel is much superior, and would doubtless have been preferred for boilers long ago but for the difficulty of working it because of its shortness of fibre and consequent brittleness.—These defects the introducers of the steel boiler have overcome by a careful removal of the silicas which constitute the impurities of the metal, and by a process of annealing after the metal has been rolled into form, the result being a metal which is not at all inferior to copper as a conductor of heat, and tougher than the most malleable iron, the proof being that it will bear bending into form when cold. Within the last few days we have seen a large boiler that has been made of this purified and finely tempered steel, and a close inspection of the angular parts affords the most satisfactory proof of its toughness and ductility. On account of the great strength of the metal—being twice the strength of iron of the same thickness—the plates are of course much thinner than those of an ordinary boiler, and being one homogeneous mass, it is greatly superior to plates of iron, which are laminated substances, and as it is impossible, by the most careful process of hammering and rolling, to effect a perfect welding of the layers in every part, the water or steam penetrates between them wherever the least flaw exists. Thereupon oxidation ensues, and the substance being thus reduced in that particular part, the result is the same as if the boiler were uniformly impaired, inasmuch as the weakest part is the measure of the strength of the entire vessel. Another advantage afforded by this peculiarly prepared steel is, that the banishment of the silicas renders it a better conductor of heat. Hence a great economy of fuel. And this increased capability of generating steam involves no corresponding danger of explosion, ample compensation being afforded by the great strength of the steel. Thus a boiler of given size will yield additional steam with a saving of fuel. This economization of bulk and weight must prove advantageous when the boiler has to be conveyed a distance from the manufactory, and incalculably valuable in marine engines intended for long voyages, as it will increase the stowage space as well as diminish the ponderosity, while the concurrent saving of fuel will in certain voyages supersede the necessity of taking in supplies at a coal station whither the material has been conveyed at an enormous cost. It might be supposed that steel was too expensive a material to be used for the manufacture of boilers; but the fact is that, considering the saving effected in the thickness of the plates, the cost exceeds in an appreciably small degree that of the best Lowmoor iron. This improvement in the manufacture of boilers is accompanied by an important advantage in the application of steel for making tubes for multitubular boilers, which are immensely superior to iron tubes, and as conductors of heat fully equal to copper, at a considerable reduction of cost. The new boiler, to which reference is made above, will shortly be brought into operation in the establishment of an enterprising manufacturer in London, to whose order it has been made, and we trust we shall be enabled to report an entirely satisfactory result. The manufacturing community is directly, and in no small degree, interested in the issue, but Sheffield, as the emporium of the steel trade, is especially so, as the use of steel for the manufacture of boilers, should it

become general, will cause an immediate expansion of the leading branch of our staple trade to the extent of which experience presents no parallel.

The new properties which, after much research, Mr. Howell has succeeded in imparting to steel will doubtless make it available for many new purposes. We hear, for example, of its being introduced into shipbuilding in a variety of ways.—A ship "yard"—the enormous beam placed horizontally athwart the mast—is made at great expense, of numerous pieces joined together, and its weight is so great—not unfrequently amounting three tons—that from its high altitude it necessarily retards the progress of the vessel, by increasing its unsteadiness. By the substitution of steel for wood the weight will be reduced from half to two-thirds, and in respect of strength, there will be a gain rather than a loss. Mr. Howell has protected himself by taking out a patent for the invention, and we believe that the shipping interest will shortly have an opportunity of seeing its merits demonstrated by actual experiment.—*Sheffield (Eng.) Times.*

Opening of the Grand Trunk Railway.

The expectation is that, on the 1st October, the Grand Trunk Railway will be completed from St. Mary's to Portland. The Victoria Bridge will, it is true, still remain uncompleted and the Western extension have to be made. But as the river is passable at Montreal there will be no break in the line from St. Mary's to the seaboard. Already there are symptoms that the completion of this great national work will change the direction of commerce and travel between the seaboard and the great West. In New York fears of this result are entertained; and some of the journalists of that city write as viciously respecting this great national work as the most slavish advocate of the Great Western in Canada. Already there are three lines of steamers which will bring passengers upon the Grand Trunk; and it is understood that the Great Eastern, by far the largest steamer ever built, is to make at least one experimental trip to Portland. The line of steamers subsidized by the Canadian Government has been eminently successful this season. Every one of them has supplied news to the whole continent of America in advance of its being brought by any other line. These steamers are invariably crowded with passengers; and as the experiment has been so eminently successful the line is becoming a favorite with the Canadians, who heretofore were the great support to the Cunard line. This latter line is not so managed as to make it very attractive to the public; and the mishaps which have befallen the Collins' steamers prevent that line from being preferred when there is as much choice as now exists. Two steamers have been lost—the Arctic and the Pacific—the Atlantic was once on thirty-six days and made land with a broken shaft; besides innumerable derangements of machinery, causing delays of several hours on the Atlantic and panic among the passengers. A strong national partiality added to the excellent management of the cuisine, causes Americans to stick by this line; but it is no unfrequent thing to meet with Americans who admit that this is not the most desirable line on the ground of safety. What the new lines which are to come to Montreal and Portland will accomplish, remains to be tested.

The shortest route, in point of time, is the one that will ultimately be adopted. The value of a couple of days to commercial men may be and often is very great; and those who are not stinted for time never want motives for desiring a quick ocean passage. Those who travel for amusement or instruction generally regard the ocean trip as the great drawback of the journey, and are anxious that it should be as short as possible. Those who have never yet made a sea voyage are often deterred from doing so by the thoughts of a long passage. In point of speed, our Canadian steamers are a match for their rivals; and should the Great Eastern be permanently put on the Portland route, she will, unless she greatly disappoint all

calculations regarding her, distance very far all competitors. However much room there may be for speculation as to her success, it is not an unreasonable conclusion that she will succeed so far as to shorten the passage at least two days from what it is at present. And in that case there is no fear that, large as she is, she will find a full complement of passengers every trip. Persons whose destination was New York would prefer to take passage in her, because by doing so they would sooner reach their destination. Should the Great Eastern succeed she will of course not long remain the solitary leviathan of the deep. Others will soon rival her in size, and perchance eclipse her even in that respect. But even so; New York will be a loser by this extraordinary development of ocean steamers. There is not water enough in the New York Harbor to admit the entrance of such a vessel as the Great Eastern; and if steamers of her size are hereafter to do the business, they must go to Portland or Quebec. This is thoroughly understood in the Empire City; and if little or nothing is said about it publicly, it is not therefore the less secretly lamented. Here is an element in future success of the Grand Trunk Railroad. If Portland is hereafter to become the great connecting point with Europe, a large proportion of the passengers—all those westward bound—will go through Canada on our great national railway. The Canadian steamers, which, besides their other elements of success, have cheapness to recommend them, will be also feeders to our great national line. On the whole there is every reason to expect that, in a few years, a complete revolution in the communications between Europe and the Western States will take place.—*Toronto Leader.*

State Finances of Maryland.

Loan to Chesapeake Canal.....	\$7,194,222
To Baltimore and Ohio Railroad.....	4,118,043
To Susquehanna Canal.....	1,000,000
To Susquehanna Railroad.....	2,232,045
Various I. Improvement Loan.....	590,599

Total Debt of State.....	\$15,132,909
Of which held by Sinking Fund.....	3,428,750

Total outstanding.....	\$11,706,159
In 6 per cents.....	\$3,015,220
Sterling 5 per cents.....	8,272,258
4½ per cents.....	77,681
3 per cents.....	341,000—11,706,159

The State holds:

Stock in Baltimore & Ohio Railroad.....	\$4,182,691
In Baltimore Banks.....	468,406
Bonds of Susquehanna Canal.....	1,192,500
Mortgage Susquehanna Road.....	1,500,000
Treasurer's claims on Receiv. Officers.....	672,143
Miscellaneous Stocks.....	99,538

Total productive Stocks.....	8,115,278
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Balance of Debt on State taxables..	\$5,590,831
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The State has claim:

On Chesapeake Canal.....	\$7,886,573
Stock in same.....	5,000,000
Various Stocks.....	756,073

Total unproductive.....	\$13,642,646
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Taxables—Baltimore City and County.....	\$115,157,275
Interior Counties.....	128,776,171

Total Taxables of State.....	\$243,933,446
Income of Treasury in 1855.....	1,200,762
Interest, S. Fund, Charities, &c.....	985,064

Carried to balance in Treasury.....	\$214,798
Income of S. Fund from Interest.....	\$164,408
Contributed from Treasury.....	98,617

Total.....	\$263,025
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The State of Maryland affords a remarkable ex-

ample of rapid and highly honorable recovery from the embarrassments which overtook so many of the States soon after the general revulsion of 1837. Her financial position in 1842 appeared to be almost hopeless, but good faith and prompt submission to direct taxation in her people soon replaced the Public Debt upon its most creditable basis.

American Association for the Advancement of Science.

Below we give a paper read by Prof. Guyot, upon the great Appalachian range of mountains of the United States.

Prof. Guyot commenced by saying that for the last few years he had been endeavoring to form an idea of the general structure of the Appalachian system of mountains; and, although he had been interrupted for two or three years, he had tried this year to complete his view by the examination of the southern or higher portion of the system.—He had previously examined the White mountains of New Hampshire with a great deal of care, and made a partial exploration of the high peaks of Essex county, New York, and therefore had been more desirous of making observations on the southern portion. Before speaking of those explorations he begged leave to make a few remarks on the general structure of the whole system.—The great Appalachian range is, as is well known, composed of a system of parallel ranges, somewhat resembling the folds of a garment. But this comparison may lead to views of the structure of the system which will need modification. On the western side, the system does not consist of single chains, but of a high table land, elevated in some parts about 2,500 feet above the sea, being from 50 to 100 miles in breadth. This is the case in New York State, where between Lake Champlain and Lake Ontario there is a plateau of 1,500 feet above tide water, on which are placed high points, such as Tahawas, the high peak of Essex. We find that in Virginia, through which he had just passed, the bottom of the valley is about 1,700 ft. above the sea, behind the Alleghenies, and westward from this, extends a plateau lying 2,000 feet above the sea. Thence on for a hundred miles west we find an elevation of from 1,500 to 2,000 feet, not a level plateau, but one rough with longitudinal ridges. It was the same thing in Tennessee, with the long plateau of the Cumberland mountains. So that wherever we make a cross-section of the Appalachian system, we should find in the general profile, first, a gentle slope from the Atlantic, then a sudden rise to the highest elevation, then a more gradual descent on a table land westward. Thus in New England the eastern foot of the mountain ranges is about 800 feet above the sea, the western, in New York, 1,500. In Pennsylvania the eastern foot of the range is elevated about 500 feet, the western 1,000 feet. Still farther south we have the eastern foot 1,200 feet, and the western, about 2,500 feet above the sea. These are the general features of the profile. But we shall find that the beautiful law first pointed out by Prof. Rogers, is common to this and to the Jura mountains; that while the whole range is steeper to the east than to the west, the particular chains are just the reverse, and have their steepest slopes towards the west. He was the more desirous of mentioning this, because, when he had stated it on a former occasion for the Jura, he had been misunderstood. The middle region of the Appalachian system is, on an average, much the lowest portion of the whole—the peaks are lower, the table land lower, and the valleys lower; the highest points in Pennsylvania being little more than 2,000 feet. But, although low, it is here unbroken. The only clean cut through the whole system is, as was remarked by Prof. Henry, the great valley of the Mohawk, in which we attain at the highest point an elevation of only 400 feet. As we come north from Pennsylvania, all the elements increase. Instead of elevations of 2,000 ft., we have at the Catskill nearly 3,000, among the Adirondacks 5,000, and among the White mountains 6,000. And all the other great features—

the height of the valleys, and of the table lands—the general swell of the base increases in like proportion. As we go south, on the other hand, all the features in like manner become more grand. The high valleys in Virginia are over 1,000 feet above tide water, and in North Carolina is a tract from 100 to 150 miles in length, at an elevation of 2,000 feet. It is on this that the Black mountains rest. One of the marked features of the Appalachian system consists in a series of great central valleys running in the same direction as the whole range, as, for example, what is called the great valley in Virginia, and the valley of the Connecticut in the more northerly part of the chain. It is these valleys, in connection with the great swells of the land, that decide the courses of the rivers. But the whole system is curiously divided into two parts, a northern and a southern; one apparently twisted toward the east, the other toward the west; that is to say, all the streams in the northern part of the system take their rise upon the western plateau, and break through the eastern ridges on their way toward the sea; while in the southern portion the streams rise in the eastern plateau, and break through the western ridges on their way toward the Mississippi. The twist changes in Montgomery county, Virginia, at a place marked by no extraordinary features, but well defined by containing branches of the New river, called, nearer the Ohio, the Kenawha, and also the head waters of the Roanoke, which breaks through the Blue Ridge near the Peaks of Otter. The division lies between Christiansburg and Salem. North of this point the name Alleghany is given to the dividing ridge, or water shed. The dividing line south of this point is called the Blue Ridge. With those few preliminary remarks, he would now indicate the exact position of the Black mountains, and also of the White. They were both on the east, on the very border of the system, having the whole of the high plateau west of them. There is, it is true, a portion of the Blue Ridge running east of the Black mountains, as there is a range lying east of the White hills; but in both cases they are, as it were, additions on the east to the main central system. At the point where the Black mountains occur, the distance from the Blue Ridge to the Tennessee border mountains is from thirty to fifty miles. At this place the structure of the intervening mountains, also, is, like that of the White hills, different from that of the great Appalachian system. Instead of having the greater trend of the range, there are transverse ranges reticulating the country into cross valleys, in which the rivers run at right angles to the usual trend of the mountains.

Now this structure is not found in any other parts of the Appalachian system. The lowest points of these cross-valleys are about 2,000 feet above the sea, as at Ashville, on the French Broad River, in Buncombe County. The valley of the Toe River, at Burnsville, Yancey County, has an elevation of about 2,500 feet. Between these valleys a vast, anomalous mass of hills, consisting essentially of two ranges, one running from north to south about ten miles, the other starting from this southern point and running about ten miles to the northwest, and forming a vast horse-shoe, open to the north-west, and giving rise to Cane river. Although masked somewhat by other mountains about, they are well marked by that circumstance, which has given them the name of Black Mountains. The vegetation of their summits resembles somewhat that of Lake Superior. Instead of the oaks, chestnuts, and tulip poplars that make the other mountains green, the tops of these, from 5,300 or 5,500 feet upward, are clothed with a dense forest of the balsam fir. These mountains already attracted the attention of travelers in the last century. The Michaux, both father and son, traveled about them, and called the attention of the scientific world to the interesting field which they opened. They were also visited by Nuttall and Rafinesque. The first who has the honor of attempting measurements was Dr. E. Mitchell of Chapel Hill, in 1835. His first barometer was poor, but he obtained tolerable

good results, making the height of the peak he visited 6,476 feet. In 1844 he found a still higher elevation of 6,672 feet. Prof. Guyot mentioned that the Hon. Thomas Clingman of the House of Representatives, a great amateur in mountains, gave a very good description of the Black Mountains, and found a peak further north which he made 209 feet higher. All this uncertainty of measurements induced Prof. G. to go, provided with good barometers and assistants, to make more careful measurements. He would describe some of his processes, that the Association might know how far they could rely on his numerous results. One of the first objects in barometric measurements is to get rid of local variations by having two barometers, one kept stationary on a well-determined point. But it is usually difficult to find well-determined places sufficiently near.—In his measurements of the White mountains, when the stationary barometer was within ten or twenty miles of him, he found himself liable to an error of fifty feet in altitude. The second cause of error is less guarded against, and more difficult to get rid of, and that is the correction for the temperature of the air. The mean of the temperature of the two places may not at all represent the actual temperature of a great layer of air—four, five or six thousand feet in thickness. The errors from this cause may readily amount to thirty or forty feet, as the whole correction is frequently 300 feet. In the Black mountain measurements he started from a point whose level had been determined by a railroad survey, within seven miles of the nearest hill. By frequent barometric comparisons, during two different days, between this point and a house half way up the mountain he avoided the errors from great distance, and from great difference of altitude, which he had pointed out. Thence he determined by comparisons the height of one of the nearer mountains. Bringing now both barometers to the tops of the mountains, he compared peak with peak by the barometer. His single observations differed only two or three metres from the means, and the mean of one day scarcely differed one metre [3 inches] from the mean of another. All the peaks had been determined twice, and some of them several times. His great wish was to induce gentlemen to use more frequently the barometer to measure mountains. It is so convenient, and so accurate, only provided that you know how to use it well.

His measurement of Mt. Washington, 6,285 feet, differed but three feet from the determination of the coast survey, made afterward, and even that might arise from the difference of the tide level assumed by the survey, and by the railroad engineers, who gave him the level of Gorham, N. H.—So that he would recommend very much all observers, who may be interested, to take hold and multiply observations on the height of mountains and inland places. If I am traveling, said he, and I find I have not my barometer, I do not feel comfortable. I would carry it *always* in my pocket if it were not so long. At the request of the guides he had given names to the peaks, and a path had been made to one of them. The names were chiefly taken from natural features. All the measurements of heights of course depended for their reference to tidewater on that point determined by the railroad. The great mass of the mountains terminates abruptly to the north and to the south. It was mica slate and gneiss, probably wholly azoic—but he could not tell much about it, as his attention was absorbed with the other work he had undertaken. Few men can be obtained willing to accompany you through the forest—to go up and down through it on the mountain side is work for a giant. One great difficulty is in the beautiful groves of rhododendron. This choice green-house plant grows there in vast thickets, 15 or 20 feet high, almost impenetrable. Your path may be through flowers, but it is a struggle for life. It extends even to the tops of the mountains, even under the Balsam Firs, intermingled with the beautiful Kalmias and Azeleas. The great art in getting through is to go around; to keep on the crests; to follow the bear trail, the only help,

and a great help. Yet it often compelled them to go like the bears, on all-fours. This is the culminating point of the Appalachian system in all respects. The average of the group is higher by 500 feet than the average of the White hills, and the bases are nearly double the height of those.—The notches between the groups around Washington have an elevation of only 2,000 feet above the sea, but in the Black mountains the notches are more nearly 3,000 feet above the sea.—Even the great chains of the Tennessee border give heights of 6,000 feet; and the Blue Ridge of 5,000 to 6,000; and the very cross ridges furnish peaks as high as the White hills, and chains of 5,000 feet in elevation. Indeed, the main Appalachian chain here, on the Tennessee boundary, maintains a height of 5,000 feet for more than 150 miles.—The following are a few of the heights of the Black mountain groups: Black Dome, the highest point, 6,760; Hairy Bear, 6,606; Balsam Cone, 6,668; Black Brother, 6,626; Cat-tail Peak, 6,615; Deer Mount, 6,213; Long Ridge, 6,244; Bowler's Pyramid, 6,340. After a little conversation the section adjourned.

ON THE REMAINS OF FOSSIL ELEPHANTS.

Col. J. W. FOSTER, of Massachusetts read a paper on the geological position of the deposits in which occur the remains of the fossil elephants of North America, and other mammalia.

The true position in the geological series of these remains is still a mooted point among American geologists. Many maintain that the introduction of the elephant was subsequent to the glacial or drift epoch; and there are those even who assert that their extinction has taken place since the advent of man. I am disposed to refer their origin to a far higher antiquity, when the earth was tenanted with different forms of life, and when different physical conditions prevailed from what we now behold. I shall proceed, with some minuteness, to adduce the evidence on which this opinion is based; and in the accomplishment of the task, it will be necessary to inquire into the origin and age of the superficial deposits in which these remains are entombed. From the borders of the Arctic ocean, and extending as low down as latitude 40° N. we meet with accumulations of clay, sand, and gravel, interspersed with boulders of Northern origin, and angular blocks derived from no great distance. In the basins of the great Lakes, these deposits consist of marly clays variously colored, overlaid by coarse pebbles and waterworn boulders. Intermingled with these clays are the remains of vegetables, consisting so far as identified, of red and white cedar, pine, spruce, and cranberry, indicating at that time the existence of a sub-Arctic vegetation. Thus far, throughout the entire area occupied by these deposits few remains of shells have been found; but these are of fresh-water origin. These materials are sometimes mingled together *pell-mell*, but more frequently are distributed in stratified beds. The boulders occupy no fixed position; but sometimes rest upon the surface, and at others are found deep down in the clay. We are too apt to regard the drift agency by which these materials have been dispersed, as of short continuance, but it may be presumed that a long interval intervened between the first grooving and planing down the rocks, and the cessation of the boulder transportation, which observers have thus far failed to indicate by distinct geological monuments. There are other phenomena intimately connected with the close of the drift epoch, to which I shall proceed to advert; and these are the terraces. To those who have investigated the terraces which border the Northern Lakes and the rivers of our country, it must appear evident that they have not resulted from the bursting of the barriers at their outlets, but from the gradual rise of a portion of the continent, with sufficient pauses in the movement to admit of their formation. The oldest river terraces appear to have been formed toward the termination of the drift period, since we find that they contain angular and erratic blocks which could not have been

transported to their present positions by existing agencies. This might not necessarily follow in all instances, for the drift might have been subsequently modified by fluvial agency, but we have no means of distinguishing between primitive and modified drift. Even those terraces, composed of finely assorted materials, might have been formed at a time when the summits of the country were above the effects of the drift agency, while the depressed portions were exposed to the full force of its ravages. On the whole, it is reasonable to infer that the most ancient terraces are intimately connected with the drift phenomena, and that their formation is due to those elevatory movements by which the continents were made to assume their present outlines. When we witness the present operation of rivers in eroding their channels and forming alluvial deposits, we may well suppose that the more recent even of the terraces have a far higher antiquity than that ordinarily assigned to the origin of man. It is pretty well agreed among geologists that ice was the agent by which the rocks were plained down and striated, and the boulders were transported, but it is not agreed whether this agent was in the form of glaciers or icebergs. For the production of glaciers these conditions are necessary. The country must be broken by high mountains and deep valleys, the difference in the Summer and Winter temperature must be marked, and the atmosphere so charged with moisture as to send down much snow and rain. Hence, as De Beaumont has remarked, in the tropical regions we have at the present day, mountains which rise above the snow line, but the variability of the climate is not such as to cause the snow to accumulate in the form of glaciers. In Arctic America we have all the conditions for the formation of glaciers except the elevations and depressions of the soil. The height of land, according to Sir John Richardson, between Lake Superior and the Arctic Ocean, does not exceed fifteen hundred and forty feet above the Lake. Suppose before the drift period the country was elevated a few thousand feet higher than now, the summits of the Adirondack and White Mountains would be within the limits of perpetual snow, and glaciers might be formed, which, descending into the valleys, would groove and polish the rocks and leave long lines of rocky fragments, known as Moraines. But at the West, where from the southern line of the drift to the Arctic Ocean there is no elevation above twenty-five hundred feet, no glaciers could be formed, whatever where the conditions of the climate. Ice would accumulate in immense quantities in the Polar regions, and a sub-arctic vegetation would cover the plains and slopes of the hills where now we meet with deciduous trees. A great variety of facts prove that the climate of both continents was much colder than now before the human epoch. Buried timber is almost exclusively of a sub-arctic character. The molasses of that period are said by Professor Forbes to indicate the same thing. The thick wool and hair of the fossil elephant of Europe adapted him to a cold climate, and the structure of his teeth adapted him to feed mainly upon the woody fibre of trees. The habits of the mastodon were the same, as is proved by the contents of his stomach—found in several instances to have been twigs and branches of coniferous trees which now grow in northern latitudes, and are identical with those buried in the drift.

Assume now that the country was submerged, as is proved by drift 2,000 feet above the ocean level, the ice in the polar regions would float away in the form of bergs, carrying fragments of rock and finer materials taken from their resting places on land. The general course of these bergs would be south, being driven by the currents of cold water toward the equator, and little influenced by the wind, because above seven-eighths of their masses were submerged. Melting away they would leave long lines of boulders in their progress, visible when the continent rose again, strewn about the land or imbedded in the

drift. The substances thrown down, in deep water or in currents, would be assorted and stratified, and when icebergs became stranded upon a reef or shoal coast, the rocks would be scratched and grooved and long lines of pebbles and boulders thrown up; and as the country rose again slowly, with occasional pauses in the movement, summits would occasionally emerge; the ocean would recede, and a series of coast lines and beaches would be left to record its form or levels; estuaries would become lakes, rivers would increase their rapidity and excavate new channels, bearing into the pools the silt and sand of a former sea bottom. Terraces would be formed along the margin of the valleys, and the waters would cut away the barriers which obstructed them. These lakes and waters might soon become the home of numerous fresh-water mollusca, whose remains now constitute beds of shell marl. As the lakes shoaled, by filling up or by deepening their outlets, their bottoms would become clothed with water plants flourishing so long as they had sufficient moisture.

Hence many of the swamps and peat beds in which the mastodon has been found, may have been formed at a period very remote, when compared with the advent of man, although the associated shells belong to still existing species. Our evidence is incontestible, of an augmentation of cold producing barriers of ice, of the depression of a vast area in the northern part of this continent, of the dispersion of boulders, of the formation of terraces and beaches, and of the deposition of detrital materials enveloping the remains of terrestrial and molluscan animals.

There are two facts which militate against this hypothesis: 1st. The entire absence of marine shells; and 2d. With a depressed continent, we should look for an equable climate, and a vegetation conforming to that of the tropics. Having thus sketched the peculiarities of drift deposits, I turn to their connection with the remains of the elephant. Col. Foster first spoke of the remains of this animal found in the Muskingum Valley. The foundation of this valley consists of the coal measures rising on either side to the height of 200 to 300 feet. The soil is clayey and contains no boulders or granite pebbles. Within the basin, skirting the flanks of these heights, on each side, is a terrace rising 60 feet above the Muskingum, composed of the valley drift, and resting upon the rocks. The river bottom between these terraces of fine sand or clay, is free from loose blocks and boulders. [A minute description of the strata and topography of this portion of the Muskingum Valley, near Zanesville, illustrated by drawings, was introduced to show the application of the principles of drift in the early part of this paper.] Recurring now to the remains of the mastodon found in this valley, and which was a specimen of uncommon size and well preserved, the speaker showed that they were entirely confined to the oldest of these terraces. He then analyzed the character of the deposits in Southern Ohio and Western Virginia, Kentucky, Vermont, Canada, and the Southern States, where similar remains have been found. He next instituted a comparison between these deposits and those of Europe, which contain the *Elephas primigenius*.

From all the facts in the case the author believed that the fossil elephant of America commenced his existence before the drift agencies had entirely ceased—when the waters stood at a higher level—when the contours of the continent were different, when a different climate prevailed, and when a sub-arctic vegetation stretched far toward the tropics—at a time when the valleys were excavated by the retiring waters and the streams assumed nearly their present direction. It was a period of erosion which ought to be marked by distinct geological monuments; he would designate it as the *Fluvialite period*. Contemporary, probably, with the elephant was the mastodon of a more ponderous frame but of an inferior height; the fossil beaver tenanted the streams and lakes; the ox and the bison roamed

over the plains, while the tapir wallowed in the swamps, all belonging to extinct species. In the milder regions of the South, visited by the elephant and mastodon in their migrations, lived the great leaf-eating megatherium, the mylodon, the megalonyx, the hippopotamus, the elk, the deer, also belonging to extinct species; while at the head of the carnivora stood the colossal lion, which then as now was the monarch of the wilderness.

ON THE FORMATION OF CANNEL COALS.

Prof. Newberry read a paper on the formation of cancell coals.

These coals, as a class, compared with ordinary bituminous coals, are characterized by greater homogeneity of physical structure and chemical composition, having a more laminated and slaty fracture—impure specimens, conchoidal across the plane of stratification—contain more earthy and more volatile matter (and of course less fixed carbon), and the gases which they evolve have a higher illuminating power. The fossils which they contain are either aquatic, or exhibit marks of the action of water. The origin of these differences between cancell and common bituminous coals has been the subject of considerable diversity of opinion among geologists, the peculiar characteristics of cancell having been ascribed to a peculiar and highly resinous vegetation to applied or generated heat, all of which theories, being more or less unsatisfactory, this became one of the problems to which his attention had been specially directed in his investigations of the geological phenomena of the Ohio system of the Alleghany coal field. His observations upon the cancell coal beds of Ohio, the changes they exhibit in going from one front of outcrop to another, their physical and chemical characters, &c., have resulted in giving him the conviction that the peculiar characters presented by beds of cancell coal are due to their deposition in water, and the commingling with macerated and dissolved vegetable tissue, which for the most part compose them, and a considerable portion of animal matter. 1st. Cancell coal always exhibits a tendency to assume the foliated structure of slates and shells—a structure which it must have derived from aqueous deposition. It often is found shading into bituminous shale—into which it is converted simply by accessions of earthy matter. Bituminous shale and cancell coal may therefore be considered the same consolidated ligneous mud, deposited from aqueous suspension with different admixtures of carbonaceous matter, in bituminous shales as in cancell coal, exhibiting a preponderance of volatile matter over fixed carbon, and the gas furnished by it contains a larger proportion of the more volatile hydro-carbon, and possesses a higher illuminating power than that derived from ordinary bituminous coal. The chemical composition of cancell coal, so rich in volatile ingredients, is such as would naturally follow the decomposition of vegetable matter while constantly submerged. What we call the decay of plants after the loss of their vegetable life is in fact a combustion—an oxidation of their hydrogen to form water of their carbon to form carbonic acid. Under water these changes go on still more slowly, and a larger portion of the vegetable tissue becomes bituminized. In such circumstances bituminization is the oxidation of the carbon and escape of carbonic acid—with the combination and removal of a portion of the alkaline phosphates and carbonates, &c., which go to form the loss—the union of hydrogen with the carbon to form carbonretted hydrogen and other hydro-carbons—a portion of which are given off and part combine mechanically or chemically with the oxygen; a portion of the alkalies and the earthy matter—to form an almost indestructible mass, destined to serve man for the generation of heat, and which we call coal.

It is evident that the more ready the access of oxygen to the carbonaceous matter during the process of bituminization, the larger the proportion of the products of the process will be those of combustion; and the more perfectly the oxygen

is excluded, the larger proportion of the more volatile and combustible constituents of the wood will be retained. Of the conservative influence of water and vegetable matter we have ample evidence, not only in the almost incalculable durability of wood when constantly submerged, but in coal itself. In all beds of coal, except those where the process of volatilization is complete, in plumbago, and perfectly gasless anthracites, the work of decomposition is constantly going on, and water is to this as to ordinary combustion, an extinguisher. In this country coal is commonly mined from the outcrop, in some hill-side, where it is not covered by standing water; in such circumstances a progressive change is noticeable both in the chemical and physical proportion of the coal from the surface to the point where atmospheric influence ceased. Near the surface it is friable and lusterless, and becomes harder and more brilliant as it is penetrated. Near the surface, too, it is nearly destitute of gases, the proportion of volatile matter increasing as the coal improves in appearance. Of this Mr. N. was assured, by personal examinations of specimens from the outcrop and from deep in the mine. On the contrary, where the outcrop was covered by water, the coal will be found hard and light, and containing nearly its normal quantity of volatile ingredients. The higher illuminating power of the gases of cancell would naturally follow from the preservation of the volatile elements of wood by its continuous submersion in a hydrogenous liquid and the presence of a portion of animal matter. That a resinous vegetation could have given its inflammable character to cancell he thought improbable. He had found unchanged resin in bituminous coal, but never in cancell. The greater relative proportion of earthy matter in cancells would be an almost necessary result of covering the vegetable matter with a fluid heavier than air, and of greater power of transporting sediment. The appearance of the fossils previously noticed also seems to prove the aqueous nature of the origin of cancell. Pieces of cancell from England correspond with those in which these fossils are found. Shells, too, are not unfrequently found in the middle of a stratum of cancell. Among the vegetable remains found in this coal by Mr. Newberry are *Stigmaries*, roots and rootlets of trees which grow in coal-producing marshes, roots so characteristic of the under class of the coal seams, and others. Strata of ordinary bituminous coal usually consist of layers of greater or less thickness of brilliant bitumen, having a conchoidal fracture alternating thin layers of what is generally cancell, sometimes containing so much earthy matter as to become bituminous shale; at times these layers of cancell are of considerable thickness, and form an important part of the stratum. This arrangement is attributed to the variable quantity of water covering the coal marshes—the cancell-like layers being deposited during the prevalence of higher water, when the fishy remains could naturally have become a portion of the stratum.

Iron Cars.

Since the recent terrible slaughter on the North Pennsylvania railroad, public attention has been turned to the necessity of having cars built of a totally different material from wood, more particularly for passenger transportation. Dr. La Mothe has recently patented an iron car which is building at Paterson, N. J. It will be of the ordinary shape and dimensions, being designed to seat sixty passengers, and resting on two four-wheeled trucks. The body of the car will consist of strong iron bands, twelve or fifteen inches apart, running lengthwise and crosswise, and secured by rivets at their intersections. This will constitute the frame work, which will be covered by sheet iron on the flooring, and iron panels with glass windows on the side. Ventilators will be liberally supplied at the top. There is to be no wood work whatever about the cars; but to counteract the radiation of heat and obviate danger from accidents, the inside will be lined throughout with several layers of thick paste boards and heavy cushions.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,638,100	2,973,700	6,019,929	470,647	110,247	5	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Adirondack & Kennebec.	56	588,042	1,622,905	2,210,947	209,475	110,247	none	10	South Western	92	1,007,498	468,500	1,824,920	253,306	141,168	8	---
Kennebec & Portland.	56	1,114,725	1,661,236	2,775,961	270,214	112,491	6	86	Tennessee and Alabama.	30	246,486	---	679,906	In progr.			
Portland, Saco & Portsmouth.	61	1,367,000	119,237	1,486,237	233,234	120,834	---	---	Tennessee and Mississippi.	---	170,931	---	175,340	In progr.			
Boston, Concord & Montreal.	93	1,808,093	1,059,512	2,867,605	380,221	143,565	2	14	Memphis and Charleston.	217	2,179,440	2,127,002	4,028,796	311,631	159,572	---	
Cheshire.	53	2,086,925	899,318	2,986,243	375,919	138,454	6	74	Mobile and Ohio.	163	2,568,555	1,902,921	4,536,412	199,932	109,236	---	
Concord.	35	1,500,000	8,242	1,508,242	335,919	138,454	2 1/2	39	Miss. Central.	188	642,534	---	628,303	In progr.			
Northern, N. H.	82	2,768,400	---	2,768,400	370,529	138,299	2 1/2	74	N.O., Opelousas & G.W.	55	2,030,425	671,645	2,657,565	In progr.			
Con't & Passumpsic Riv.	61	1,048,145	787,608	1,835,753	162,687	65,173	none	4	Vicksburg, Shreveport & Tex.	---	111,760	---	107,895	In progr.			
Rutland & Burlington.	120	2,233,376	2,662,396	4,895,772	894,971	---	---	---	East Tennessee and Va.	111	1,000,000	1,500,000	2,500,000	In progr.			
Vermont Central.	117	5,000,000	3,550,236	8,550,236	820,119	214,793	none	2	Nash. and Chattanooga.	16	625,425	638,598	1,033,781	In progr.			
Boston and Lowell.	27	1,830,000	325,635	2,155,635	489,754	140,377	5	57	Covington & Lexington.	151	2,319,330	1,497,081	3,843,094	316,090	112,177	none	
Boston and Maine.	83	4,078,974	150,000	4,228,974	854,426	339,000	6	77 1/2	Lexington and Frankfort.	98	1,302,804	2,235,939	3,738,753	264,973	138,694	---	18
Boston and N.Y. Central.	71	2,240,300	1,518,671	3,758,971	69,917	8,740	none	7	Lexington and Danville.	---	694,444	52,734	747,178	In progr.			
Boston and Providence.	55	3,160,000	359,132	3,519,132	558,671	219,689	none	81	Louisville and Frankfort.	65	698,236	669,061	1,367,297	244,014	90,902	6	---
Boston and Worcester.	68	4,500,000	655,428	5,155,428	1,008,004	404,461	6 1/2	81	Atlantic & Gt. Western.	254	866,939	77,294	613,231	In progr.			
Cape Cod.	47	681,600	280,504	962,104	119,221	65,527	3	49 1/2	Bellefontaine and Ind.	118	1,881,685	2,025,925	2,862,652	298,293	140,828	none	30
Connecticut River.	52	1,591,110	273,241	1,864,351	286,633	103,787	5 1/2	40	Clev. Col. and Cincin.	141	4,547,020	122,857	4,613,722	1,290,295	732,056	9	101 1/2
Connecticut Mass.	60	2,583,400	2,947,737	5,531,137	467,281	305,908	---	---	Cleveland and Toledo.	200	2,676,425	2,689,301	5,124,629	736,272	398,986	10	76 1/2
Delaware.	37	3,540,000	153,700	3,693,700	681,163	225,071	---	67 1/2	Clev. and Mahoning.	103	---	---	628,533	In progr.			
North Eastern.	30	800,242	225,536	1,025,778	In progr.			---	Clev. and Pittsburgh.	133	2,780,744	3,043,992	5,824,736	681,877	309,515	---	57 1/2
N. Bedford and Taunton.	21	500,000	---	500,000	198,491	56,543	6 1/2	82 1/2	Cin. Hamilton & Dayton.	60	2,153,900	1,321,213	2,987,577	508,271	278,012	---	64 1/2
Old Colony and Fall River.	57	3,015,100	292,650	3,307,750	653,499	206,738	---	6 1/2	Cin. Wilm. & Zanesville.	131	1,120,450	1,131,265	2,326,459	In progr.			
Vermont and Mass.	77	2,232,541	1,033,670	3,266,211	284,726	87,313	none	8	Columbus and Xenia.	55	1,484,550	149,000	1,633,550	356,368	187,518	10	82
Western, Mass.	155	6,160,000	5,966,420	12,126,420	1,833,673	633,013	7	88 1/2	Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	In progr.			
Worcester and Nashua.	46	1,140,000	205,565	1,345,565	294,780	75,760	2	43	Dayton and Michigan.	140	1,076,602	895,011	1,958,269	In progr.			
Providence and Worcester.	43	1,510,020	335,461	1,845,481	311,430	138,057	---	70	Dayton and Western.	35	310,000	500,000	733,769	In progr.			
Hartford and N. Haven.	72	2,356,000	939,000	3,295,000	730,012	352,799	10	26	Eaton and Hamilton.	42	454,690	904,489	1,358,155	171,929	65,000	---	20
Hart'd, Prov. and Fishkill.	122	2,008,110	2,030,665	4,038,775	288,665	119,611	none	---	Little Miami.	65	2,963,921	1,171,785	3,648,172	681,562	336,708	---	88
Housatonic.	102	2,000,000	414,240	2,414,240	339,198	71,427	none	---	Mad River and L. Erie.	205	2,451,550	2,572,932	4,446,661	Recently opened.			
Naugatuck.	57	1,031,800	524,244	1,556,044	220,459	93,768	---	25	Central Ohio.	138	1,520,927	8,485,076	4,283,443	1,111,628	662,117	9	---
N. York and N. Haven.	62	3,000,000	2,876,808	5,876,808	884,306	338,877	none	---	Ohio and Peon.	187	2,451,700	3,219,000	5,670,700	1,111,628	662,117	9	---
N. Haven and N. London.	50	738,258	735,165	1,473,423	88,007	30,315	---	---	Pittsb'g, Mayav' & Cin.	50	371,350	31,000	399,933	In progr.			
N. London, W. & Palmer.	66	509,200	1,073,673	1,582,873	124,044	68,430	none	---	Sand'y, Mansf. & Newk.	127	1,350,000	2,206,357	3,552,357	328,968	164,479	none	---
Norwich and Worcester.	66	2,122,300	873,489	2,995,789	304,236	88,458	2 1/2	25	Scioto and Hocking Valley.	135	403,975	609,050	888,568	In progr.			
Albany Northern.	32	439,005	1,625,098	2,064,103	117,710	9,904	---	---	Springf. Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.			
Black River and Ulster.	35	643,330	317,859	961,189	In progr.			---	Tol. Wabash & St. Louis.	242	2,500,000	4,830,000	---	In progr.			
Buffalo, Corn. and N. Y.	100	1,487,374	1,601,183	3,088,557	172,478	65,333	none	---	Cin. Log. and Chicago.	255	4,196,679	1,006,126	2,080,433	In progr.			
Buffalo and N. Y. City.	92	798,439	2,557,849	3,356,288	288,392	31,896	none	---	Evansv. & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,552	7	60
Buffalo and St. Line.	99	1,300,000	1,040,000	2,340,000	679,750	355,763	10	---	Ind. and Cincinnati.	88	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60
Canandaigua and Elmira.	47	434,111	922,393	1,356,504	174,080	69,506	---	---	Indiana Central.	66	611,400	1,261,179	1,907,911	550,176	134,376	---	60
Canandaigua & Niagara F's.	98	1,815,000	2,279,854	4,094,854	3,485,732	---	---	---	Ind. Clev. & Pittsburg.	83	826,625	1,099,400	1,831,225	226,058	93,010	none	---
Cayuga & Susquehanna.	35	637,000	608,698	1,245,698	185,438	48,649	none	28 1/2	Jeffersonville.	60	1,014,252	694,000	---	206,544	94,318	none	---
Hudson River.	144	3,758,466	9,250,362	13,008,828	1,032,087	603,946	none	28 1/2	Madison and Indianapolis.	87	1,647,700	1,336,816	1,205,000	286,140	112,880	none	---
Long Island.	95	1,875,148	684,949	2,560,097	301,793	116,462	none	26	New Albany and Salom.	288	2,535,121	5,281,848	6,443,189	645,827	371,402	none	---
New York Central.	534	24,154,880	14,462,742	38,617,622	5,683,581	3,162,126	8	86 1/2	Penn and Indianapolis.	73	---	858,314	---	150,000	90,000	none	16 1/2
New York and Erie.	464	10,923,968	25,126,669	36,050,637	4,488,998	2,627,118	none	60 1/2	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	159,702	16	---
New York and Harlem.	133	5,071,100	4,069,769	9,140,869	1,035,677	234,126	none	15 1/2	Chicago and Rock Is'd.	182	3,141,500	2,387,155	5,214,152	In progr.			
Northern, N. Y.	118	1,633,022	4,406,874	6,040,896	520,153	135,764	none	1 1/2	Chicago and St. Louis.	220	---	---	---	1,077,312	---	---	94
Oswego and Syracuse.	35	399,000	126,681	525,681	128,540	59,982	3 1/2	---	Chicago, Burl. and Quincy.	55	1,639,100	1,684,736	2,884,622	722,580	379,821	20	---
Potomac and Watertown.	29	467,200	294,189	761,389	124,149	82,600	7	---	Central Military Tract.	88	1,022,500	2,133,050	2,920,241	471,399	219,588	---	---
Rensselaer & Saratoga.	25	610,000	140,000	750,000	191,909	21,089	none	---	Chic., St. Paul & F'd du Lac.	178	2,300,000	1,326,000	3,626,000	In progr.			
Saratoga and Whitehall.	48	500,000	395,000	895,000	171,909	21,089	none	---	Galena and Chicago.	259	5,441,500	1,318,039	7,742,614	2,315,786	1,192,402	22	108
Syracuse & Bingham's.	60	768,369	1,578,804	2,347,173	159,434	22,508	none	---	Illinois Central.	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	---	110
Troy and Boston.	27	437,380	737,079	1,174,459	166,363	55,184	---	---	Peoria and Quawwa.	93	569,889	818,454	1,388,342	In progr.			
Watertown and Rome.	97	1,370,378	700,979	2,071,357	404,374	172,474	3 1/2	---	Ohio & Miss. (Wat. Div.).	147	1,780,295	3,292,403	4,870,586	Recently opened.			
Belvidere Delaware.	64	1,000,000	1,619,000	2,619,000	161,355	75,834	none	---	Terre Haute and Alton.	173	2,281,420	1,256,000	3,537,424	In progr.			
Camden and Amboy.	94	8,000,000	1,407,200	9,407,200	2,017,127	961,941	12	124	Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.			
Camden and Atlantic.	60	369,320	1,522,131	1,891,451	122,417	50,080	none	---	Mich. Central.	282	6,032,444	5,996,013	10,688,155	2,215,283	879,566	10	91
New Jersey.	30	3,482,850	690,000	4,172,850	611,514	500,747	10	121	Mich. South'n & N. Ind.	475	6,929,900	6,919,224	11,645,200	2,410,000	875,000	10	90 1/2
New Jersey Central.	63	2,000,000	2,296,176	4,296,176	338,728	171,003	---	---	Green Bay, M'L. & Ch.	155	746,076	442,726	1,188,706	In progr.			
Morris and Essex.	53	1,187,895	375,000	1,562,895	229,341	96,267	6	---	Milwaukee and Miss.	106	1,826,428	2,467,889	3,578,767	691,843	417,443	17	76 1/2
Albany Valley.	44	1,637,567	342,564	1,980,131	219,253	82,450	---	---	Milwaukee & Watert'n.	72	354,861	132,000	514,238	In progr.			
Cataw. W. & Erie.	63	1,700,000	1,940,000	3,640,000	128,540	66,994	---	---	Milwaukee and Horicon.	15	554,200	---	854,109	In progr.			
Cumberland Valley.	56	1,099,500	12,211	1,111,711	148,311	259,263	6	80	Milwaukee & La Crosse.	61	1,351,832	532,181	1,883,983	In progr.			
Del. Lark & Western.	109	3,061,922	3,884,702	6,946,624	648,081	259,263											

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85%	85%
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	97%	97%
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	85	85
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	72%	72%
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	70	77%
Cincinnati, Wilmington, and Zanesville	1,500,000	Do. convertible	7	May, Novemb.	"	1862	86	86
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	925,000	Do. inconvertible	7	Feb'y, August	"	1863	87%	87%
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	80	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	80	80
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	63	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Gaucha and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94%	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86%
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	79
Indianapolis & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	70	72
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	77%	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100%	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101%	102%
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1862	94%	95%
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	95	95
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1868	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79	79
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	98%	98%
Racine and Mississippi	680,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	85	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Stonewall and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71%	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	86%	87
Do. do.	1,125,500	Do.	6	Jan'y, July	Balt.	1875	87%	87%
Chicago and Rock Island	3,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95%	95%
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	105	105
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95%	96%
Do. do.	4,000,000	3d mortgage	7	March, Sept.	"	1863	95%	97%
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	93%	93%
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86	87
Hudson River	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93%
Do. do.	3,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98%	99
Do. do.	2,000,000	2d do. do.	7	16 Jan. 16 Dec.	"	1860	86	86%
Do. do.	2,000,000	3d do. convertible	7	May, Novemb.	"	1870	66	66%
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	92%	92%
Do. (Free Land)	3,000,000	Mortgage 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	94	94
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	92	96
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80	84
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	80	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	N.Y.	1861	90%	94
Do. do.	1,500,000	Do. do.	7	Feb'y, August	"	1868	84	85
New York Central	3,287,000	No mortgage, do.	6	May, Novemb.	"	1863	89%	89%
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June 15 Dec.	"	1864	101	101%
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	100	102
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	100	102
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844 '48 '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88	90
Do. do. 1849	3,460,000	Do. inconvertible	6	April, October	"	1870	86%	87

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y, 100	101		Milwaukee, 7 per ct. coup. X	Divers	80	85
Do. 5 do. 1858-60	May, 95	97		New Orleans, 6 per ct. cp. R.R. X	Do.	77	80
Do. 5 do. 1870-75	August, 95	97		N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	83	86
Do. 5 do. 1890	November, 94	95		Philadelphia, 6 per ct. 1870-79	Jan'y, July	89%	90%
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August, 97	100		Pittsburgh, 6 per ct. coup. X	Divers	74%	75%
Albany, 6 per ct. coup. 1879-90 X	Quarterly, 97	99		Quincy, 8 per ct. coup. 1868 X	Jan'y, July		
Baltimore, 6 per ct. coup. 1879-90 X	Quarterly, 97	99		Racine, 7 per ct. coup. 1875 X	10 Feb'y, Aug	85	
Boston, 6 per ct. coup. X	April, October, 100	100		Rocheater, 6 per cent. coup. X	Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July, 101	102		St. Louis, 6 per ct. coup. Long X	Do.	78	79
Cleveland, 7 per ct. cp. W.W. 1879 X	Do. do., 88%	89%		Do. do. Municipal X	Do.	80%	81%
Cincinnati, 6 per ct. coup. X	Divers, 89	90		Sacramento, 10 p. ct. cp. 1862-74 X	Do.	71	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July, 89	90		S.F. Francisco, 7 p. cp. 1865 pay. N.Y. X	May, Novemb.	80	
Do. 7 p. ct. coup. 1880 X	Jan'y, July, 101	102%		Do. 10 p. ct. cp. 1871 X	Do. do.		
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August, 101%	102%		Do. 10 do. pay. N.Y. X	Jan'y, July		
Hubbuck, 8 per ct. cp. Long X	March, Sept., 94	95		Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	52	57%
Jersey City, 6 per ct. cp. W.W. 1877 X	Jan'y, July, 79	80		Wheeling, 6 per ct. coup. X	Divers	67%	
Louisville, 6 per ct. cp. 1880-88 X	Divers, 65	70		Do. 6 p. ct. cp. Municipal 1874 X	March, Sept.	81%	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July, 65	70		Zanesville, 7 do. X	April, October	97%	

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending September 3rd, 1856.

BONDS.	
\$3,000 Ohio & Miss. 7 per ct. 2nd Mort.	48%
2,000 Hillsboro' & Cin., 7 per ct. 1st Mort.	45
7,000 Cov. and Lex., 10 per ct. Income	50 to 55
2,500 Do. do. 6 do. do.	85
1,000 Covingt. & Lex., 7 per ct. 2nd Mortgage	88
1,500 Indiana Central, 10 per ct. Income, due in '58	90 to 95
and '58	90 to 95
900 Ind. & Cin. 7 per cent. Dividend	71
1,000 Ohio and Miss., 7 per cent. 1st Mortg., (six months' interest included)	70
1,260 Little Miami, Dividend Scrip.	80
500 Col. & Xenia, 7 per cent. ten years Divid.	85
STOCKS.	
100 Shares Little Miami	88%
200 " Ohio & Mississippi	5%
50 " Do. do.	6
24 " Indianapolis and Cincinnati	6
38 " Marietta and Cincinnati	14
71 " Covington and Lexington	14
20 " Cin., Ham. and Dayton	65
45 " " b60d.	68
149 " Cin. & Chicago b60s	6
50 " Mad River and Lake Erie	14
50 " Indiana Central, b60d	60
6 " Cin., Col. & Cin.	100

By KIRK & CHEEVER.

For the week ending September 2nd, 1856.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	.....	80
Covington & Lexington, 2nd Mort. 7 per ct.	.....	65
Ohio & Mississippi, 2nd Mort. 7 per ct. (Eastern Division)	.....	48
Indianap & Cin., 2nd Mort. 7 per ct.	.....	80
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	.....	82½
Hillsboro' and Cin., 7 per cent. 1st Morg.	.....	46
Covington & Lexington, 10 per ct. Income	.....	54
Indianapolis and Cincinnati Dividend	.....	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	.....	68
Do. do. due July 1, 1866	.....	85
Little Miami, Dividend Scrip. issued June, 1856	.....	79
STOCKS		

Bellefontaine and Indiana, 25.—Cin., Ham. and Dayton, 66.—Col. and Xenia, 82.—Cincinnati, and Ohio, 84.—Covington & Lexington, 14.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 60.—Indianapolis and Cincinnati, 58.—Little Miami, 89.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 15.—Ohio and Mississippi, 5%.—Hillsboro' and Cincinnati, 15.—Peru and Indianapolis, 14.—Cincinnati, Wilm. and Zanesville, 12.

Extract from De Coppet & Co's Money Circular for the European Steamer of the 9th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Sept. 8, 1856.

During the two or three days subsequent to our last advices, the inactivity then noticed continued to be felt; since then, without being able to attribute it to any cause in particular, our stock market has experienced some little revival, especially in railroad stocks, the prices of which have generally advanced. The greatest number of this class of securities, which give handsome dividends, are comparatively low, and calculated to attract the attention of investors; and as capitalists return from the country, and the fears respecting the health of the city are lessened as the season advances, it is not unreasonable to anticipate a gradual improvement in their market value, if the money market remains in its present condition. To the more active demand for money noticed in our last advices, there has succeeded rather more ease. In regard to State stocks, we may observe that the demand for Missouri 6s has continued good through the week, at an advance of $\frac{1}{2}$ per cent. Some moderate transactions took place in Virginia 6s, at $\frac{3}{4}$ advance, and in Indiana 5s and California 7s, 1875, without material fluctuations. The demand for city bonds continues most limited; we notice only a few retail transactions in Milwaukee 7s and San Francisco 6s, at rather irregular prices. Since the payment of interest on the latter, there is more disposition to deal in them. A very limited business was done in railroad bonds at the Stock Exchange, except in Illinois Central Construction, which were active, at $\frac{1}{2}$ per cent. advance. There were some sales of Erie 7s, 1875, at $\frac{1}{2}$ advance, and of 7s, 1863, at a decline of $\frac{1}{4}$. At private sale, purchases of some amount, and principally for American account, were done in Milwaukee and Mississippi 1st mortgage on third section; also a few retail sales of Burlington and Missouri railroad 1st mortgage, and Peoria and Oquawka railroad 1st mortgage (Eastern Extension). There was some activity in the following

railroad shares, with an advance on Erie of 2½, on Reading 1½, on New York Central of ¾, on Cleveland and Toledo of 2½, on Chicago and Rock Island of 1½, on Illinois Central of 1½, and on Panama of 4½ per cent. In other railroad shares very little was done. Money is in steady demand, at 7 for short loans, and for paper at 8 to 11 per cent., according to class and length.

DE COPPET & CO.

Marie & Kanz' Money Circular for the European Steamer of the 9th Inst.

[TRANSLATED EXTRACT.]

New York, Tuesday, Sept. 8, 1856.

The week elapsed since our circular of the 2d inst., has been marked by greater activity, and an almost general rise in railroad shares, for which an improved outside demand has manifested itself. State stocks have also been pretty active at an advance on Virginia and Missouri and others at firm prices, but railroad bonds, with the exception of Illinois Central, have remained very quiet, the purchases for foreign account continuing on a very limited scale. Money if changed in any way has been in rather better supply on short loans, while the offerings for discounts at Banks and private bankers have slightly increased, though without causing any material change in rates. Missouri has again been the most active of State stock, advancing ½. Virginia rose 1; Louisiana ½; Indiana 5s and California 7s, 1875, have been sold at former rates. In city and county bonds we have no transactions of any importance to notice. The sales of Illinois Central railroad bonds have been large, the closing price showing an advance of 1½. Erie 1875 bonds went up 1, while Erie 1883 bonds sold in several small lots at a decline of 1 per cent. New York Central 6 per cent. bonds declined ½, and Hudson River 3d mortgage ½. The transactions in railroad shares have been large in Erie, Reading, Cleveland and Toledo, and to a fair extent in the shares of the Western roads. Erie advanced 2; Reading 1½; New York Central ¾; Panama 4½; Michigan Central 1; Michigan Southern 1½; Illinois Central 1½; Cleveland and Toledo 2½; Chicago and Rock Island 1½; Cleveland and Pittsburg 1; Galena and Chicago ¾; Milwaukee and Mississippi ½. Money is in good supply on call at 7 per cent. Discount 8a9 per cent. for first class, and 10a12 for paper less known. Exchanges firm with a fair business doing in francs. Sterling, 109½a7½. Paris, 5.17½a5.15.

MARIE & KANZ.

Railroad Statistics of the United States.

The Secretary of the Treasury has prepared the annexed set of "interrogatories," which are to be addressed to "President of railroad companies," with a view to the compilation of railroad statistics of the United States:

1. What is the corporate name of your company?
2. What is the date of its charter?
3. When was it commenced?
4. When completed? or if not completed, when is it expected to be completed?
5. What are the termini of the main road, and what of the branches?
6. What is the length of the main road, and what of the branches?
7. What is the length of the double track, if any?
8. What was the cost of the road all complete? or the estimated cost if not completed?
9. What is the capital stock paid in?
10. What is the amount of bonds issued?
11. What is the amount of floating debt?
12. What is the aggregate amount of debt?
13. What are the annual receipts.
14. What is the amount of operating expenses, including repairs?
15. What is the annual rate and amount of interest paid?
16. What are the net annual profits?
17. What are the dividends?
18. What number of miles is run by passenger trains per year?
19. What number of miles is run by freight trains per year?

20. What is the number of through passengers for the year?

21. What is the number of way passengers for the year?

22. What is the number of tons of through freight for the year?

23. What is the number of tons of way freight for the year?

24. What is the mileage of the passengers carried during the year, or the equivalent number of passengers carried one mile?

25. What is the mileage of the tons of freight carried during the year, or the equivalent number of tons of freight carried one mile?

26. What is the average speed of passenger trains?

27. What is the average speed of freight trains?

28. What number of casualties for the year were fatal?

29. What number of casualties for the year were not fatal?

The Secretary requests that the answers to these interrogatories may be given from the last annual report of each company, with the date of the report; that the may be inserted in the bank left opposite to each interrogatory; and that the interrogatories, so answered, may be returned to the department at the earliest period practicable. When the compilation is completed and printed, it is the intention of the Secretary to send a copy to each President, partly to requite the favor solicited and partly to disseminate the information collected and combined.

American Railroad Journal.

Saturday, September 13, 1856.

The Late Accident on the New York Central Railroad.

An accident occurred on the 5th inst., on the New York Central railroad, near Port Byron, by which six men almost instantly lost their lives. A cattle train standing on the track was run into by a passenger train. The shock broke the supply pipe of the engine, and the escape steam enveloped six cattle drovers in the last car of the cattle train, literally scalded them to death.

The alleged cause of the accident was the misplacement of the switch. The passenger train was said to be running at the rate of about eight miles an hour. It was probably running at a faster rate, or its momentum could have been checked previous to the collision.

The misplacement of the switch though a sufficient cause of censure to the party in charge of it, should not be taken as any excuse or apology for the accident; and proper regulations on the part of the company would have prevented it, had the switch been out of place. On entering a station where the train is to halt, the Engineer should have his train so far under his control as to be able to bring it instantly to a stand. The penalty for running into a train, or for running the train off from misplacement of the switch on the Erie railroad, is invariably punished by dismissal of the Engineer. The rule prescribed to him, is to run his train in such a manner as would insure safety should the track belonging to him at the station be occupied, and should every switch connected with it be misplaced. He is told to have his train entirely under control. And also that the switchman is placed at the switch or turn-out for his convenience, and not, as far as the Engineer is concerned, to secure the safety of the train. In this way, and in no other way, can safety and freedom from accidents be secured. To prescribe a rate of speed would not meet the case, as there is

no way of measuring speed. But when the Engineer understands that he is responsible for accidents of the class named, he will be always vigilant, and always have his train under control.

It was the proscription of the above rule, among others equally salutary, that led to the strike among the Engineers, soon after Mr. McCallum took charge of the road. It was rigidly enforced, however, and it is now regarded as an excellent one by the Engineers themselves; and has doubtless saved the company numberless accidents, which would have involved heavy losses both of life and property. We should suppose it would be adopted by every railroad company.

Cleveland, Painesville and Ashtabula R. R.

At the annual meeting of the Directors of this railroad, held on Wednesday, August 27th, the following gentlemen were elected to fill the offices noted:

President—WILLIAM CASE.

Secretary and Treasurer—G. B. ELY.

Superintendent—H. NOTTINGHAM.

Chief Engineer—WM. BECKWITH.

Directors—Messrs. Wm. Case, H. B. Payne, A. Stone, jr., W. D. Beattie, A. Kelley, J. B. Johnson, Charles Hickox, T. M. Kelley, S. Witt, D. R. Paige, T. P. Case, S. G. Randall, and James Milner.

Bridging the Ohio.

Another stupendous mechanical undertaking is about being inaugurated at Cincinnati. The people of that enterprising region are moving in earnest towards erecting a bridge across the Ohio, to connect Cincinnati and Covington. Proposals are invited for laying the abutments, and the construction of an immense suspension bridge is to be immediately proceeded with. The stock has all been paid in. The bridge will not, so it is said, interfere in the least with river navigation. The arches are to be fully sixty feet above high water mark, thus allowing the tallest chimneys of boats to pass beneath it without the slightest trouble.

Insurance upon Railroad Property.

We give, in another column, an advertisement by the Liverpool and London Fire Insurance Company, which propose to make risks upon railroad property, such as depots, station and engine houses, machine shops, running furniture of all kinds, bridges and all kinds of combustible structures, a permanent and important branch of their business. This company has a paid-up capital of \$10,000,000, with a reserve, or surplus fund of \$3,500,000. As an additional security, the insured have the personal liability of the stockholders. The Directors in this city are JAMES BROWN, MORTIMER LIVINGSTON, WILLIAM S. WETMORE, FRANCIS COTTENET, GEORGE BARCLAY, JOSEPH GAILLARD, ALEXANDER HAMILTON, jr., ED. F. SANDERSON, JOSEPH FOWLER, JOHN H. HICKS, ALFRED PELL, and EUGENE DUTILH. The Directors in New Orleans are: FREDERIC RODEWALD, AMEROSE LANFEAR, JOHN C. B. YUILLE, H. V. OOBEN, and THOMAS BYRNE. Many of the above gentlemen are large shareholders in the company, and the whole compose a list of our most respectable and substantial citizens.

Railroad companies have often greater reason for insuring perishable property, than private individuals. Independent of risk of loss, a small

sum annually will insure regular dividends to stockholders, which are now often interfered with by heavy losses from fire. Every railroad should keep a portion at least of its perishable property insured. An excellent opportunity is now afforded in a company of the highest respectability and of ample means.

Ohio and Mississippi Railroad--Illinois Division.

Two parties claim the right to control this road; one headed by H. D. Bacon, and the other by the city and county of St. Louis. An election of Directors has been recently held by each. The following is the Bacon list of Directors—

Samuel Gaty, Daniel R. Garrison, H. D. Bacon, Geo. Partridge, Wyllis King, Stephen M. Edgell, Samuel R. Wilson, Wm. H. Belcher, Thos. L. Salisbury, Aaron Shaw, of Illinois.

This Board has been organized by the choice of the following officers:

Henry D. Bacon, President; Daniel R. Garrison, Vice President; Geo. K. McGunagle, Secretary; Aaron Shaw, Councillor.

The rival list of Directors is as follows:

Gerard B. Allen, Henry T. Blow, Andrew Christy, John O'Fallon, John Hartnett, A. H. Hackney, Jas. Harrison, John How, W. M. Morrison, Wm. Palm.

Railroad Earnings.

The receipts of the Galena and Chicago railroad for August were as follows:

August 1856.....	\$250,693.82
August 1855.....	210,066.23

Increase..... \$46,067.59

The Little Miami and Columbus and Xenia roads show the following comparative earnings for the three months—ending Sept. 1:

	1855.	1855.	Increase.
June.....	\$90,063	\$75,579	\$14,483
July.....	93,852	63,896	24,455
August.....	111,369	86,946	23,422

Total..... \$294,785 \$231,422 \$63,360

The earnings in August show an increase of 28 per cent. These two roads are worked as one line.

The following statement of the Cumberland Valley Railroad Company exhibits the comparative receipts for August this and last year:

	1855.	1856.
Passengers.....	\$6,408.89	\$8,847.36
Freight.....	5,803.22	7,886.75
Mails.....	433.33	433.33

Total..... \$12,644.94 \$16,667.44

Increase..... \$4,022.50

The earnings of the Michigan Central road for the month of August, 1856, were:

	Pass'grs.	Freight.	Misc'l's.	Total.
1856.....	\$146,826	\$112,021	\$6,802	\$265,649
1855.....	125,643	69,915	7,049	202,607
Inc. \$21,182	\$42,106	.....	\$63,042	
Dec. ....	.....	\$247	.....

The following is a comparative statement of the traffic receipts on the Chicago and Burlington Railroad for the month of August, 1856, as compared with the same month last year:

	Freights.	Pass'grs.	Misc'l's.	Total.
Aug. 1856.....	\$195,632	\$46,795	\$2,544	\$244,972
Aug. 1855.....	100,008	39,456	1,389	148,849

Gain in '56.. \$95,629 \$7,339 \$1,155 \$104,123

The proportions of earnings for August by each road composing the line are as follows:

	Freights.	Pass'grs.	Misc'l's.	Total.
C. & C. Union.....	\$26,068	\$4,241	.....	\$30,308
C. B. & Q'cy.....	162,133	36,561	\$2,090	200,784
Peo. & Oqu'ka.....	7,432	5,993	454	13,880

Total.... \$195,633 \$46,795 \$2,514 \$244,972

Length of line 210 miles.

The revenue for August of the Baltimore and Ohio has been as follows:

	Main Stem.	Branch.	Wash'n	Total for both roads.
For pass'grs....	\$67,844.18	\$30,181.80	.....	\$98,025.98
For freight....	330,441.70	9,466.12	.....	339,907.82

\$398,285.88 \$39,647.92 \$437,933.80

On a comparison with the corresponding month of last year we have the following gratifying result:

	Pass'grs.	Freight.
August, 1856....	\$67,844.18	\$330,441.70
August, 1855....	58,120.26	257,529.49

Increase.... \$9,723.92 Increase. \$72,912.21

	Pass'grs.	Freight.
August, 1856....	\$30,181.80	\$9,466.12
August, 1855....	27,168.93	9,005.52

Increase.... \$3,012.87 \$460.60

From the above comparison it will be seen that there has been an increase of \$86,109.60 in the gross receipts over those of the corresponding month last year. There has been an increase in the receipts in every department of the road; on freight on the main stem the increase is \$72,912.21, and on passengers, \$9,723.92, on freight on the Washington Branch the increase is \$460.60, and \$3,012.87 on passengers.

	1855.	1854.
October.....	\$423,436.84	\$359,610.52
November.....	399,119.40	347,677.96
December.....	441,815.61	293,014.16

	1855.	1855.
January.....	\$191,809.81	\$370,211.93
February.....	211,513.76	216,299.49
March.....	405,820.39	370,455.02
April.....	561,811.28	368,202.84
May.....	479,318.25	385,358.14
June.....	438,788.26	371,783.84
July.....	417,971.97	301,909.21
August.....	437,933.92	351,824.20

\$4,399,339.49 \$3,735,347.31

Increase..... \$663,992.18

The earnings of the Milwaukee and Mississippi railroad for the month of August, 1856, are..... \$56,809

Corresponding month of last year..... 55,095

Increase..... \$1,204

The receipts of the Morris Canal were:

Total to August 30, 1856.....	\$189,481 88
Week ending September 6, 1856.....	11,952 88

Total to Sept. 1, 1856.. \$201,434 26

Week ending Sept. 8th,

1855..... 7,292 43

189,641 01

Increase, in 1856..... \$11,793 25

The following is a statement of the net earnings of the Pennsylvania railroad for six months, ending July 1st, 1856, compared with corresponding periods for 1854 and 1855:

	1856.	1855.	1854.
January.....	\$295,947	\$293,004	\$275,192
February.....	302,651	187,710	297,657
March.....	513,217	374,378	475,496
April.....	601,119	343,619	313,889
May.....	451,372	416,720	294,224
June.....	345,613	304,701	223,863

Total.... \$2,509,922 \$1,820,135 \$1,880,324

Expenses..... 1,366,223 992,952 986,974

Net income... \$1,143,698 \$827,183 \$893,350

Capital stock..... \$12,400,000

Funded debt, 6 per cents..... 7,570,000

Total, including \$1,450,000 to other roads..... \$19,970,000

Net income, 6 mos., as above..... 1,143,698

3 per ct. interest on debt... \$227,100

4 per ct. on stock..... 496,000— 723,100

Leaving to contingencies..... \$420,598

The net earnings of the road, after providing for the funded interest for the six months, are equal to about 7½ per cent. on the stock, of which 4 per cent. was paid out in cash as the half yearly dividend. Previous to this year the policy of paying simple interest on the stock, 6 per cent. a year, had been pursued from the foundation of the enterprise.

The earnings of the Cleveland, Columbus and Cincinnati road for August were:

Passengers.....	\$46,840 49
Freight, &c.....	80,702 83

Total..... \$127,543 32

August, 1855..... 113,408 41

Increase..... \$14,134 91

North-Western (Va.) Railroad.

This road has been completed to Clarksberg, Va., a distance of 22 miles from Grafton, the eastern terminus. The work of laying the rails to that place, was finished by the contractors on Saturday last, when the "iron horse" entered the town amidst the peal of cannon, and the enthusiastic shouts of a large assemblage of ladies and gentlemen, who subsequently during the evening invited the contractors and their workmen to partake of a handsome collation. The citizens are anxiously expecting a passenger car to be placed on the road to connect with the Baltimore train at Grafton. The work of laying the track on the Parkersburg end of the road, is in rapid progress, and there is said to be a fine prospect of the entire work being finished in about sixty days.

Peterboro' and Shirley Railroad.

The annual meeting of this company was held on Wednesday, the 3rd inst. The Directors made their tenth annual report. The actual cost of the road up to the present time is \$265,268 81. The capital stock of the company when the balance of No. 4 is converted into stock will amount to \$265,000. The Directors have procured a lease of the New Hampshire road for five years from July 1st, 1855, and have leased the same to the Fitchburg railroad for three years and nine months from the 1st of April, 1856, for the sum of \$3,500 per year, and they are to run two trains of cars per day each way, and also keep the road in good repair.

The amount of bonds now outstanding against the company which have been given for the purchase of the debts of the New Hampshire road is \$40,000, and the amount of notes is \$2,600. The earnings of the year have been \$18,868 80, and total credit of the road with the Treasurer, for the year ending Sept. 1st, was \$38,367 57. About \$8,500 has been paid out during the year in dividends.

The expenses are trifling, the road being run by the Fitchburg road. The repairs of the New Hampshire road cost \$1,796 09; the expenses of do. \$839 25. The report was accepted, and the following Board of Directors chosen, Mr. C. B. Barrett taking the place of Mr. Charles Powers, a Director last year:

J. M. Maynard, Geo. Barrett, Daniel Adams, Walter Fessenden, F. A. Worcester, Levi W. Woods, J. H. Walker, C. B. Barret, Geo. Taft.

London and Port Stanley Railroad.

That portion of this road lying between Port Stanley and St. Thomas has been opened for traffic. The whole line will be shortly completed.

Reading Railroad.

The Philadelphia Ledger, of the 6th inst., gives the following relative to the earnings of the Reading Railroad:

The following tabular statement shows the business of the Philadelphia and Reading Railroad Company, as compared with last year:

Received from coal....	\$807,968.80	\$355,724.75
" " m'd's'e..	24,365.30	21,514.17
" " travel,&c.	31,279.21	31,036.28

Total.....	\$363,498.31	\$408,275.20
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Transportation, road-way, dumpage, renewal fund, and all charges.....	\$173,760.71	\$162,989.89
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Net profit for the month.....	\$184,737.60	\$245,285.30
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" for previous 7 months.....	882,745.18	1,189,292.89
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Total net profit for 8 months.....	\$1,067,482.73	1,434,578.20
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It will be seen from the above account, current for the month of July, that while the receipts of the road have fallen off \$44,777, the renewal fund charges, &c., have increased \$15,770; the total net profits of the month being only \$184,737, against the profits of July last year. For the eight months of the current year the net profits it will be seen, are \$367,095 less than the net profits to the corresponding time last year. Should the falling off to the end of the year continue at the same rate, the decline will exceed half a million of dollars.

London and Grand Trunk Junction Co.

On Saturday the first meeting of the above company was held at the Robinson Hall in pursuance with the published notice. Among those present were the Mayor, John Wilson, M. P., Thos. Galt, W. W. Street, John Carling, P. Schram, L. Lawrason, J. Shanley, H. C. R. Becher, E. F. Whittemore, John Crawford, &c. On motion being made the Mayor took the chair, and Mr. Galt acted as Secretary. After Messrs. Schram and Street had been appointed scrutineers the ballot for Directors was taken, which resulted as follows:—

Hon. John Ross, John Wilson, M. P. P., L. Lawrason, H. C. R. Becher, James Shanley, jr., Wm. Barker, Lionel Ridout, Lewis Moffat, John Crawford, E. F. Whittemore, and Thomas Galt.

It will be seen from the above list that London is fully represented. After the election of the Directors they proceeded to business.

The Directors then held their first regular meeting, at which the Hon. John Ross was appointed President, and Mr. John Wilson, M. P. P., Vice President of the Company. Preliminaries having thus been arranged the matter of the contract next came up. It was thought proper to award it to Messrs. Gzowski & Co., for the sum of £8000 sterl. per mile, including the right of way and rolling stock. The road is now, therefore, under contract to be built, and the contract provides for its being placed in running order by the first of January, 1858. In the meantime, as a precautionary measure, Messrs. Gzowski will pay the interest on the capital till the road is

completed. We may mention further that the locomotive has penetrated as far as Stratford, and that the road will be opened in a month to within about two miles to St. Mary's, to a point beyond which the work has not been graded, owing to the delay necessary to the organization of the present company.—*London (Canada) Free Press.*

Trade and Commerce of New Orleans.

The New Orleans Price Current of September 1st, gives the following review of the trade and commerce of that port for the commercial year ending that date:

The extent of the season's operations, and the magnitude of our trade, are partially indicated by the value of our products received from the interior, and which amounts, according to our annual valuation table, to \$144,256,081, against \$117,106,823 last year, and \$45,716,045 in 1841-42. This would seem to show a very fair ratio of increase for our much abused city, considering the extensive diversions of the products of the West into other channels, and also the fact that the last sugar crop was more than 200,000 hogsheads short of the maximum product of 1853. This increase in the value of our trade, however, large as it is, is not as great as it should have been, and would have been, had the railroad enterprises which are now in progress been earlier entered upon and more liberally aided by those having capital at command. We trust, however, that this spiniess will soon yield to a conviction of the necessity of more energetic action, and that the speedy completion of the Opelousas and Texas, the Jackson and Great Northern and the Mississippi and Red River railroads, and also the Tehuantepec route, will ere long add their contributions to the advancement of our city's prosperity.

According to the Custom House records the total value of exports of produce and merchandise of the growth and manufacture of the United States, for the fiscal year ending June 30th, was \$110,853,486, against \$83,120,218 last year; showing an increase of \$27,233,218, or over 30 per cent. The value of foreign merchandise and specie imported in the same period was \$17,183,327, against \$12,923,608 last year, showing an increase of \$5,259,719, or about 37½ per cent. Of the value of the hundreds of cargoes of domestic and foreign merchandise and produce imported coastwise, there is no record, (though there should be by requirement of law), but we estimate that the value of property, including produce, merchandise and vessels, that has passed the mouth of the Mississippi river inward and outward, during the past year, probably exceeds two hundred and fifty million of dollars.

The operations of the Branch mint during the past year shows a further slight decrease in the deposits, but an increase in the coinage. The total deposits of gold and silver for the year ending 31st of July, were \$2,720,082, against \$2,939,260 the year previous; showing a decrease of \$218,238. The coinage during the same time has been, of gold, 67,350 pieces of the value of \$525,500, and of silver, 8,864,000 pieces, of the value of \$2,936,000. Total value, \$3,461,500, or an increase of \$1,255,240.

With respect to the market prospects of the coming crops, and the interests of trade generally, we conceive that the promise is in a high degree flattering. Peace again prevails throughout the leading nations of the world, and commerce and the arts have asserted their ascendancy in questions of threatening aspect. Of the crops, those of wheat and Indian corn are known to be unusually abundant, and cotton, thus far, gives fair promise; but the sugar production must inevitably fall to a very low figure, while that of tobacco will be materially less than the crop of last year. With money unusually abundant, and readily obtainable for all legitimate purposes, all these crops are likely to meet with a ready market, at remunerating prices, and the cost of transportation to other markets will probably range below the average of last year, as a large amount of tonnage will be relieved from the employment of the Allies.

Inundations in France.—The River Rhone.

The inundations which have just caused such extensive calamities in the departments of the south naturally direct attention to the questions connected with the hydrography of some of the great rivers of France. The Rhone which stands in the first rank, rises in Switzerland at the foot of Mont Furca, in the canton of the Valais, the whole of which it traverses. It has its rise from three different springs, and forms for itself a very irregular bed among rocks and innumerable glaciers. It afterwards falls over an immense precipice near the Chapel St. Nicholas into the small plain of Oberwald, where it receives several tributary streams. From its source as far as Martigny, a town situated at the commencement of the Great St. Bernard road, and which was almost entirely destroyed by the terrible inundation of 1818, the Rhone follows a south-western course. At a short distance from Martigny it suddenly turns to the north-west, and after passing through a narrow gorge throws itself by two branches into the Lake of Geneva, and at about 12 miles further on enters the French territory near the Fort de l'Ecluse, and forms the frontier between France and Savoy. The river, in ordinary times, is not more than 12 feet wide at Oberwald. Above the Lake of Geneva it is 150 yards wide. On leaving the lake, and at its confluence with the Arve, it is 88 yards wide; and on entering France, 175 yards. From its source to the Fort de l'Ecluse its fall is 1,496 yards. The Rhone after quitting Switzerland, runs towards Lyons, and on passing through the Lake of Geneva is hemmed in on its right bank as far as below Ceyssaryn, by the slopes of the Jura, and on the left bank as far as its confluence with the Uches by the Montagnes aux Vaches in Savoy. Between l'Ecluse and Geniseat it runs through a narrow defile about 12 miles in length. After Geniseat, the mountains retire from the banks of the river until near Vienne, where they again approach it, and continue so until its confluence with the Ardeche on the right, and the Durance on the left. After this the banks become lower. The Rhone falls into the Mediterranean after a total course of 825 kilometres (about 515 miles.) Its principal tributaries on the right bank are the Ain, the Saone, the Ardeche, the Ceze, and the Gard; and on the left the Guier, the Isere, and the Durance.

The Saone, one of the largest rivers in France, rises in the department of Vosges, in the arondissement of Mirecourt. It traverses the departments of the Haute-Saone, the Cote d'Or, and Soone et Loire, separates those of the Rhone and Ain, and falls into the Rhone at Lyons, after a course of about 280 miles. As far as its confluence with the Oignon, it runs through a narrow valley; it becomes navigable below Gray, and at about this point the situation of the country changes; the valley widens on its left bank, while on the right it is skirted by the slopes of the mountains of the Cotes d'Or, and of the Charolais. The principal affluents of the Saone are the Doubs and Oignon on the left, and the Ouche and the Azergue on the right. The question of the overflow of the Rhone and the Saone has for a long time occupied serious attention. Without entering into the causes, which may be derived from the laws of terrestrial philosophy, it is interesting to know the opinion on this subject of Vauban, one of the most celebrated men that France ever possessed. This superior engineer, on being consulted by Louis XIV. on the question of the overflow of rivers, gave it as his opinion that the most effectual means to prevent the recurrence of inundations was to always keep in a good state the depth and width of the beds of rivers and streams. Colbert profited by this idea, and some years after issued an edict which obliged governors of provinces to keep the beds of rivers and streams perfectly clear and in good order, and there still exists a celebrated decree issued by the Parliament of Dijon in 1698, which condemned the administration of the rivers and forests of Burgundy to a fine of 6,000 crowns for the benefit of the hospitals, for having neglected to clear out the bed of the Saone, and for hav-

ing allowed it to get narrower in some places.—These facts now possess great interest, and it would be curious to ascertain whether, since the end of the eighteenth century, the narrowing of the beds of rivers has not had a very powerful influence in causing the repeated inundations.

The Tehuantepec Enterprise.

Col. Wm. J. Smith, contractor for building the Tehuantepec road, has arrived at New Orleans.—He is on his way to the North, to make arrangements for the final opening of the road from sea to sea, by the first of December next. There are thirty miles already completed, and the remainder will be completed for the reception of stock by the first of November. Travelers and their baggage will be transported across the Isthmus in 18 hours. A thousand men are at work on the road, the whole distance of which is one hundred and eleven miles. The *Picayune* says:

"Some of our citizens, who may remain away until December, will, on reaching home, find that they are within reach of the Pacific coast in four days from New Orleans, and of San Francisco in ten or eleven. A steamboat from New Orleans will land them on the third day in the Coatzacoalcos; and the next day will find them on their way up the western coast of the continent, and six or seven days will land them in San Francisco. It will be a great event for the country, and particularly for this city, and will work a vast change in the routes of communication between the Atlantic and Pacific States."

Collision on the Central Railroad—Six Men Killed.

A sad accident occurred about 10 o'clock last night, on the Central railroad, near Port Byron, by which six men were scalded to death. In accordance with the direction of the Superintendent, a cattle train was standing on the straight track, waiting for the arrival of the 5 o'clock passenger train, which ought to have entered the depot on the turn out; but by negligence or inattention of the switch tender, who neglected to turn the switch, the locomotive ran into the cattle train.—The passenger train was going at the rate of eight miles an hour when the engineer discovered the neglect of the switch-tender, when he immediately gave the signal to break up. He reversed the engine, and did all in his power to prevent a collision.

The locomotive when it struck the train threw the last car, containing six drivers, off the track and upon the boiler. By the collision the supply pipe was broken, and before the men in the car could be extricated, they were literally scalded to death. Three were taken out of the car dead, and the others survived but a short time.

We learn from Dr. Breck of Springfield, Mass., who was on the train, and who remained there hours, in attending upon and doing all he could for the sufferers, that it was an awful sight. He was the first person who came to the assistance of the drovers. Being told that it was a cattle train, he did not expect to see any person in the car, but upon looking up he discovered a person attempting to open a window. With a bar of iron he broke in the door and assisted in getting the men out. All his efforts to save them proved unavailing, for five had died before he left, and the sixth person was gasping, and could not live more than an hour.

We obtained from him the following list of the dead:

J. L. Bissel, of Madison, Lake county, Ohio.
W. A. Wilson, of Benton county, Kentucky.
Wm. Smith, of Cleveland, Ohio.
Edward Taylor, of Palatine, Pickaway county, Ohio.

Robert Boaz, Carlisle, Kentucky.

The engineer and some of the brakemen, after doing all that they could, and finding a collision inevitable, leaped from the train and were uninjured. Several of the platforms on the cars of the passenger train were broken, but none of the passengers were injured. The calamity is wholly

attributed to the carelessness of the switch-tender, who neglected to turn the switch.—*Albany Journal*, Sept. 6th.

Passenger Coal Burning Engines.

It has long been a great desideratum on the Reading as well as other important railways of the country, to obtain engines that will consume anthracite coal, and yet make as good time as wood burners. The "Taunton," a Massachusetts engine, placed on the Reading road, about a year since, as a coal burner, was not a complete success, although her performance at times was satisfactory, and as a running engine, she was delightful. Another coal burner, the "Excelsior," was completed last spring, by Norris & Son, of Philadelphia. So far her performance has been satisfactory. The builders claim that she will consume her coal and gas perfectly; that the smoke-stack shall remain free from smoke, cinders and coals, under any pressure of steam which the engine may be made to bear; that she will run regularly at the highest rates of speed allowed on roads; that she will burn with one-third less draft than any coal engine hitherto built; that she wastes no coal, and will run at one-third less cost than the common boiler engine; that her furnace requires no raking whatever while on the road; that the coal will burn evenly and steadily over every part of the furnace; that she requires no superior skill in her management, but that any engineer and fireman competent to run a wood engine can safely manage her; that her boilers will last the average time of wood boilers, and that the wear and tear on all parts of the machinery, from a superior steadiness in her running, will be less than upon locomotives of different construction. If, indeed, the Messrs. Norris have succeeded in "the Phileas Coal Burner," the traveling public as well as the company may congratulate themselves. It is the pleasantest engine one can ride behind, and the most economical in point of consumption of fuel.—*Pottsville Journal*.

Jackson and Carrollton Railroad.

We learn from the *Alton Courier* that the Hon. D. M. Woodson, President of the Jacksonville and Carrollton Railroad, has perfected arrangements with H. Spencer, Esq., the lessee of the Chicago and Alton Railroad, for a connection with and use of a portion of that road, between Monticello and Alton. This arrangement will enable the company to put their line into operation at much less cost than if they had to lay down a track of their own. The counties along that portion of the line yet to be built have subscribed nearly \$500,000.

Cattawissa Railroad.

William D. Lewis, Esq., President of the Cattawissa Railroad Company, has resigned. Mr. Lewis was a prompt and efficient officer, and had become so closely identified and interwoven with the Cattawissa road, before this community, that the name of the President and the company were twin thoughts, till sundered by the act of resignation.

The Cattawissa Railroad was constructed and opened throughout its whole length, under the administration of Mr. Lewis, who gave it, at all times, watchful attention and valuable service.

Mr. Lewis resigns a post in which he has evinced zeal, acquired honor, and given satisfaction, with a view, as it is understood, of withdrawing, altogether, from active official business.

Thomas Kimber, Jr., Esq., President of the Williamsport and Elmira Railroad Company, was invited by the directors of the Cattawissa Railroad Company, to accept the presidency vacated by Mr. Lewis, and has accepted. The two roads, therefore, under one executive organization, will be practically though not technically, hereafter under one management. And Mr. Kimber having heretofore evinced great industry and perseverance in the management and development of the road between the West branch and the Chemung rivers, will henceforth have a larger field for the play of his executive abilities, in the man-

agement of two roads, between the Schuylkill and the Chemung rivers.—*Penn. R. R. and Mining Register*.

Baltimore Work for the South.

Messrs. A. & W. Denmead & Son have just finished and had conveyed on board the Steamship City of Savannah, which sailed this morning for Savannah, three large steam boilers, their capacity in the aggregate being one hundred horse power. They were built for Mr. Edward Denmead, in Savannah, Georgia, and are intended to be used in a large flour mill which he is now having erected in the heart of the city, immediately on the line of the railroad. A very handsome engine has also been forwarded, capable of working off any amount of steam made by the three boilers, in fact, all the necessary machinery for running a large flouring mill has been manufactured or sent from this city. The burrs, four in number, were the best French article, and were ordered from a house here. Throughout the whole of the immense establishment of the Messrs. Denmead, to whatever point the eye rests, workmen are busy, the firm having as many orders on hand as they can attend to, and have been forced to relinquish a large order for cars, in consequence of their inability to furnish them forthwith.—*Balt. Patriot*.

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Is recently published, containing, in addition to the original work, an ESSAY ON THE THEORY OF COLOR and its Application to Geometrical Drawings, making about thirty pages of new matter, rendering the book much more complete. PRICE THREE DOLLARS, strongly bound in leather. The very favorable commendations with which the former editions were received by the scientific and mechanical press both of the United States and Great Britain may be taken as a sufficient guarantee of its usefulness.

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Persons at a distance, by remitting me the retail price as above, can have a copy forwarded per mail pre-paid.

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NOTICE.

WHEREAS a certain J. R. HILLIARD has obtained from the Patent Office a Patent for a certain RAIL JOINT, formed and constructed upon a principle altogether new; (the said Joint being applicable also to carpentry, and generally wherever a strong, compact and self-sustaining joint is desirable) and whereas the said principle is my invention, and my intention is to test the validity of the said Patent: I, T. BRIGGS SMITH, do hereby give this public caution, in order that no person or party may unknowingly and innocently subject himself to the legal consequences of an infringement of my right, by using my said invention or otherwise.

T. BRIGGS SMITH.

New York, September 3d, 1866.

1137*

Railroad Iron.

700 TONS "Erie" pattern, 57 to 58 lbs. weight per yard, now in port, on ship board. For sale by THEODORE DEHON, 10 Wall st., near Broadway.

Sept. 4th.

3137

NEW YORK.

Railroad Iron.

1,000 TONS Railroad Iron, "New York and Erie" pattern, best English make, on the way from England to New Orleans. For sale by THEODORE DEHON, 10 Wall st., near Broadway.

Sept. 4th.

3137

NEW YORK.

LOCOMOTIVES for SALE.

TWO first class Locomotives, 22 and 25 tons. 4 feet 8½ in and 4 ft. 10 in. gauge.

For sale by

GEO. W. BILLINGS,
66 BROADWAY, N. Y.

Lord & Wright,

Counsellors at Law, Cincinnati, Ohio.

1137

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37 CASTLE STREET,
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{ 20 and 21 POULTRY,
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AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

PAID-UP CAPITAL AND SURPLUS AND RESERVED FUNDS,
THREE MILLIONS OF DOLLARS.
OVER HALF A MILLION INVESTED IN THIS COUNTRY.

THE LIABILITY OF THE SHAREHOLDERS UNLIMITED.

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In addition to their usual business, this Company is prepared to take Fire Risks upon
Railroad Property of all Descriptions,

AS FOLLOWS:

1. They will name a premium at a low rate upon a policy to cover ALL the perishable property of any Railroad Corporation.

The Railroad Companies desiring Insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2. This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

NEW YORK, August 27th, 1856.

Covington and Cincinnati BRIDGE.

PROPOSALS will be received between the 10th day of September and the 1st day of October, 1856, at the office of the Covington and Cincinnati Bridge Company, at Covington, Ky., for the cutting of stone and laying of 30,000 perch of masonry in the towers, anchorage, and abutments of the Covington and Cincinnati Suspension Bridge. All materials will be delivered by the Company. None need apply but experienced mechanics, who will superintend the work in person and without subletting. Also proposals received for the foundation of the towers. The work is to be commenced forthwith. Plans and specifications to be seen at the office after the 10th day of September.

RICHARD A. RANSON, President.

JOHN A. ROEBLING, Engineer.

3136

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 55 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 55 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Brooklyn Water Works. NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appurtenances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

H. S. WELLES & CO.,
No. 4 WALL ST., New York.

8132

Railroad Chairs and Spikes.

ORDERS taken at fixed sterling prices for Wrought Iron Chairs of any pattern, and Spikes, to be manufactured in England.
NAYLOR & CO.,
99 and 101 JOHN ST., New York City.

SALE OF THE Syracuse & Binghamton R.R.

SUPREME COURT.—David Hoadley & Horace White, Trustees for the First Mortgage Bondholders of the Syracuse and Binghamton Railroad Company, against the Syracuse and Binghamton Railroad Company and others.

In pursuance of a judgment of foreclosure and sale, entered in this action on the first day of August, 1856, there will be sold by me, or under my direction, at the Syracuse House, in the city of Syracuse, on the 20th day of September, 1856, at 10 o'clock in the forenoon, "All and singular the corporate property and franchises of the said Syracuse and Binghamton Railroad Company, consisting of all the lands, tracks, lines, rails, bridges, ways, buildings, piers and wharfs, erections, fences, walls, fixtures, privileges, franchises, rights and real estate whatsoever, and all the tolls, income, issues and profits to be had from the same, and all the railway depots or stations, with the buildings thereon, together with all the locomotives, tenders, cars, carriages, tools and machinery owned by said Syracuse and Binghamton Railroad Company, or any way belonging or appertaining to said road and used thereon, between the city of Syracuse and village of Binghamton, including 13 locomotive engines, tenders and fixtures, 10 locomotive lamps, 10 first class passenger cars, 3 second class passenger cars, 2 mail baggage and express cars, 3 baggage cars, with stoves and lamps in each, 80 box cars, 34 platform cars, 40 gravel cars, 8 hand cars, 1 large snow plow; also one stationary engine and boiler, 2 lathe, 1 wheel press, 1 upright drill, 40 feet line shafting, 8 bands and 1 pulley for same, 3 forges and bellows, 3 anvils and all the tools in the shop at Syracuse, and along the line of said road, and materials on hand for repairs and use of said road; also, 80 tons of iron rails, 20 tons of railroad chairs, 10 tons of rail spikes, 16 frogs, 8,000 cords of wood at various points along the line of said road, 12 hand trucks, 8 platform scales, 19 stoves, and all the furniture, books and blanks at the several stations and buildings along the line of said road; 120 lamps of various kinds, in use on trains, at stations, shops, and switches along the line of said road; also, the office furniture, consisting of two large desks, two tables and cases of pigeon holes, 3 iron safes, one draughting table, one case of drawers, 4 stoves, one ticket case and tickets in same, one regulator, sundry blanks, blank books and stationery for use of said Company."

A more complete inventory of property and description of premises to be sold, together with the maps and profiles, will be exhibited on the day of sale, and also the terms of sale will then and there be made known. Dated August 4th, 1856.

B. DAVIS NOXON, Referee.

DAVIS & LEACH, Attorneys.

6133

NATHAN LANE & CO., NEW YORK, Railroad, Bank, Insurance, and Counting-House STATIONERS,

PRINTERS, LITHOGRAPHERS,
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Respectfully invite attention to the different departments of their business, and trust that from their long experience of over 15 years they can execute all orders in the most satisfactory manner, and on as favorable terms as any house in the city. Having always on hand a large and extensive assortment of all the various kinds and sizes of Blank Books, manufactured in the most substantial manner, and in different styles of binding, of the very best material, they are enabled to supply a single book or complete sets from their own shelves, at short notice.

Blank Books manufactured to any pattern or style,
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ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, etc., etc. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

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1y17

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 16th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural locks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher portion of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

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Pittsburgh, Pa., August 25, 1853

SWETT, ELLIOTT & CO.

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Baltimore Railroad.
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SOUTH AND WEST.

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do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	5 00

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From New York to Cincinnati.....	\$17 00
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From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
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An extra charge will be made for meals and state rooms on board the boat. GEORGE A. PARKER Sup't.

New York and Erie R. R.

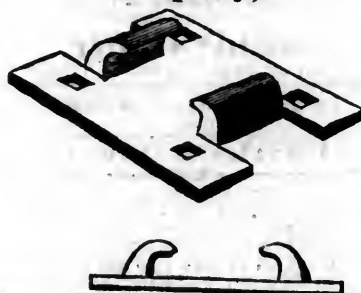
On and after Thursday, August 7, 1856, and until further notice, PASSENGER TRAINS will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m., for Dunkirk.
MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
ROCKLAND PASSENGER, at 3½ p.m., (from foot of Chambers st.) via Pleasant, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.
EXTRA, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.,
D. C. McCALLUM, General Sup't.

Augustus Schwaab,
CIVIL ENGINEER, MACON, GEORGIA.

IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible situations on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

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Wrought Iron Railroad Chair
Company,

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The thickness of the Lips of the Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge;—so that a less weight of metal may be used and a strength required equal, if not superior, to that of a heavier Chair of uniform thickness.

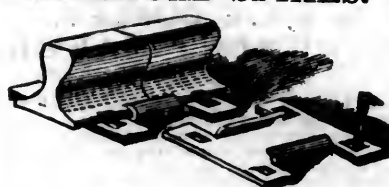
Our arrangements are now complete for executing work promptly, and all orders from responsible parties will be filled on short notice.

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Chairs and Fastenings.

THE CALVERT IRON & NAIL WORKS continue to manufacture with increased facilities, HOOK & FLAT HEAD RAILROAD SPIKES, and WROUGHT CHAIRS and FASTENINGS of all patterns, also CUT NAILS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES.

Long experience in the manufacture of these goods enables them to produce an article of superior quality and finish. They are in use upon a large number of roads in the country and are highly approved.

Orders filled promptly, and at the lowest prices.

J. HOPKINSON SMITH,
Baltimore, Md.
162

Please direct the name in full.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HEN SHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 51x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1856.

3m.

NEW YORK
IRON PAVEMENT
AND
STREET RAILWAY CO.

Office Nos. 8 and 10 Wall st.,

ROOM 16.

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CITIES OF THE UNITED STATES,

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RAILROAD COMPANIES

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ROBINSON'S IRON PAVEMENT,

1st. The cheapest pavement ever used, because most enduring at least cost of repair.

2d. The safest pavement for either man or beast to travel on.

3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

4th. The most beautiful pavement to look upon, because the most cleanly and variegated, and free from dust.

5th. The easiest and least tiresome pavement to ride upon, because most even of surface.

6th. The least noisy pavement to use or reside near.

7th. The best pavement ever used, everything desirable considered.

This Company is enabled to furnish cities and others with an Iron Pavement for every use, at a reduced price. They will contract to lay it down upon any graded street, of superior strength, beauty, and perfection to that recently laid down in Boston, or that in Nassau street, fronting the Post Office, in this city, for

\$5 to \$6.50 PER SUPERFICIAL YARD,

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FOR A SMALL ANNUAL PER CENTAGE ON THE COST OF LAYING DOWN, CONTRACTS WILL ALSO BE MADE FOR KEEPING THIS PAVEMENT IN REPAIR FIVE, TEN, OR TWENTY YEARS, OR EVEN FOR A LONGER PERIOD.

The municipal authorities of cities, and directors of railroad companies, and all enterprising citizens who wish to blend utility with embellishment of their private grounds, residences, &c., are specially invited to investigate this subject. The surpassing usefulness of the Iron Pavement has been too well established in the public streets of Boston as well as in a section of Nassau street, in this city, to require experiment or argument to uphold it.

All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement
and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

HON. B. B. FRENCH, { Washington, D. C.
CHARLES MONROE, Esq. }

DAVID BURBANK, Esq., Baltimore, Md.

JOHN J. SPED, Esq., Detroit, Mich.

HON. J. V. C. SMITH, Mayor of Boston, Mass.

L. L. SADLER, Esq., Treasurer of Union Telegraph Company, Boston, Mass.

HON. H. F. FRENCH, Associate Judge, Superior Court, Exeter, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Portland, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 88.]

SATURDAY, SEPTEMBER 20, 1856.

[WHOLE No. 1,066, VOL. XXIX,

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, September 20, 1856.

The Chicago, Burlington and Quincy Railroad Company.

As we understand that this company has made the Bank of Commerce in this city its transfer agent, and its stock will probably soon take its place at the Brokers' Board, we have collected the following information relative to its road.

It was originally constructed under two charters, neither of which bore the present name of the company; one being styled the "Chicago and Aurora Railroad Company," and the other the "Central Military Tract Railroad Company." The first named company was incorporated to construct a railroad from a point upon the Chicago and Galena road, thirty miles distant from Chicago to Mendota upon the Illinois Central railroad, sixteen miles west of LaSalle; and the Central Military Tract Company was authorized to construct a road from Mendota to Galesburgh, a distance of eighty miles, where it intersects the Peoria and Oquawka road running to Burlington.

The whole line has been completed to Galesburgh less than two years, and to Burlington about a year and one-half. In July last the two companies, viz. the Chicago and Aurora, then denominated the Chicago, Burlington and Quincy, and the Central Military Tract, consolidated their

stocks under the corporate name of the "Chicago, Burlington and Quincy Railroad Company."

This company as now constituted owns the road from the junction with the Galena and Chicago road to Galesburgh, a distance of 138 miles; it holds a temporary lease of the Peoria and Oquawka road from Galesburgh to Burlington, with permanent running arrangements, and the right to run its own trains to and from Burlington. It also has advanced to the Peoria and Oquawka Railroad Company \$300,000, for which it holds its securities and the road in pledge, to be repaid within two years.

From Galesburgh to Quincy, a distance of 100 miles, the Northern Cross Railroad has been constructed. The Chicago, Burlington and Quincy road, therefore, constitutes the trunk road, over which the business and travel from Iowa and also from Quincy and the northern part of Missouri and all of Illinois south and west of Galesburgh seeks Chicago. When it is considered that this road is not yet two years old, and was constructed through a very sparsely settled community, its business will be deemed, we think, to have been very extraordinary, and will probably establish its position as the most successful road in the country.

The Stock of the company under the consolidation amounts to \$3,731,300
Bonds at 7 per cent. 2,000,000
Do. 8 per cent. convertible..... 1,074,000
\$6,805,300

From this, however, should be deducted the amount of the debt due from the Peoria and Oquawka Company which leaves the total cost of the road in stock and bonds, \$6,505,300. The company owns in Chicago for depot grounds ten acres of land which cost \$140,000, and is, we are informed, almost, if not entirely, without floating debt beyond the means in its control and provided for its payment.

The earnings of the two roads now constituting the consolidated road for the first six months of the year 1855 were as follows, viz:

Passengers.....	\$126,897 47
Freight.....	263,447 45
Miscellaneous.....	6,121 44
Total.....	\$396,466 36

or equal to \$2,872 91 per mile for the six months. For the first six months of the present year they were as follows, viz:

Passengers.....	\$212,165 00
Freight.....	350,188 41
Miscellaneous.....	7,999 86
	\$570,292 77

or equal to \$4,132 55 per mile.

For the last six months of 1855 the receipts were as follows, viz:

Passengers.....	\$218,941 94
Freight.....	478,280 66
Miscellaneous.....	6,535 72
	\$698,708 22

or equal to \$5,063 11 per mile.

For the current six months of the present year it is, of course, impossible to estimate with accuracy, but two month of the six have passed away with the following results for July and August, viz:

	Passengers.	Freight.	Miscellaneous.
July.....	\$35,964 62	\$107,999 81	\$2,082 37
August..	36,561 04	162,132 74	2,090 47

—equal to \$2,513 27 per mile for two months.

These are remarkable figures for the earnings of a road 138 miles long and eighteen or twenty months old, and indicate an earning for the current six months of, probably, \$1,000,000, a result attainable only in the West, and upon well located lines of road.

The country along the line of this road is the garden of the West, and is rapidly being placed under cultivation, and although the great mass of this large business is the local traffic of the road, yet the resources of the country along the line are but beginning to develop themselves, while the roads from Burlington west through Iowa, and from Hannibal through Northern Missouri must add very largely to its through business.

The Hartford and New Haven Railroad Co. NEW HAVEN, Sept. 17, 1856.

At the annual meeting of the Hartford and New Haven Railroad Company, held this afternoon, C. F. Pond and C. W. Chapin were unanimously re-elected directors, and John A. Robinson and Levi Cook were elected in the place of Messrs. Gibbs and Battell. The vote was large, and the session excited great interest.

Great Western (Can.) Railway.

At the half-yearly meeting of the stockholders of this company, held on the 12th inst., at the office of the company in Hamilton, the following gentlemen were elected Directors, viz:

Robert William Harris, Esq., President, Hamilton, C. W.

John Smith Radcliff, Esq., Vice President, Hamilton, C. W.

Charles John Brydges, Esq., Managing Director, Hamilton, C. W.

Admiral John Milligan Laws, R. N., Binfield, Berkshire, England.

Alexander Beattie, Esq., London, England.

William Dickson, Esq., Galt, C. W.

Col. William Gourlay, Barton Lodge, C. W.

Robert Gill, Esq., Mansfield, England.

Richard Juson, Esq., Hamilton, C. W.

Henry McKinstry, Esq., " "

William Govan, Glasgow, Scotland.

Auditors—R. P. Street and Edmund Ritchie, Esqs., of Hamilton.

A dividend of 8 per cent. was declared for the half year, on all registered paid-up shares, from the 31st of July.

A resolution passed by the Board in England placing £2,000 at the disposal of the unsalaried directors in England and Canada, was confirmed by the meeting.

The directors having prepared an estimate of the probable cost of completing and stocking the whole line, it was unanimously agreed that the ultimate sum be fixed at £4,982,462 16s., and that no outlay, not included in said estimate, shall be undertaken without a distinct vote of the proprietors, ordering and authorizing the same.

We make the following extracts from the report of the Board of Directors:

From the accounts which are appended to this report, it will be seen that the net amount at the disposal of the shareholders of the Great Western railway company, for the half year ending 31st July, 1856, after deducting interest upon the company's bonds and upon the loan from Government, is..... £181,392 11 6

This is equal to a dividend of 9½ per cent. per annum on the share capital, but there has to be deducted, to provide for the repayment of Government advances..... 14,052 10 0

Leaving the available balance.... £117,840 1 6

Out of which the Directors recommend the payment of a dividend at the rate of 8 per cent. per annum, which will absorb..... 109,284 14 7

And leave a balance to the credit of the current year of..... £8,055 6 11

The extreme severity of the winter, mentioned in the last half yearly report, had a serious effect in limiting the traffic during the early part of the spring, and the unusual contraction of business throughout the continent of America has brought the traffic during the present summer much below what was anticipated. The traffic, from these and other causes, has doubtless suffered to an extent of not less than from £20,000 to £30,000, which could easily have been carried without materially increasing the expenses actually incurred.

The severity of the winter has also had the effect of seriously increasing the working charges, especially in the item of maintenance of way.—The extreme degree of frost, and the very heavy falls of snow, caused great displacement in the spring of the year, on the breaking up of the frost, both in the road bed and track, and to this cause is mainly to be attributed the excess in the charges for maintenance of way during the last half year. The closing of the Detroit river by ice for sixty-

two days involved a large and unusual outlay for portage and ferriage at Windsor, and also rendered necessary very extensive and costly repairs to the company's ferry boats.

The additional amount of capital that has to be paid upon for the last half year, also tends materially to affect the dividend. The actual increase to the capital amounts to £700,000, cy., but inasmuch as during the half year, ending the 31st of January last, the entire amount of the shares paid upon was not in receipt of dividend for the whole of the half year, the actual additional capital now entitled to interest or dividend amounts to nearly £850,000. Of this sum about £500,000 (including rolling stock) is on account of the Hamilton and Toronto line, which, during the past half year, for the first time forms a charge upon the general revenues of the company. The Toronto line has not earned at the rate of 5 per cent. per annum for the half year, its traffic having been at the rate of £23 12s. per mile per week, as against £54 13s. on the main line. The Galt Branch earnings were at the rate of £13 5s. per mile per week.

Bonds bearing interest at 6 per cent. have been converted into shares during the half year to the amount of £170,875, which tends to swell the amount of dividends to be paid.

The amount put to the credit of the Government Sinking Fund exceeds by £1,277 10s. the amount set aside during the preceding half year; and the loss upon the working of the steamers has amounted to £6,504 14s. 8d.

The Directors, seeing that there will be but a small addition during the current half year to the amount of capital to be paid upon,—that there is every reason to expect that the working expenses will present a more favorable appearance than for the last six months,—that the business throughout the continent is rapidly reviving, as is evidenced by the present satisfactory increase in the weekly traffic returns of this, as well as all other railways,—and that no material amount will hereafter be charged on account of the steamers,—have come to the determination of recommending the proprietors to place to the credit of the revenue account the amount realized during the two last half years for premiums on the shares and bonds sold by the company. A strong wish was expressed by many influential shareholders in England that this course should have been adopted for the half year ending the 31st January last, as it would seem that at no further period could this sum be so judiciously placed to the credit of revenue as now, the whole of the shares being now disposed of, and the use of the amount at the present time having the effect of maintaining the right of dividend hitherto paid, and which, from the circumstances already explained, will, it is hoped, again be paid during the current six months, from the net revenue of the line without extraneous assistance.

It will be observed that in adopting this course the line has actually earned £52,176 9s. 8d., beyond the dividends really paid up to the present time, the accounts showing that the sum mentioned stands to the credit of the Sinking Fund on the Government loan, which has been formed by half yearly deductions from the net revenue. * *

The average weekly receipts during the last half year have amounted to £13,633 13s. 11d., or £48 8s. 6d. per mile, as against £49 16s. 0d. during the preceding half year. The reduction in the rate per mile is owing to the opening of the Toronto line.

The maintenance of way and works has cost £41,185 13s. 6d. This includes £2,195 0s. 0d. for the renewal of rails worn out.

During the last spring, every effort was used to prevent the stoppage of any part of the line, from the damages occasioned by the severity of the winter and subsequent breaking up of the frost. In this the Directors are happy to be able to say that they were successful, but the necessity of executing so much work with great rapidity and during the existence of a heavy traffic, obviously caused the outlay to be largely increased. * *

The locomotive expenditure amounts to £56,676 11s. 11d.—and the number of miles run hav-

ing been 758,462, the cost per mile is 1s. 5½d. The charge during the previous half year was 1s. 7½d. This deduction in the mileage charge arises principally from a change made in the conduct of the wood and water service of the line, which has lately been made a part of the locomotive department, from which proceeding has resulted a material change during the last six months. The severe winter already alluded to, caused great breakage of tyres, wheels, axles and other parts of the machinery. Nearly the whole of the stock has during the past six months received extensive repairs, and is now in a satisfactory state to carry on the traffic during the winter. The number of cords of wood burned by the engines has been 20,969, which is at the rate of about 36 miles to one cord of wood.

Since the last report ten engines have been purchased—making the stock at present eighty-six. Seventy-six engines are now running, eight of the ten lately purchased have reached Hamilton, and the whole are expected to be at work by Christmas.

The Car expenditure has amounted to £14,742 15s. 2d, or at the rate of 0.708d. per mile for each of the miles run during the half year—the charge during the preceding six months was 0.662d. per mile. Extensive repairs have been executed during the half year, including the thorough painting and renovating of ten first-class cars, and the re-tying of a large number of wrought iron wheels. The stock is generally in a good and serviceable condition, all needful repairs being promptly and effectually attended to.

The charge for the steam ferry at Windsor has increased, partly owing to the heavy expenditure incurred in carting passengers, baggage, and freight across the ice, when it was too firm to permit the boats to cross, and, partly, from the extensive repairs rendered necessary to the ferry boats, owing to the damage they sustained while breaking through the ice. * * *

It will be observed that the working of the two steamers belonging to the Company, has again resulted in a loss. Seeing this, and feeling that but little chance existed of their recovering the loss already sustained, the Directors determined to lay up the boats, and accordingly, on the 23d August, they were withdrawn for the season.

There will be a further charge, during the current six months, for the closing of all outstanding contracts connected with the steamers; but, beyond this, the company's revenue account will not be burthened by them. If a reasonable opportunity presents itself, the steamers will be disposed of, and, in the meantime, care will be taken that they suffer no undue deterioration.

The Directors are disappointed that their hopes in regard to the traffic by the steamers, have not been realized; but as the boats will not again be allowed to burthen the revenue of the railway, it is unnecessary to enter into further remarks on the matter.

The total capital expenditure on the Main Line, Galt and Toronto Branches, and the two steamers, but excluding the Sarnia Line, amounted, on the 31st of July last, to £4,558,513 11s. 5d.

The construction of the line from Preston to Guelph is proceeding in a satisfactory manner, under the terms of the arrangement explained in the last report, and it is hoped that the Line will be completed and opened during next spring.

This company has paid £41,271 19s. 1d on account of the Galt and Guelph line. The Galt and Guelph Company has paid over to this Company Provincial Bonds for £20,000 currency, mentioned in the last report, and gives its own first mortgage bonds for the expenditure, beyond that amount, as it progresses.

Bonds of the company, to the amount of £250,875, and bearing interest at the rate of 6 per cent. will become due in October, 1857. The Directors hope that the state of the money market in England, and the credit of the company, will be such as to enable them to renew the amount of these loans at 5 per cent., and, also, to make arrangements for the gradual issue of a sufficient amount

of bonds at the same rate of interest, to pay off the loan from the Provincial Government, which carries interest at 6 per cent., and, moreover, involves the keeping of a Sinking Fund of 3 per cent. per annum, to provide for the repayment of the principal.

The Sarnia line is progressing favorably, the accounts showing that £123,596 18s 7d had been expended thereon up to the 31st July last.

The contract for the construction of that line amounts to £350,000. With additional works required at the junction with the main line, and the necessary amount of rolling stock, the cost of that line in round numbers, may be set down at from £450,000 to £500,000, varying according to the extent of rolling stock required.

This will make the total ultimate outlay for the lines at present owned or constructing by the Great Western Railway Company in round numbers £5,600,000, for which they will have 330 miles of railway.

It may be useful to offer a few remarks as to the prospects of the return ultimately to be secured upon the above capital.

Assuming that, £1,500,000 is borrowed at 6 per cent., it would require, taking the working expenses at 50 per cent., to pay a dividend of 8 per cent. on the share capital, a weekly average traffic of £160,000, or £48 10s. per mile per week.

It must be remembered that in addition to the Michigan Central Railway, which is at present the only western connection this railway possesses, a line from Detroit to Grand Haven, opposite Milwaukee, is now being constructed, and which with a line intersecting it from Port Huron opposite to Sarnia before the close of the next year—and that an additional western connection will be secured early next year in the Southern Michigan Railway, which company is now earnestly occupied in carrying its line to Detroit immediately opposite to this company's western terminus. The Great Western Railway will thus connect with three great highways leading into the fertile regions of the Western States, and it cannot but be obvious that the through traffic must in consequence largely increase.

Alabama and Florida Railroad.

We have received from Major W. H. Chase, President of this road, the annual report upon the condition and prospects of the company.

The work of grading was commenced on the 13th of April last, since which time ten miles have been completed, and seven more are in a state of forwardness. The whole length of the line from Pensacola to the Alabama line, is 45 miles. At that point it connects with the Alabama and Florida railroad of Alabama, extending to Montgomery, an entire distance of 156 miles from Pensacola; fifty miles of the road below Montgomery is now ready for the iron, which will probably be laid during the coming winter. The recent grant of land by Congress, estimated at from 200,000 to 250,000 acres of land between Greenville and the Florida line, can be made available to purchase iron for 60 miles of road through that country.

It is expected that 60 miles below Montgomery and 70 miles above Pensacola, will be in operation by the 1st of June, 1858, leaving a gap of but 26 miles to be completed. This would draw a large portion of the through travel from the north and south, as passengers could go from Montgomery to New Orleans in 24 hours.

The road will connect with the Selma and Mobile and Mobile and Girard roads, and through them with the entire system of Alabama and Tennessee railroads, and with the sector of country whose arc stretches from the sources of the Mississippi to the debouches of the river St. John in New Brunswick. The Savannah and Gulf railroad, and the proposed extension of the South-western road, will also be in connection with Pensacola.

The report anticipates great benefit to Pensacola from its connection with the coal region of Northern Alabama, as coal could be delivered at the wharf at \$6.15 per ton, thus making Pensacola the great coal depot for the Gulf trade.—*News.*

Florida Railroads.

Having been written to by various persons at home and abroad, to learn something concerning the progress of the railroads being constructed through our State, we have applied for and kindly obtained of the Hon. E. C. Cabell, the President of the Pensacola and Georgia railroad company, reliable information on the subject.

The great object of these enterprises is to connect the waters of the Gulf with the Atlantic, and to unite the different sections of the State. We are gratified to find how great and satisfactory is the progress made, and how bright are the prospects of the realization of our hopes. Several companies are engaged in these works. The Florida railroad company commenced operations at Fernandina, and has, we understand, completed the bridge connecting the Island of Fernandina with the main land, and graded twenty-five or thirty miles of their road. Cross-ties are furnished for this distance, and 1,300 tons of iron have arrived at Fernandina, and about 4,000 tons more have been purchased in England, part of which has been shipped. Fifty miles of this road, will, probably, be completed this year. This road is intended to be built to Cedar Key, and crosses one of the most interesting and fertile parts of the State.

The Central railroad, from Jacksonville to Alligator is also progressing in a satisfactory manner, under the efficient supervision of experienced contractors. A contract for grading and cross-ties for the entire route has been made. Two hundred hands are now engaged on this road, and have graded fifteen miles of the same.

The Pensacola and Georgia railroad company have undertaken to build the road from Alligator to the waters of Pensacola Bay, with branch roads to the Gulf and to the Georgia and Alabama lines. This company commenced operations in the spring at Tallahassee, and, we are informed by the President, will have thirty-five or forty miles graded by the 1st of January. Contracts have been let to responsible contractors for the line from Tallahassee to within a few miles of the Suwannee river. From that point to Alligator the route was hastily located, and a corps of engineers has been organized to re-survey the route, with a view to insure the most favorable location. So soon as this survey shall be completed, contracts will be let to Alligator, where a junction will be effected with the Central road.

There are now, or will be in a few days, 350 hands at work on this road, and before the end of the year the number will be increased to 500 or more, the whole work completed, ready to receive the iron by the fall of 1857. The present means of the company are quite sufficient to prepare the road for the iron, including the bridging. The bonds of the company guaranteed by the internal improvement fund, will, it is believed, more than suffice to iron and equip the road. Beside a subscription of \$500,000, and the aid afforded by the internal improvement act of our last Legislature this and the other railroad companies have had granted to them, 3,800 acres of land per mile.—There is no great amount of public land in this and Jefferson county, but the deficiency can be supplied in Madison, Hamilton and Columbia counties. We are personally acquainted with the character of the lands in Columbia and Hamilton which will become the property of this company, and have no hesitancy in saying that two dollars and a half will be a very low estimate of their value when the road shall be completed. The company will, therefore, realize from this source at least \$9,200 per mile.

There can be, therefore, it seems to us, no doubt of the ability of this Company to construct their road one hundred and four miles to Alligator, at which point they connect with the Central Road, and thirty-five miles further East with the Florida Railroad to Fernandina.

The Tallahassee Railroad from Tallahassee to St. Marks, has been re-graded and re-laid with sixty pound iron. A locomotive has arrived for this road at St. Marks and another ordered by the

Company. This road connects with the Pensacola and Georgia Railroad at Tallahassee, and more than one-half its stock is owned by the latter Company.

The two roads may be considered one.

The citizens of Gadsden have subscribed funds to survey and locate so much of the P. and G. R. R. as will run through their county. A subscription sufficient to grade and timber the road through the county has been promised by the people of Gadsden, and we expect soon to have the pleasure of announcing that contracts have been let in that county. We feel confident that the people of the West will not suffer this great work to stop.

A route will also be surveyed through Quincy, or its vicinity, to the Georgia line, in the direction of Bainbridge, to which point it is confidently believed the South-Western Railroad will be extended, thus connecting the Florida system with all the railroads North and West.

We shall resume this subject in our next issue, and endeavor to show the superior advantages of this road over the Brunswick road, which, we hear, has warm advocates, even in Florida. We hear many persons express great confidence in the ability of Brunswick to build a road but doubt the ability of the people of Florida. We think we can show that we have much greater ability to build a road, and that ours will be a much better paying road than the Brunswick road.—*Tallahassee Floridian.*

New Mode of Manufacturing Iron and Steel.

Yesterday, the new and extremely ingenious process just patented by Mr. A. Bessemer, of manufacturing malleable iron and steel without fuel, was put to a severe practical test, but with the most successful result, at Baxter House, St. Pancras road, in the presence of several ironmasters carrying on an extensive business in different parts of the country, and many practical engineers and scientific men resident in the metropolis.

The magnitude and importance of this discovery of Mr. Bessemer can scarcely be exaggerated. The only parallel to it is to be found in the kindred invention of Henry Cort, which, toward the close of the last century, relieved this country to a great extent from its commercial servitude to Russia and Sweden in regard to its supply of wrought iron. Two years have been spent by Mr. Bessemer in the perfection of his scheme; and when, the other day, he divulged it to the world before men distinguished for their scientific attainments, and practical manufacturers well able to appreciate its vast public significance and its whole bearing on the trade in which they are interested, it took them wholly by surprise.

The essential feature of Mr. Bessemer's invention is, that he takes crude iron directly from the ordinary blast furnace, and in the incredibly short space of 30 minutes converts it into ingots of malleable iron or steel of any size, and fit for the various manipulations ordinarily employed to adapt them to all the material purposes to which they are now applied. He thus dispenses with all the intermediate processes to which recourse has been had to produce the same effect within the last seventy years, including the making iron into pigs, and the refining, puddling and squeezing stages, with all their attendant labor and fuel. Paradoxical as it may seem, it is not the less true, that he has achieved this great result by the application to the iron, in its transition from the blast furnace to the condition of the ingot, of a heat inconceivably intense, generated without furnace or fuel, and simply by blasts of cold air. By this means he not only avoids the injurious action of mineral fuel on the iron under operation, which has always deteriorated the quality of English iron, but saves all the expense of the fuel. He sets out with the assumption that crude iron contains about 5 per cent. of carbon; that carbon cannot exist at a white heat in the presence of oxygen without uniting therewith and producing combustion; that such combustion would proceed

with a rapidity dependent on the amount of surface of carbon exposed; and, lastly, that the temperature which the metal would acquire would be also dependent on the rapidity with which the oxygen and carbon were made to combine, and, consequently, that it was only necessary to bring the oxygen and carbon together in such a manner that a vast surface should be exposed to their mutual action, in order to produce a temperature hitherto unattainable in our largest furnaces. With a view of testing practically this theory, he has constructed a cylindrical vessel of three feet in diameter and five feet in height, somewhat like an ordinary cupola furnace, the interior of which is lined with fire bricks, and at about two inches from the bottom of it he inserted five tuyere pipes, the nozzles of which are formed of well-burnt fire clay, the orifice of each tuyere being about three-eighths of an inch in diameter. At one side of the vessel, about half way up from the bottom, there is a hole made for running in crude metal, and on the opposite side there is a tap-hole stopped with loam, by which the iron is run out at the end of the process. A vessel is placed so near to the discharge hole of the blast furnace as to allow the iron to flow along a gutter into it, and a small blast cylinder is used capable of compressing air to about 8 lbs. or 10 lbs. to the square inch.

A communication having been made between it and the tuyeres, the converting vessel is in a condition to commence work. The blast being turned on, and the fluid iron run into the vessel, a rapid boiling up of the metal is heard going on within the vessel, the metal being tossed violently about, and dashed from side to side, shaking the vessel by the force with which it moves, from the throat of the converting vessel. This continues for about 15 or 20 minutes, during which the oxygen in the atmospheric air combines with the carbon contained in the iron, producing carbonic acid gas, and at the same time evolving a powerful heat. The rapid union of carbon and oxygen adds still further to the temperature of the metal, while the diminished quantity of carbon present allows a part of the oxygen to combine with the iron, which undergoes combustion and is converted into an oxide. At the excessive temperature that the metal has now acquired, the oxide, as soon as formed, undergoes fusion, and forms a powerful solvent of those earthy bases that are associated with the iron. The violent ebullition going on mixes most intimately the scoria and metal, every part of which is thus brought in contact with the fluid oxide, which washes and cleanses the metal most thoroughly from the silica and other earthy bases that are combined with the crude iron, while matters which cling so tenaciously to iron at ordinary temperatures are driven off, the sulphur combining with the oxygen and forming sulphurous acid gas.

In conducting the demonstration yesterday, 6 cwt. 8 qr. 18 lb. of molten iron from a furnace was poured into the fire brick vessel, already described, at 1:12 o'clock, the blast having been applied at a pressure of about 8 lbs. per square inch, and continued until 1:27. The mass of metal began to boil up, and the cinders and other impurities were extruded from the top of the vessel by two apertures provided for the purpose. Showers of brilliant sparks were thrown off during this process, which lasted several minutes; and as the object was to produce a mass of cast steel, rather than continue the process to the extent necessary for making pure iron free from carbon, the vessel was tapped at 1:36 o'clock, and the contents drawn off. Small specimen ingots being first taken, the general mass was run into an ingeniously contrived mould concealed in the floor in front of the apparatus, and, after remaining there a few minutes, cooling down, it was raised out of the mould in a red hot state by a hydraulic ram, and placed upon a weighing machine. The ingot thus produced, with the two specimen ingots, weight 6 cwt.—Without the aid of fuel, this mass of material was converted in 24 minutes from crude cast iron as it comes from the furnace blast, into steel of fine quality.

The experiment was unanimously pronounced by the company to be perfectly satisfactory. It is a peculiar and important feature in the process, that by continuing the boiling a few minutes longer the whole of the carbon still remaining in the mass of metal, and which gives to it the character known as steel, would have been drawn off, and a pure spongy mass of crystalline iron would have been the result.

Mr. Bessemer states that hitherto the finest qualities of iron have always been imported from Sweden and Russia, and these are now sold in this country from £20 to £30 a ton; but, by the new process, iron can be manufactured of equal quality at a cost of £2 per ton less than the present cost of common English iron. If this statement be borne out by experience of his invention, we shall no longer be dependent on the foreign market for the production of iron of the finest quality. He also speaks with something like enthusiasm of the extent to which what he calls semi-steel, of a quality between malleable iron and steel in ordinary use, as manufactured under his patent, may be expected to supersede, in time, the use of malleable iron for railway plates, and many other purposes to which the latter is not altogether adapted; and he as confidently asserts that the process of forging and welding, which, under the existing system, is necessary, whenever a piece of iron work of a larger size than 80 or 100 pounds is required to be constructed, will be dispensed with. He looks also to the universal use of his discovery, seeing that atmospheric air is the prime element used in producing the desired result.—*London Times*, Aug. 23.

New Albany and Salem Railroad.

The following is a statement of the earnings of this road for the year ending June 30th, 1856, with the expenses and net earnings: The receipts for the year ending June 30th, 1856, have been \$730,407 13; for the previous year, \$645,827 57, showing an increase of \$84,579 56, or about 12 per cent.

Earnings for the year ending June 30th, 1856.

1855.	Freight.	Passeng.	Mails.	Total.
July..	20,985.51	27,268.23	1,837.50	50,091.24
Aug..	27,017.08	29,656.66	1,837.50	58,511.14
Sept..	33,474.82	33,409.18	1,837.50	68,781.54
Oct..	33,549.08	45,916.68	1,837.50	87,302.26
Nov..	32,144.18	32,578.49	1,837.50	66,560.27
Dec..	40,402.07	25,591.42	1,837.50	67,830.99
1856.				
Jan'y..	25,489.80	22,989.52	1,837.50	50,266.82
Feb'y..	16,585.00	17,215.58	1,837.50	39,638.08
March	27,295.53	30,322.31	1,837.50	59,455.24
April	29,183.04	33,581.51	3,587.50	66,352.05
May..	25,118.50	33,649.25	3,587.50	67,355.25
June..	26,733.66	32,991.09	3,587.50	62,312.25

\$337,978.31 365,108.82 27,300.00 730,407.13

The business of the first six months of this year shows an increase over the corresponding six months of last year of about \$12,000.

The total receipts for the year have been.....\$730,407 13
Expenses for same time.....340,949 03

Net income.....\$389,458 10
Less interest on Bonds, &c.....351,430 58

Net income after paying interest and expenses.....\$38,027 50

The rolling stock of the road consists of 31 locomotives, 20 passenger cars, 6 baggage cars, 260 box freight cars, 175 platform freight cars, 83 dump gravel cars and 80 hand cars. In addition to the freight and passenger cars put on the road during the year, the company have now in the shops, in a forward state, 2 passenger cars and some 33 freight cars. They have also rebuilt

three of the locomotives, and put the machinery of this road generally in good order.

By reference to the annexed statement of the assets and liabilities of the road, it will be seen that there has been expended since the last report \$386,307 76, in finishing the construction of the road, putting up additional buildings, water stations, &c., and in furnishing additional cars and locomotives.

Statements of Assets and Liabilities, July 1, 1856.

ASSETS.

Construction of road, including right of way, incidental expenses, engineering, discount, and interest on bonds, &c.	\$6,029,630 33
Depots, Water Stations, Machine Shops, Machinery, Engine Houses, &c.	315,524 63
Cars—Freight, Passenger and Baggage.....	337,463 83
Locomotives	264,704 46
Real Estate	82,183 76
Total of permanent assets.....	\$7,029,497 01

Cash.....	\$6,275 38
Due from Operating Department.....	67,125 29
Fuel on hand.....	38,999 14
Due from Post Office Department.....	5,512 51
Land not necessary for use of road, for sale.....	18,802 47
Material and unfinished work in shops.....	79,800 00
Balance from agents and others.....	30,917 96
Balance due from stock subscriptions.....	94,748 28
Montgomery city B'nds. 100,000 00	
Capital Stock of the Company received in payment for Bonds... 254,100 00	
7 per cent. 3d Mortgage Bonds on hand unsold.....	452,800 00
	1,147,501 03
	\$8,176,998 04

LIABILITIES.

Capital Stock	\$2,511,824 31
Ten per cent. Bonds, due \$100,000 per annum, from April, 1859, to April 1, 1863.....	\$500,000 00
Seven per cent. Bonds, issued by Crawfordsville & Wabash R.R. Co., Jan'y 1, 1863..	175,000 00
Eight per cent. Bonds, \$175,000, due May 1, 1864, and \$200,000 per annum from May 1, 1866, to May 1, 1875.....	2,325,000 00
Seven per cent. 2d Mortg. Bonds, due June 1, 1878.....	1,000,000 00
Seven per cent. 3rd Mortg. Bonds, due Feb'y 1, 1885.....	1,000,000 00
Six per cent. Bonds, issued to contractors	12,870 00
Ten per cent. Income Bonds.....	17,500 00
Deferred interest, payable in ten per cent. Income Bonds	197,152 00
	5,227,522 00
Bills payable and balance due operatives	\$335,157 26
Balance due on open accounts.....	8,341 59
	343,498 85
Balance to credit profit and loss.....	94,152 88
	\$8,476,908 04

<i>Increase of Assets from July 1, 1855, to July 1, '56</i>	
This amount added to construction.....	\$317,184 20
Do. Building Depots, Water Stations, Machinery, &c.	18,920 74
Do. Cars	26,800 10
Do. Locomotives	12,904 69
Do. Real Estate	10,498 03
Total addition to permanent assets.....	\$386,307 76
Less decrease of other assets as per statement.....	82,404 43

Total increase of assets for the year. \$303,903 23

Increase of Liabilities from July 1, 1855, to July 1, 1856.

Ten per cent. Income Bonds.....	\$17,500 00
Deferred Interest, which is being paid by ten per cent. Income Bonds.	197,152 00
Increase of Bills Payable and balance due on open accounts	77,820 83
Balance of Net Earnings for the year to Profit and Loss.....	38,028 52

\$330,499 85

Less decrease of Capital Stock, by forfeitures of Stock in settling with contractors.....

Decrease of six per cent. Bonds received in payment for lands..... 3,300 00

26,596 62

\$303,903 23

Since the last report, the work of finishing and ballasting the track, and re-laying the flat bar iron, has steadily progressed, and the track is now in good order on the entire length of the line, with the exception of six miles yet to re-lay, and which will probably be completed within the next three months. This will be of great advantage to the company, not only in relieving them from the expense of keeping up and running over any portion of that track, but will also relieve them from the bad name of having to run over it, which has had a very unfavorable influence upon the passenger business, through the misrepresentations of agents of competing roads.

The Directors not having been able from the insufficiency of the earnings to proceed with the necessary improvements, and also to meet existing engagements, ordered about the 1st of December last, \$500,000 of income bonds to be issued, for the purpose of obviating this difficulty. These bonds are secured by a mortgage on the rolling stock of the company, and such other property as had not before been pledged, and proposed to the holders of second and third mortgage bonds to receive these bonds instead of cash, for 2½ years' interest, and the holders of the first mortgage bonds to receive them for one year's interest. It was hoped that this arrangement would enable the Board to get through the difficulties under which they had been laboring.

St. Louis and Peoria.

The two cities have recently been placed in railroad connection, almost without any body being aware of it. By the junction of the Peoria & Oquawka road with the Illinois Central, the object has been accomplished, and now we have a railroad communication between St. Louis and Peoria in twelve hours; while, as travelers know, the difficulty of communication by steamboat is very great and almost amounts to non-intercourse. Twelve hours is now the time between St. Louis and Peoria. A letter dated at Peoria on the 6th says: "Our distillers and manufacturers have, for the last ten days, been keeping back their stuff, waiting for the opening of the road, when the cars will be loaded here, and go direct through, with-

out any delay or transshipping of freight, and at a much less rate, than is now charged by steamboats.

Merchants and shippers should look to this road in the present condition of the Illinois river. To passengers, it offers obviously the best line of travel—leaving St. Louis in the morning and arriving at Peoria in the evening. In low water, this road will be of great importance to this city, and as such we invite attention to it.—*St. Louis Republican.*

Railroad in Maryland.

Railroad Extension.—The George's Creek Coal and Iron Company have determined to extend their railroad two miles further up the George's Creek Valley. The location of the proposed extension is already begun, under the charge of W. G. Atkinson, Esq. This, no doubt, will prove a valuable acquisition.

Cumberland and Pennsylvania Railroad Extension.—The work for the extension of this road from Frostburg to Lonaconing has already commenced, a force of hands was put upon the tunnel last week, and we learn from good authority that several contracts will be let this week.

New Schemes upon the London Money Market.

The London Times has the following supplementary notice of the new money schemes, and American and other negotiations introduced into that market:

The effect of the diminution of £700,000 in the Bank bullion which took place in July, just after the inflation consequent on the reduction of the rate of discount to 4½ per cent. has manifested itself during the past month in checking the manufacture of new companies. During the first half of the present year the sums demanded by projectors, amounted to an average of £3,900,000 per month. In July the ardor increased, and the total proposed to be employed was £5,370,000, the unfavorable feature of the proportion of foreign being in excess of home schemes having also become more prominent. In the past month the amount has fallen one-half, and, although it has reached £2,540,000, which is at the rate of more than £30,000,000 per annum, it assumes by comparison an appearance of great moderation. Annexed is the list:

International Coasting Company	£320,000
Timber Bending Patents Company.	100,000
New Orleans and Jackson Railroad Bds.	450,000
General Credit Company.....	20,000
Bank of Toronto, £500,000, at present..	100,000
Levant Mineral Company.....	250,000
Hannibal and St. Joseph Railway (Mo.)	200,000
British Steam Fisheries Company.....	130,000
London Discount Company.....	1,000,000

Some of the above schemes will involve no drain on the Money market. One million of the amount is for the London Discount Company—a species of establishment which can beget no danger beyond that of stimulating undue speculation at some future period. The International Coasting and the British Steam Fisheries Companies, which take £420,000, merely propose facilities for developing our own commerce and productions, and the Timber Bending Company is for promoting a patent which, if it realizes its promises, will operate in the direction of economy rather than expenditure. The Levant Mineral Company do not propose apparently any risk of money in exploring doubtful mines, but simply to work on a large scale certain formations of emery stone already yielding definite supplies. The only objectionable point therefore, in the above list, consists in the totals to be sent to Canada and the United States, whither, in addition to what is drawn forth by public advertisements and companies, there is always a large private drain of British capital.—The aggregate this month is £750,000, which will all be drawn rapidly, and which is mostly proposed for railways in the Southwestern States, of which the investors can know little beyond the representations they receive from interested

agents. Meanwhile, not only are other borrowers daily arriving from the United States to obtain, on the first turn of the market, new advances on first, second or third mortgage bonds of railroads in every imperfect stage of construction, but orders are being sent hence for direct purchases, which have already, according to the last New York advices, operated unfavorably on the rate of exchange, and checked those remittances of bullion on which we must partly rely to meet our requirements for the Continent and China.

Milwaukee and Beloit Railroad.

TO CONTRACTORS.

Proposals are invited for the construction of 30 miles of the Milwaukee & Beloit R.R., extending from Milwaukee to East Troy. Bids will be received until the 4th of October next; plans and specifications may be examined at the office of the company in Milwaukee on and after the 27th inst. See Advertisement.

Williamsport and Elmira Railroad.

Capital stock.....	\$1,500,000
First mortgage, 7 per cent.	1,000,000
Second mortgage, 7 per cent.....	700,000
Unfunded debt.....	264,454

Total cost to date.....\$3,464,454
Estimated yearly traffic to 31st March, 1857.....\$508,500
Operating expenses.....250,000

Net increase.....\$253,500
Equal to interest on debt.....\$154,000
Add 6½ per cent. on stock... 99,500—\$253,500

This line of 82 miles connects Philadelphia and Northern Pennsylvania with the New York and Erie road at Elmira, and also forms a continuous line from Philadelphia across the Erie at Elmira to Niagara Falls. Its freight traffic is in iron, coal, and general merchandise, besides the usual amount of local transportation of farm produce and lumber from the counties of Northern Pennsylvania through which it passes. The enterprise is but just emerging from the financial embarrassments which overtook it in 1853-4. The Directors, in their recent report, explain the difficulties with which they have had to contend; and it is certainly to their credit, in view of all the facts, that they have so far been enabled to overcome them as to place the interest upon their debt from the net earnings of the road beyond question, and to open a fair prospect of dividends on the stock.

Iron Mountain Railroad.

Our citizens will be gratified to learn that this road is now making excellent progress, and will soon have regular trains running part of the way upon it. We understand that the work of grading in front of the United States Arsenal has been completed, and that the rails will be laid by Wednesday next. On that day cars will commence running as far as Jefferson Barracks, and even below it. Next day the passenger cars will be put on the road, and will commence running between St. Louis and Carondelet every hour. The company will have omnibuses at the temporary depot of the road, in order to bring up passengers. Permanent arrangements will soon be made for business.

Men are at work on every section of the road, and the company are sanguine in the expectation of having the road completed by the first of July next. Then we shall begin to experience something of the advantages of this road to us, in bringing the Iron Mountain and Pilot Knob ore to our very door, where they can, with the aid of coal and other facilities, be transformed into iron suitable for all purposes whatever. Then, too, we shall be able to furnish all manufacturers of iron cheaper than any other city in the United States.—*St. Louis Republican.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,533,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	300,000	800,000	650,000	In progr.	141,168	8	---
Androscog. & Kennebec	56	588,042	1,622,000	2,210,947	209,476	110,247	6	73	South Western	92	1,097,400	465,500	1,624,920	253,300	---	---	---
Kennebec & Portland	56	1,114,725	1,661,230	2,470,600	2,470,600	112,491	6	86	Tennessee and Alabama	30	246,456	---	679,906	In progr.	---	---	---
Portl., Saco, & Portsmouth	51	1,367,000	119,237	1,486,237	270,214	120,834	---	---	Tennessee and Mississ.	---	170,931	---	175,340	In progr.	---	---	---
Boston, Concord, & Montreal	93	1,808,093	1,089,612	2,771,810	223,234	143,506	2	14	Memphis and Charleston	217	2,179,440	2,127,002	4,028,796	311,631	169,572	---	---
Ohio	35	2,085,925	899,315	3,179,687	380,221	138,454	6	74	Mobile and Ohio	183	2,608,555	1,302,921	4,536,412	199,932	109,236	---	---
Onondago	85	1,500,000	8,242	1,412,678	335,919	138,299	2 1/2	39	Miss. Central	188	642,534	---	628,303	In progr.	---	---	---
Northern, N. H.	82	2,768,400	---	3,016,833	370,529	155,173	4	---	N.O., Opelousa & G.W.	55	2,930,425	671,645	2,657,568	In progr.	---	---	---
Conn't & Passumps. Riv.	61	1,043,145	787,608	1,780,062	162,687	55,173	---	---	Vicksburg, Shreveport & Tex.	---	111,760	---	107,895	In progr.	---	---	---
Rutland & Burlington	120	2,233,376	2,662,396	4,378,428	394,971	---	---	---	East Tennessee and Va.	111	1,000,000	1,500,000	1,933,781	In progr.	---	---	---
Vermont Central	117	5,000,000	3,550,236	8,463,266	820,119	140,377	6	57	Naah. and Chattanooga	161	2,319,330	1,497,081	3,845,694	816,690	112,177	---	---
Boston and Lowell	27	1,830,000	325,635	2,188,595	489,754	339,000	6	80	Ovington & Lexington	98	1,362,804	2,235,931	3,738,753	264,673	138,694	18	---
Boston and Maine	83	4,076,974	150,000	4,179,335	58,917	8,740	---	---	Lexington and Franklin	29	450,055	158,099	637,071	93,263	43,635	6	---
Boston and N.Y. Central	74	2,240,300	1,518,671	3,465,419	588,671	219,689	61	---	Lexington and Danville	55	684,444	52,734	717,178	In progr.	---	---	---
Boston and Providence	66	3,160,000	655,428	4,665,419	1,008,004	404,461	8 1/2	---	Louisville and Frankfort	55	998,236	669,061	1,589,566	244,014	96,902	6	---
Boston and Worcester	68	4,500,000	655,428	4,665,419	1,008,004	404,461	8 1/2	---	Atlantic & Gt. Western	254	866,930	77,294	613,231	In progr.	---	---	---
Cape Cod	47	681,050	280,595	967,252	119,221	65,527	3	49 1/2	Bellevue and Ind.	118	1,851,635	2,025,925	2,862,652	298,293	140,823	30	---
Connecticut River	52	1,691,110	273,241	1,862,244	298,563	108,737	5 1/2	---	Clev., Col., and Cin.	141	4,847,020	122,857	4,613,722	1,200,295	732,056	9	102 1/2
Eastern, Mass.	60	2,683,400	2,947,737	4,621,136	305,998	---	---	---	Cleveland and Toledo	200	2,675,425	2,669,301	5,128,526	756,272	396,980	10	78
Essex	307	3,840,000	153,700	3,765,908	681,163	225,071	67 1/2	---	Clev. and Mahoning	103	---	---	628,533	In progr.	---	---	---
North-Eastern	30	800,242	255,585	958,521	In progr.	---	---	---	Clev. and Pittsburgh	133	2,790,744	3,043,992	5,637,466	581,877	309,518	60 1/2	---
N. Bedford and Taunton	21	600,000	---	3,362,949	683,499	295,738	6	82 1/2	Cin., Hamilton & Dayton	60	2,153,900	1,321,213	2,987,757	508,271	278,012	64 1/2	---
Old Colony and Fall River	87	3,015,100	202,650	3,209,727	219,726	57,313	6 1/2	---	Cin., Wilm. & Zanesville	131	1,120,450	1,311,265	2,326,450	In progr.	---	---	---
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	219,726	57,313	6 1/2	---	Columbus and Xenia	63	1,454,550	149,000	1,481,733	356,366	187,518	10	82
Western, Mass.	185	5,150,000	5,966,420	10,495,995	1,869,673	633,013	7	58 1/2	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---
Worcester and Nashua	46	1,141,000	205,565	1,251,271	294,780	76,760	2	48	Dayton and Michigan	149	1,076,692	393,011	1,185,826	In progr.	---	---	---
Providence and Worcester	43	1,610,020	325,461	1,906,606	811,430	138,057	70	---	Dayton and Western	35	310,000	500,000	733,769	In progr.	---	---	---
Hartford and N. Haven	72	2,550,700	830,000	3,313,932	730,012	352,799	10	123	Easton and Hamilton	42	454,690	904,489	1,155,135	171,929	65,000	20	---
Hartford, Prov. and Fishkill	123	2,008,110	2,680,866	4,060,869	258,685	119,611	---	---	Little Miami	65	2,963,921	1,171,785	3,648,132	681,562	336,708	88	---
Housatonic	110	2,000,000	414,240	2,431,773	339,196	71,427	---	---	Mad River and L. Erie	203	2,461,550	2,572,932	4,448,661	In progr.	---	---	---
Naugatuck	57	1,081,800	524,244	1,680,723	220,459	93,768	---	---	Central Ohio	138	1,520,927	3,455,078	4,283,443	Recently opened.	---	---	---
N.Y. York and N. Haven	62	3,000,000	2,375,803	5,376,803	884,306	338,577	25	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,628	662,117	9	---
N. Haven and N. London	60	739,258	735,165	1,450,318	88,007	30,318	---	---	Pittsburg, Mayv. & Cin.	50	371,850	31,000	300,853	In progr.	---	---	---
N. London, W. & Palmer	66	602,200	1,073,073	1,694,383	124,044	66,430	---	---	Sandry, Mass. & Newk	127	1,350,000	2,206,257	3,552,257	328,958	164,479	---	---
Norwich and Worcester	32	439,005	1,625,095	1,540,695	117,716	9,904	---	---	Scioto & Hocking Valley	135	403,975	590,050	888,858	In progr.	---	---	---
Albany Northern	32	439,005	1,625,095	1,540,695	117,716	9,904	---	---	Spring, Mt. Vernon & P.	113	2,000,000	950,000	---	In progr.	---	---	---
Black River and Utica	38	1,487,874	3,017,183	2,519,096	172,478	66,333	---	---	Tol. Wabash & St. Louis	242	2,500,000	4,350,000	---	In progr.	---	---	---
Buffalo, Conn. and N.Y.	100	798,439	2,537,849	3,401,868	288,392	31,896	---	---	Om., Log. & Chicago	255	4,190,679	1,006,125	2,080,433	In progr.	---	---	---
Buffalo and N.Y. City	92	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	61,562	---	---
Buffalo and St. Line	47	434,111	922,393	1,275,796	174,089	69,506	---	---	Ind. and Cincinnati	88	1,213,723	1,442,519	2,173,481	358,012	193,142	7	60
Canandaigua and Elmira	95	1,315,000	2,279,854	3,495,832	---	---	---	---	Indiana Central	66	611,400	1,221,179	1,907,911	350,176	134,375	60 1/2	---
Canandaigua & Niagara Falls	35	687,000	506,689	1,187,562	135,433	48,649	---	---	Ind., Clev. & Pittsburg	83	826,825	1,099,400	1,831,225	226,058	93,010	---	---
Cayuga & Susquehanna	144	3,758,496	9,250,362	12,737,898	1,812,087	603,946	29	---	Jacksonville	66	1,014,252	694,000	---	200,544	94,318	---	---
Hudson River	95	1,876,148	668,949	2,655,956	301,793	116,642	28	---	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	286,148	117,880	---	---
Long Island	534	24,154,880	14,462,742	28,623,913	6,563,581	3,162,126	8	86 1/2	New Albany and Salem	288	2,535,121	5,281,848	6,643,189	645,827	371,402	---	---
New York Central	534	10,023,958	25,128,669	33,439,431	6,563,581	3,162,126	8	86 1/2	Peru and Indianapolis	73	---	858,314	---	150,000	90,000	---	---
New York and Erie	139	5,717,100	4,069,769	8,786,203	1,656,577	284,126	10 1/2	---	Terre Haute and Ind.	73	974,800	604,355	1,502,168	287,512	139,702	10	10 1/2
New York and Harlem	139	1,633,022	4,406,874	5,470,714	620,153	135,754	1 1/2	---	Chicago and Rock Is'd	182	3,141,500	2,387,155	6,214,152	In progr.	---	---	---
Northern, N. Y.	115	899,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and St. Louis	220	---	---	1,077,312	In progr.	---	---	---
Oswego and Syracuse	35	467,200	294,189	749,683	In progr.	---	---	---	Chicago, Burl. and Quincy	58	1,639,100	1,684,736	2,884,622	722,580	379,821	20	---
Pottsdam and Watertown	25	610,000	140,000	896,423	241,149	82,600	7	---	Central Military Tract	88	1,202,500	2,133,050	2,920,241	471,399	219,588	---	---
Rensselaer & Saratoga	48	600,000	305,600	71,909	71,909	21,059	---	---	Chic., St. Paul & P'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Saratoga and Whitehall	80	768,369	1,678,804	2,272,777	159,434	22,503	---	---	Galena and Chicago	259	5,441,600	3,318,039	7,742,614	2,315,786	1,192,042	22	110
Syracuse & Binghamton	27	437,830	737,079	1,109,822	156,363	55,184	---	---	Illinois Central	627	2,271,050	9,416,392	20,374,446	1,532,118	527,962	---	117 1/2
Troy and Boston	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	90	Peoria and Oklawaha	93	569,889	818,454	1,388,342	In progr.	---	---	---
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,584	---	---	Ohio & Miss. (Wat. Div.)	147	1,780,295	3,292,408	4,870,556	Recently opened.	---	---	---
Belvidere Delaware	94	800,000	11,407,200	8,636,523	2,017,127	961,941	12	124	Terre Haute and Alton	173	2,281,420	1,256,000	8,537,424	In progr.	---	---	---
Camden and Amboy	60	369,320	1,522,131	1,729,642	122,417	60,080	---	---	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.	---	---	---
Camden and Atlantic	30	3,482,850	690,000	4,310,011	861,514	500,747	10	121 1/2	Mich. Central	282	6,032,444	5,990,018	10,668,158	2,215,253	879,656	10	92 1/2
New Jersey Central	69	2,000,000	2,264,176	3,683,149	398,728	171,603	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,308	2,410,000	875,000	10	91 1/2
Morris and Essex	63	1,167,805	375,000	1,636,550	229,341	96,267	6	---	Green Bay, Mil. & Ch.	155	764,075	442,726	1,193,765	In progr.	---	---	---
Allegheny Valley	41	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee and Miss.	106	1,826,428	647,889	3,578,757	661,843	417,443	17	78 1/2
Cataw., Wm. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	12,450	---	---	Milwaukee & Water'n	72	354,861	132,000	614,238	In progr.	---	---	---
Cumberland Valley	109	3,051,622	3,884,702	6,022,667	628,911	259,263	6	80	Milwaukee and Horicon	15	554,200	---	584,109	In progr.	---	---	---
Del. Lack. & Western	23	600,000	150,000	750,000	---	---	---	---	Milwaukee & La Crosse	61	1,351,832	632,131	1,883,668	In progr.	---	---	---
Phila. and North East	33	600,000	1,200,000	1,348,812	89,535	53											

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex- interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N. Y.	1872	85 1/2	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	97 1/2	
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	85	
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1866	72 1/2	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	91	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	70	77 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	77	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863		87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	60	80
Covington and Lexington	400,000	Do. do.	7	April, October	"	1867		75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	62	64
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875		91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		80
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	93 1/2	94 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	8	April, October	"	1873		75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	82
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866		85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconvert.	6 1/2	May, 2 Nov.	"	1853	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N. Y.	1862	94 1/2	95 1/2
Do. do.	650,000	Do. 2d do. do.	8	April, October	"	1863	94 1/2	95 1/2
Do. do.	1,250,000	Do. 3d do. do.	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,825,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	97 1/2	98
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N. Y.	1875	78	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	86	87
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	86	
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N. Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	105 1/2	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95 1/2	97 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	96 1/2	97
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	93 1/2	94
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86	86 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	97	97 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	85	86
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	66	66 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	94 1/2	95 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	102	
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	82	85
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	82	84
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	80	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	90 1/2	
Do. Gosben Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	84 1/2	85
New York Central	3,287,000	No mortgage, do.	6	May, Novemb.	"	1883	88	88 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	100 1/2	101
Panama, 1st issue	900,000	Convertible till 1850	7	Jan'y, July	"	1866		100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866		100
Reading, issued 1845	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88	
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88	90
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	86 1/2	87

CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.	CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.
New York, 7 per ct. 1857	{ Feb'y, May, August, and November.	100	101	Milwaukee, 7 per ct. coup.	X	Divers	80
Do. 5 do. 1858-60		95	97	New Orleans, 6 per ct. cp. R. R. X	Do.	Do.	77
Do. 5 do. 1870-75		95 1/2	97	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	83	86
Do. 5 do. 1880		94 1/2	95 1/2	Philadelphia, 6 per ct. 1876-98	Jan'y, July	89 1/2	89 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	97	100	Pittsburgh, 6 per ct. coup.	X	Divers	74
Alleghany, 6 per ct. coup.	Jan'y, July	97	98	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	85	86
Baltimore, 6 per ct. 1879-90	Quarterly.	97	98 1/2	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	85
Boston, 5 per ct. coup.	April, October.	97	99	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101	102	St. Louis, 6 per ct. coup. Long X	Do.	Do.	78
Cler'fd, 7 per ct. cp. W. W. 1879 X	Do. do.	101	102	Do. Municipal	Do.	Do.	80
Cincinnati, 6 per ct. coup.	X	Divers	99	Sacramento, 10 p.ct. cp. 1862-74 X	Do.	Do.	71
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	89	90	S. F.isco, 7 p.ct. cp. 1865, pay. N. Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100 1/2	100 1/2	Do. 10 p. ct. cp. 1871 X	Do.	Do.	
Detroit, 7 per ct. cp. W. W. 1873-78 X	Feb'y, August.	101	102 1/2	Do. 10 do. pay. N. Y. X	Jan'y, July		
Elkhart, 8 per ct. cp. Long X	March, Sept.	101 1/2	101 1/2	Do. 6 per ct. pay. N. Y. 1876 X	Do. do.	52	57 1/2
Jersey City, 6 per ct. cp. W. W. 1877 X	Jan'y, July	91	96	Wheeling, 6 per ct. coup.	X	Divers	67
Louisville, 6 per ct. cp. 1880-82 X	Divers	79	80	Do. 6 p.ct. cp. Mun. 1874 X	March, Sept.	81	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68	68	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending September 9th, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	85
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	80
Indianap. & Cin., 2d Mort. 7 per ct.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	82 1/2
Hillsboro' & Cin., 7 per cent. 1st Mortg.	47 1/2
Covington & Lexington, 10 per ct. Income	84
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Do. do. do. due July 1, 1866	85
Little Miami, Dividend Scrip, issued June, 1856	79

STOCKS.

Bellevue and Indiana, 30.—Cin., Ham. and Dayton, 66.
—Col. and Xenia, 82.—Cincinnati, and Ohio, 3 1/2.—Covington & Lexington, 14.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 60.—Indianapolis and Cincinnati, 58.—Little Miami, 88.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 15.—Ohio and Mississippi, 5.—Hillsboro' and Cincinnati, 15.—Peru and Indianapolis, 12.—Cincinnati, Wilmington and Cincinnati, 12.

By HEWSON & HOLMES.

For the week ending September 10th, 1856.

BONDS.	Per ct.
\$5,000 Covington & Lex., 7 per cent. 2d Mort.	65 (& int.)
1,000 Do. do. do.	66
3,000 Ohio and Miss. 7 per cent. 2d Mortgage	49
2,000 Little Miami, 6 per ct., 1st Mortg.	80
10,000 Town of Perryburg, Wood county, Ohio, 7 per cent.	55
5,000 Township of Ottawa, Putnam city, 7 p. ct.	55
4,000 Township of Pleasant, Putnam city, 7 p. ct.	55
2,000 Township of Washington, Auglaize county, Ohio, 7 per cent.	65
1,000 Cov. & Lex., 10 per cent. Income	55
525 Little Miami, Dividend Scrip.	80
200 Columbus & Xenia, 7 per cent. 5 year	90

STOCKS.

69 Shares Indianapolis & Cincinnati	58
255 " Mad River & Lake Erie	15
40 " Little Miami	68
52 " Covington and Lexington	15
10 " Cin., Ham. and Dayton	66
100 " Cincinnati and Chicago	3 1/2
100 " Ohio and Mississippi	5 1/2
8 " Cin. and Wilm. and Zanesv.	11 1/2
35 " Cin., Harrison and Indianap.	8

Mario & Kan's Money Circular for the European Steamer of the 17th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, Sept. 16, 1856.

Since our advices of the 8th inst. the upward movement then noticed has continued, and Railroad Stocks especially show a considerable advance upon our last quotations, the largest rise being in Illinois Central Stock, which went up 7 1/2 per cent. in a few days; the outside demand for dividend paying Western Railroad Stocks, generally, has much increased, causing an improvement in prices of from 1 to 3 per cent. Railroad Bonds have been a trifle more active than of late, but at rather weaker prices, excepting Illinois Central, Erie 1883 and 1875 Bonds, of which several lots have been taken for Europe. Money has been in very good supply throughout the week, but rates have undergone no change. State Stocks—Transactions limited; Virginia advanced 1/2, and California 1875 Loan 3 per cent.; Missouri and Louisiana sold at former prices. City and County Bonds—The only sales worth noticing have been in St. Louis City and County Bonds without change in rates. Railroad Bonds—Illinois Central have been active, closing at an advance of 2: there was also some demand for Erie 1883 and 1875 Bonds, the former advancing 2, and the latter 1 1/2; Erie 1871 Bonds sold at a decline of 1/2; N. Y. Central 68, 1; N. Y. Central 78, 1/2; and Hudson River 8d Mortgages, 3/8. Railroad Stocks—The business has been very large at a general advance, except Panama, which went down 1 1/2; N. Y. Central, 3/8; Michigan Southern 3/4; Michigan Central, 1 1/2; Illinois Central, 7 1/2; Cleveland and Toledo, 2 1/2; Chicago and Rock Island, 3 1/2; Cleveland and Pittsburgh, 2 1/2; Galena and Chicago, 1 1/2; Milwaukee and Mississippi, 1 1/2; Harlem preferred has taken another start, selling as high as 52; La Crosse and Milwaukee stock having lately been dealt in to some extent, we henceforward shall quote it regularly. Money is in good supply on call at 7 per cent. discount; 7a9 for first class paper; 10a12 for names less known. Exchange—The supply of bills is

monetary, and sales are very firm. Sterling, 109 $\frac{5}{8}$ %; Paris, 5.16 $\frac{1}{4}$ to 15.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 17th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Sept. 16, 1856.

Since our advices of 8th inst., the resumption of some animation in our stock market, then noticed, has gone on increasing. A rather active speculation has prevailed on the securities and shares of a number of the leading railroads, resulting, after a few fluctuations, in a considerable advance of prices. The rise was particularly large on Illinois Central, both bonds and shares, which attracted especial attention. State stocks have scarcely participated in this movement, and during the continued absence of European demand for general investment, city and county bonds, as also the bonds of Western railroads, have, with few exceptions, remained neglected. Whilst the regular receipts of gold from California are uninterrupted, specie shipments to Europe have remained moderate, and money continues easy to procure. The epoch is at hand predicted by many when a great stringency in the money market might be looked for, but none of the signs, usually forerunners of such an event, have as yet been felt. The approach of the season when a full supply of Exchange on Europe is received from the South, diminishes the probability of any great loss of specie by our banks, and the fears of serious stringency during this autumn is being gradually dispelled. State stocks have scarcely experienced any fluctuations excepting an advance of 3 on California 7s, 1875, and of $\frac{1}{2}$ per cent. of the 7s of 1870. This rise is due to the announcement that the last July interest thus far remaining unpaid, has been provided for in this city. There was some activity in Missouri 6s at $\frac{1}{8}$ decline, and in Virginia at $\frac{1}{8}$ rise. Railroad Bonds.—There was a general demand for those transacted at the Stock Exchange. Illinois Construction were very brisk, and rose 2 $\frac{1}{2}$. Freeland's with few sales advanced 4 per cent.—There was also a fair inquiry for Erie 7s, 1883, at an advance of 2, and for 7s, 1871, for Hudson 3d mortgage and New York Central 7s at well supported prices. The New York Central 6s receded 1 $\frac{1}{2}$ per cent. Railroad Shares.—With the exception of Panama, which receded 2 $\frac{3}{4}$, there was a general decided advance upon last week's prices, although there was some decline to-day. This rise was 7 $\frac{3}{8}$ on Illinois Central. There was through the week a well sustained activity on the following, and a rise as follows: on Erie 1, on Cleveland and Toledo 2, on Reading 1 $\frac{1}{4}$, on New York Central $\frac{3}{8}$, on Michigan Southern $\frac{1}{4}$, on Michigan Central 1 $\frac{1}{2}$, on Chicago and Rock Island 2 $\frac{1}{2}$, and on Cleveland and Pittsburg 3 per cent. Milwaukee and Mississippi with moderate sales have advanced 2 per cent. Money in good demand, but easy to procure on call at 7. Paper rather better held at 8 to 11, according to length and class.

DE COPPET & CO.

We give below extracts from the circular of Robert Benson & Co., received per "Atlantic":

The past week has been one of changeable and uncertain weather, and the accounts from various parts of the country are rather unfavorable for the prospects of harvest. This, together with a considerable demand for money, consequent upon the payment yesterday of the fifth instalment of £500,000 on the last loan, and the settlement in stocks, has caused great flatness in the market generally, and both Government and Railway stocks are quoted lower. Consols, after remaining all the week nearly stationary at 95 $\frac{1}{2}$ to 95 $\frac{3}{4}$ for money, and 95 $\frac{1}{2}$ to 95 $\frac{3}{8}$ for 10th September, are to-day an $\frac{1}{8}$ lower.

The Market for American Securities has been firm. U. S. and State Stocks and Bonds are held for rather higher prices. In Railway Securities the transactions have been more numerous than usual. Illinois Central shares have been sold at

5 $\frac{1}{2}$ to 6, and yesterday at 6 premium. The Six per cent. Bonds at 83 $\frac{1}{4}$, 82 $\frac{3}{4}$ and 83 $\frac{1}{2}$, which is the last price. Construction Bonds 84 $\frac{1}{4}$, 84, 84 $\frac{1}{2}$, 84 $\frac{3}{4}$. Freeland's, 89, ex-coupon. Michigan Central 1860 Bonds at 94 $\frac{1}{2}$, and 1869's at 91 $\frac{1}{2}$ ex-coupon. Erie 3d Mortgage at 87 $\frac{1}{2}$ and 87 $\frac{3}{4}$ ex-coupon; and 1875 Bonds at 84. Michigan Southern Sinking Fund Bonds at 80. New York Central 7 per cent.'s at 93. Pennsylvania 1st Mortgage at 90; and Second Mortgage Sterling Bonds at 95 and 96.

Mr. Satterthwaite in his circular says:

There has been a moderate rise for first class American Railroad Securities during the past week, and sales have been more easily effected wherever holders were disposed to make some concession; this is what might be expected, as many of the best class of Bonds can be had fully as cheap as they could be bought in New York, and in some cases rather cheaper.

The quotations recently received from New York have somewhat tended to check investments in American Railroad Stocks and Bonds, for the dividends just paid by the leading companies, and the continuously increasing traffic returns lead our capitalists to look for a higher range of prices, unless some serious cause is at work to produce a fall.

American Railroad Journal.

Saturday, September 20, 1856.

Southern Railroad.

The attention of contractors is requested to the advertisement of this company in another column of the JOURNAL, inviting proposals for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the superstructure of the roadway of the eastern division of their road; also for furnishing the cross-ties, and for the track-laying, together with stations, platforms, depots, etc., required in the thorough completion of the road.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 of embankment. The trestling to 4,000 feet. The bridging to 600 feet. The masonry for culverts to 10,000 perch. The cross-ties to 180,000.

The time for receiving proposals is limited to the first of November next. In the meantime; maps, profiles and specifications may be seen at the office of the company in Vicksburg.

The Southern railroad commences at Jackson, and is finished as far as the town of Brandon, to which point it is in good running order, and well equipped. The portion offered for letting extends from Brandon, in an easterly direction, 82 $\frac{1}{2}$ miles, to its intersection with the Mobile and Ohio railroad, near the town of Marion in Lauderdale county—passing through the counties of Rankin, Scott and Newton, over a high rolling country, well watered and timbered. The grading, except for the first 20 miles, is generally light, and the excavation and embankment upon most of the sections alternate favorably. The material is of a character easily moved, and the growth of the country affords abundance of timber for bridging and cross-ties.

The road connects with, and is an extension of the Vicksburg and Jackson railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas railroad, now under contract for its whole distance and in rapid progress of construction. It inter-

sects the New Orleans and Jackson Great Northern railway at Jackson; and through that at Canton, connects with the Mississippi Central railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western railroad in Alabama, and thro' that unites with the roads in Virginia, Tennessee, and North Carolina. It is also an indispensable link in the line of railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly national in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus national, it appeals to Southern men and Southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great Southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000 which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The 15 miles of completed road between Jackson and Brandon, with its equipments, is a bonus from the State; the public land has been donated by Congress; and it is perhaps not greatly over-estimating the present property of the road, to put it at or near \$1,000,000, in which sum future stockholders who may become such by direct subscription of money or work, will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

Chicago, Iowa and Nebraska Railroad.

TO CONTRACTORS.

Proposals for the graduation, masonry and bridging of this road at De Witt, and extending to Cedar Rapids, in Linn county, will be received at the office of the company in Clinton, Iowa, until the 15th of October. Plans and specifications will be ready for examination the 25th inst. For Advertisement see our Advertising columns.

New Process in the Manufacture of Iron.

We give elsewhere an account of a new method for the conversion of pig into refined iron, just brought out in England by a Mr. Bessemer. The account of the experiments certainly indicates that a great step in simplifying the process for the manufacture of iron has been gained. In England, where novelties are only slowly embraced, the experiments that have been made are regarded as conclusive in favor of Mr. Bessemer's method. Should it prove entirely successful, we may look for a speedy fall in the price, and a vast improvement in the quality of iron.

Warsaw and Rockford Railroad.

The office of this company has been removed to Oquawka, and E. H. W. PATTERSON appointed Secretary, and JOHN MCKINNEY, Treasurer. The work on the road is progressing at a reasonable rate and the company believe that the time is not far distant when this point will have an eastern connection.

Railroad Earnings.

The earnings of the Cincinnati and Indianapolis road for the month ending August 21 were:

Passengers.....	\$24,980.12
Freight.....	26,436.87
Mail.....	752.08
Express.....	520.00

Total.....	\$52,689.07
Earnings for August, 1855.....	35,926.50

Increase, 46 per cent.....\$16,762.57

The earnings of the Hamilton and Dayton railroad company for August, were

Freight.....	\$23,544.43
Passengers.....	18,931.66
Mails and express.....	1,582.40

Total.....	\$44,058.49
Earnings for August, 1855.....	38,876.77

Increase of 13½ per cent.....\$5,181.72

Earnings of the Indiana Central and Dayton and Western railroads for August, 1856:

Passengers.....	\$26,047.70
Freight.....	13,447.70
Express.....	500.00

Total.....	\$39,995.40
For August, 1855.....	30,574.67

Increase.....\$9,420.73

The following statement shows the earnings for August, 1856, on the Cattawissa railroad:

From passengers.....	\$9,458.04
Freight.....	14,471.52
Express and mail.....	1,204.42

Total.....\$25,133.98

These are the largest earnings ever realized on the road in any one month.

The following are comparative statements of tolls collected on the Columbia railroad for the month of August, 1855 and 1856, and also for nine months of the fiscal years of 1855 and 1856:

August, 1856.....	\$86,591.49
August, 1854.....	75,237.94

Increase.....\$11,353.55

From Dec. 1, '55, to Aug. 31, '56.....	\$702,430.85
For same period last year.....	610,908.60

Increase.....\$91,522.25

The earnings of the Pittsburg, Fort Wayne and Chicago (formerly the Ohio and Pennsylvania, Ohio and Indiana, and Fort Wayne and Chicago Roads) Railroad for the month of August, 1856, were, viz:

Freights.....	\$80,805.00
Passengers.....	67,176.33
Mail service.....	1,900.00
Express.....	2,221.05

Total.....\$152,002.38

The receipts for August, 1855, on the same length of finished road, viz: Ohio and Pennsylvania and Ohio and Indiana portion.....82,329.00

Increase equal to 85 per cent.....\$69,673.38

The following statement of the Cumberland Valley Railroad Company exhibits the comparative receipts for August this and last year:

	1855.	1856.
Passengers.....	\$6,408.39	\$8,847.36
Freight.....	5,803.22	7,886.75
Mails.....	483.33	433.33
Total.....	\$12,644.94	\$16,667.44
Increase.....		\$4,022.50

The following is a recapitulation of railway traffic for August as far as received:

	August, 1856.	August, 1855.
Baltimore and Ohio.....	\$437,933	\$351,827
Pennsylvania.....	367,713	397,628
Mich. Central.....	265,649	202,607
Chicago and Burlington.....	244,972	140,848
Galena and Chicago.....	250,693	210,066
Cleveland and Columbus.....	127,543	118,408
Milwaukee and Mississippi.....	56,309	55,095
Rock Island.....	176,774	103,207
Illinois Central.....	246,300	153,800
New Haven.....	91,480	79,377
Covington and Lexington.....	47,129	27,172
Hudson River.....	151,120	149,690
Chicago and Mississippi.....	130,000	.....
Madison and Indianapolis.....	21,866	.....
Hamilton and Dayton.....	44,058	38,876
Indiana Central.....	39,995	30,574
Catawissa.....	25,113	16,946
Little Miami and Xenia.....	111,369	.....
N. Y. and Erie.....	527,456	434,779
Cleveland and Toledo.....	66,603	51,683
Terre Haute and Alton.....	70,006	.....
Indianapolis and Cincinnati.....	52,689	35,926

Total, 22 lines.....	\$3,651,765	\$2,663,506
Increase this year.....		988,259

The earnings of the Erie road in August show a large gain over August of last year. They are:

August 1856.....	\$527,451 05
August 1855.....	434,779 57

Increase.....\$92,671 48

The receipts for the Cleveland and Toledo road for August were.....	\$66,603
August, 1855.....	51,683

Increase, nearly 30 per cent.....\$14,920

The earnings of the Central Railroad Company of New Jersey for the month of August, 1856, were.....	\$50,128 07
For the same month last year.....	30,569 11

Increase.....\$19,558 96

Texas.

Below we give a copy of the Act recently passed by the Legislature of Texas to aid the construction of railroads within her territory. By it, six thousand dollars per mile are loaned to such railroad companies (with one or two exceptions) as have a corporate existence, the State taking a first mortgage upon the roads as security therefor.

The aid thus granted will undoubtedly lead to the immediate construction of a number of important roads, as the State in addition to assistance in money, have also confirmed to several lines former grants of lands, equal to 10,240 acres per mile. These can be made to produce considerable sums, either by their actual sale, or by making them the basis of credits. With individual subscriptions, sufficient means can be raised for the rapid construction of these roads.

There is no State in which railroads can be more easily built, and none where they are so much needed. Texas, though embracing an area of 220,000 square miles, is without navigable rivers. The products of her fertile soil have now to be waggoned to market. The cost of transportation is a serious drawback upon the prosperity of the State. This is now soon to be removed.

A new era in her history is really opening before her. The development of her resources which will follow, will very soon render her the most wealthy and populous of all the Southern States.

We shall take immediate occasion to notice in detail the more important projects of that State now before the public.

AN ACT

To provide for the investment of the Special School Fund in the Bonds of Railroad Companies incorporated by the State.

SECTION 1. Be it enacted by the Legislature of the State of Texas: That the Governor, Comptroller, and Attorney General, shall *ex officio* constitute a Board of School Commissioners, whose duty it shall be to draw from the Treasury the Special School Fund created by the Act of January 31st, 1854, entitled an Act to establish a system of Schools, and such other amount as may hereafter be added to said fund, and invest the same as provided in this Act. And said Board shall annually report to the Governor its acts and proceedings relative to the said school fund, which shall be laid before the Legislature at each and every session thereof.

SEC. 2. That the five per cent. indemnity bonds belonging to said special school fund may and shall be loaned to legally incorporated railroad companies in this State at their current value, including premium; provided said value shall not be less than par, otherwise at par, for the term of ten years from the date of said loans, at an interest of six per cent. per annum, payable annually upon the terms and conditions specified in this Act, provided that one-half of said fund shall be loaned to companies whose works lie east of the Trinity river, and the residue to companies whose works lie west of said river.

SEC. 3. Said Board of Commissioners is hereby authorized to invest said funds by loaning to any such company which has been chartered for the purpose of building a railroad in this State, the sum of six thousand dollars per mile for each and every mile of railroad constructed as hereinafter provided, said loans to be secured by the bonds of such companies for said principal and interest, made and executed to the State of Texas in the corporate name of such company, signed by the President and countersigned by the Secretary or Treasurer, under the seal of such company: which bonds shall constitute a lien upon the road and chartered rights of such company, including the road-bed, right of way, grading, bridges, iron rails, equipments and masonry, and upon all the stock subscribed for in said companies, all the depots and depot stations, and all the property owned by such company, as necessary for its business, and the State of Texas upon the execution of said bonds, and by virtue of the same, shall be invested with said lien, or mortgage for the payment of said bonds and the interest thereon as the same becomes due without the necessity of any deed, special contract or act of registration.

SEC. 4. Said Board of Commissioners shall loan said sum of six thousand dollars for every mile of road completed to any such company as shall have completed in a good and substantial manner, and furnished ready for actual use a continuous section of twenty-five miles of the road of said company, and graded an additional consecutive section of twenty-five miles, ready for the cross-ties and other superstructure: and the same amount per mile for every additional consecutive section of ten miles, which shall be so completed and graded ready for the ties and other superstructure. And the same amount per mile for every section of ten miles which shall be so completed and furnished ready for use upon any railroad which shall be a continuation of, or connection with any other railroad running from any adjoining State or Territory in the State of Texas; provided, said road shall, together with such continuation or connection, be completed at least twenty-five miles in length, and provided, that before said loan is drawn upon any com-

pleted section of ten miles, an additional consecutive section of ten miles shall be graded, ready for the ties and other superstructure.

Sec. 5. That upon the application of any such railroad company to said Board of Commissioners for said loan and its representations that section 4th of this Act has been complied with, said Board of Commissioners shall appoint some competent engineer, who shall, at the expense of the company, examine the road of said company, and make a full report upon the condition of the same under oath, and shall report all matters pertaining to the business of said company which he may deem useful to said Commissioners in ascertaining the true condition of said road and company. And upon being fully satisfied that any section or sections of said road have been contracted and completed as provided in the 4th section of this Act, and that said section or sections are not subject to any lien whatever other than such as may be created by this Act in favor of the State, said Board shall draw a warrant on the Treasury of the State in the name of said company, against said special school fund for such amount of said bonds as it may be entitled to under the provisions of this Act, which warrant shall state on account of what work it is drawn, shall be signed by said Board of Commissioners and countersigned by the Governor and delivered to the President or the duly authorized agent of said company.

Sec. 6. That upon the presentation of such warrant or warrants to the Treasury of this State, the amount of said indemnity bonds called for in the same, shall be delivered and transferred according to law, to the President or authorized agent of said company, his receipt taken therefor and the same charged to the special school fund.

Sec. 7. That before said Board shall deliver to said company, said warrant or warrants upon the Treasury, it shall require said company to execute and deliver into the Treasury the bonds of said company for said loan or loans in sums of not more than one hundred and fifty thousand dollars, and not less than fifty thousand dollars, each payable to the State of Texas ten years after date, together with coupon bonds for the six per cent. interest thereon, payable annually as above stated; which bonds shall be executed in the mode prescribed in the third section of this Act, and shall be made payable at the office of the Treasurer of the State, and which shall be a lien in favor of the State as specified in the third section of this Act, and shall have a priority over all other claims against said company. That in addition to the annual interest of six per cent., every company accepting any loan under the provisions of this act, shall pay annually at the expiration of each year from the date of the loan the further sum of two per cent. upon the amount of the loan, into the Treasury of the State for the purpose of establishing a sinking fund to be applied towards the payment of the loan at its maturity, and the amount so paid for the purpose of such sinking fund with their accumulations shall be credited to such railroad.

Sec. 8. And after the execution of said bonds upon said first section, or any subsequent constructed section, it shall not be lawful for said company to give, create or convey to any person or persons, or body corporate whatever, any lien, incumbrance or mortgage of any kind which shall have priority over, or come in conflict with the lien herein secured, and any such lien, incumbrance or mortgage shall be null and void as against said lien or mortgage in favor of the State.

Sec. 9. That it shall be the duty of any such company as the interest becomes due upon said bonds, executed as aforesaid, to deposit the same in the Treasury of the State, which amount shall be credited to the special school fund, and shall be subject to the immediate appropriation for school purposes, as provided by law. And all railroad companies shall pay said interest so due by them annually on the first day of March, out of the first receipts, arising from said road inde-

pendent of any expenses or other liabilities of said roads, and the coupon bonds of such companies so satisfied shall be cancelled and delivered up.

Sec. 10. Whenever any of the bonds of said company for the principal loaned thereon, shall become due, said company shall deposit said sums so due, in the Treasury of the State, and said bonds, when so paid shall be cancelled and delivered up, and said principal sums so returned into the Treasury shall be credited to the special school fund, and subject to re-investment by said Board, as provided in this Act.

Sec. 11. That if any such company shall fail or refuse to pay said principal or interest bonds from time to time, as the same shall become due, the road of said company, together with all the rights and property of said company, specified in section third of this Act, shall be sold or caused to be sold by the Governor of the State, for the satisfaction of said bonds so due as well as the bonds of said company which may have been given under this Act to the State; and the whole of said bonds shall be deemed due if said sale takes place, and the proceeds of such sales shall be deposited in the Treasury and credited to the special school fund.

Sec. 12. That upon the failure of any such company to pay said principal or interest bonds as required in this Act, it shall be the duty of the Governor after the expiration of thirty days, to cause notice of the sale of such road to be advertised in some newspaper published at the seat of Government for the term of three months. And after due notice has been given, shall cause the entire road, together with all the rights and property of said company specified in the third section of this Act to be sold at public auction to the highest bidder for cash, at the door of the capital of the State, and at the time specified in said advertisement, provided that, if the principal or interest bonds which may have become due before the giving of said notice, and all costs attending said proceedings, shall be paid before the day of sale then said proceedings for sale shall be stopped.

Sec. 13. In the event of any sale of any railroad under the provisions of this act, it shall be the duty of the governor, either in person or by agent, to attend such sale and protect the interest of the special school fund, and shall, if necessary to protect said interest, buy in said road with all the rights and property belonging to said company in the name of the Board of School Commissioners; Provided, he shall not bid more than the amount of the bonds of said company with the interest due thereon, and the cost and expenses attending said sale, and in the event of any such purchase in the name of the Board of School Commissioners, the Governor shall appoint a receiver, who shall be required to enter into such bonds as may be required by the Governor, and whose duty it shall be to take immediate possession of and to control and manage said road under direction of the Governor until otherwise disposed of by law, the said Board of School Commissioners shall retain in the Treasury of the State charged to the credit of the school fund, five per cent. of the United States bonds of all sums loaned as provided in this act, as a sinking fund to be used for the *pro rata* appropriation annually due to the several counties for school purposes, in the event of the interest due to the school fund after the sale of any railroad, shall not be paid by said road.

Sec. 14. The State of Texas expressly reserves the right to enact hereafter all such laws as may be deemed necessary to protect the interest of the special school fund, in securing the payment of said bonds and in enforcing the lien reserved thereon.

Sec. 15. That the provisions of this Act shall not extend to any Railroad Company which may be entitled to receive from the State a larger grant of land than sixteen sections of six hundred and forty acres to the mile for the construction of such road, nor to any road for more than a single trunk

with the necessary turnouts, nor to any branch road, nor to any road which shall not bed commence and prosecuted as required by the provisions of its charter. Provided, that no company shall be entitled to a loan under this act for any section of road between the cities of Galveston and Houston or Galveston and the crossing of Buffalo Bayou, near the city of Houston.

Sec. 16. That no railroad which is less than fifty miles in length according to the terms of its charter, shall be entitled to the benefits of this Act, except on the following terms: The Brownsville and Rio Grande Railroad shall be entitled to the benefits of this act on its entire length as soon as it is completed from Point Isabel to Brownsville; and any other railroad which is less than fifty miles in length according to the terms of its charter, whenever one-half of its entire length has been completed and put in running order, and the other half has been graded ready for the ties and other superstructure, shall be entitled to said loan on said completed section, which shall be expended for the completion of the entire road; and in no event shall said road be entitled to said loan on more than one half of its entire length.

Sec. 17. If any person making an affidavit as herein required, shall knowingly swear falsely, he, upon conviction thereof before any court of competent jurisdiction, shall suffer all the pains and penalties of perjury.

Sec. 18. That it shall be the duty of any railroad company, receiving the benefits of this Act, to make through its proper officers an annual report under oath to the Governor, containing a full and complete statement of the affairs of said company, together with the receipts, expenditures and liabilities of said company, and with such other facts as may be necessary under the general laws regulating railroads, and said Railroad Companies.

Sec. 19. That every Railroad Company before it shall be entitled to the privileges of this act, shall establish upon the line of its road an office where books shall be kept showing the state of its stock and general accounts; and where the company may be legally served with all notices and process. And the superintendent or principal manager of the transportation business of the road shall reside in this State. And whenever a majority of the shares in the capital stock of the Company shall be owned in this State, a majority of the Directors including the President shall be residents thereof. And that this act take effect and be enforced from and after its passage.

Passed August 13th, 1856.

DEPARTMENT OF STATE,

AUSTIN, Texas, August 20th, 1856,

I, the undersigned, Secretary of State of the State of Texas, hereby certify that the writing contained on the foregoing eleven pages hereto attached is a correct copy of the original enrolled act now on file in this Department.

Given under my hand and the seal of the Department, at the City of Austin, this, the 20th day of August, A. D., 1856; and of the Independence of Texas the Twenty-first year.

[L. S.]

EDWARD CLARK,
Secretary of State.

Honduras Inter-Oceanic Railroad.

There appears to be no doubt that this project has been taken up by parties capable of furnishing the means for its construction, and that the public are soon to have another line of railroad connecting the two oceans. The subject has recently been before the Liverpool Chamber of Commerce, and elicited an interesting discussion, a portion of which we give below:

Mr. C. Holland, chairman of the meeting, stated that there was a question of importance referred to in the report of the chamber, that was the question of an inter-oceanic railway from the Atlantic to the Pacific, over the territory of Honduras.—Mr. Brown, the excellent member for South Lancashire, had advanced very cogent reasons to the Council why it should take an interest on the sub-

ject, and the meeting would bear from Mr. Brown himself the reasons which had influenced him in thinking so. He (the Chairman) thought it was a fair subject for the Chamber of Commerce to take up, with a view to the progressive commerce of the world; but independently of this view, it had certain bearings upon the settlement of a question in which they were all interested—the much vexed question of Central America, involving, as it did, so many elements of discord between England and the United States. [Hear, hear.]

Mr. Brown, M. P., moved that "the President be requested to act as a member of any provisional committee that may be formed for promoting the Honduras Inter-oceanic Railway, with a view to investigate the merits of the undertaking, and if approved, to recommend it to the support of the Chamber and the public." The honorable gentleman entered at some length into a history of the project, and gave a detailed statement of the advantages, expenses, &c. The length of the proposed line is 161 miles; and its course was through the Republic of Honduras, from Puerto Cabello to the Bay of Fonseca.

A charter was obtained from the Government of Honduras, which was ratified by the Legislative Chambers of the State, April 28, 1855, and at the same time proclaimed by the President of that Republic as a law of the land. The charter provided that the ports, at both extremities, shall be free ports—that all property *in transitu* shall be free of duty—and that no passports shall be required of passengers. In all other respects it is equally liberal and enlightened. In the way of material aid, the State gives the company an amount of land equal to about 2,300 square miles, or 1,500,000 acres.

The State also concedes a bounty of 75 acres of land to each laborer entering the service of the company, and exemption from public service to such citizens as may be in its employ. The protection both of the United States and Great Britain is extended to this, in common with the other isthmus routes, by the terms of the 8th article of the Convention between those powers, of July 5, 1850.

By the construction of the proposed road, it is designed to establish an adequate and permanent route of transit for passengers and freight between the Atlantic and Pacific Oceans, primarily, for the accommodations of the California and Australian trade, and secondarily, for that of the Western States of the American Continent, the Pacific Islands, and the centers of Oriental commerce in India, China and Japan.

Such a route is demanded: first, by an existing travel between the Atlantic and Pacific ports of the United States of not less than 80,000 passengers per annum; secondly, for the rapid transmission of the public mails and of treasure, the latter equalling \$80,000,000 (£16,000,000) annually; and thirdly, for the accommodation of a large and increasing general commerce. To these considerations may be added the probable requirements of Australian trade and travel, amounting in treasure (1854) to \$43,850,000 (£8,770,000); passengers, (1855), 52,309; and imports (1853) from England alone to \$72,530,000 (£14,506,000).

The peculiar advantages of the line of the proposed road, and which will enable it to meet the above requirements, are—

I. Spacious, safe and easily accessible ports, for the largest ships and steamers, at both extremities, viz., Puerto Cabello on the Atlantic, and the Bay of Fonseca on the Pacific. These ports are surrounded by fertile districts of country, capable of furnishing the amplest supplies for ships and passengers.

II. A positive saving over Panama, the only other available and practicable route across the Isthmus of Central America, of not less than 1,300 miles of sailing distance; and, from the superiority of ports and facility of embarkation and disembarkation, of not less than from seven to ten days of time in the voyage from Europe and the Eastern ports of the United States, to the great centers

of trade and travel in the Pacific, viz., California, the Sandwich Islands, China, Japan, and East Indies.

III. It passes through a country of eminent salubrity, and of vast mineral and agricultural resources, ranking, in these respects, with the best parts of Mexico. In short, it is unrivalled in respect of distance, cheapness of construction, excellence of climate, beauty of scenery, in local resources arising from mineral and agricultural wealth, in cheap timber and other materials for construction, and in perfectly safe harbors, accessible at all times by the deepest sea-going steamers and sailing vessels.

A population of nearly 100,000 souls exists on or near the line, which runs through Comayagua, the capital of the Republic of Honduras. Several thousand of the people on the Northern coast are occupied in cutting out mahogany and other precious woods for export, almost precisely the kind of work required on the proposed railway, who may be usefully employed in the construction of the road, in conjunction with exotic labor.

Contracts are offered for the supply of 2,000 to 6,000 skilled and native laborers, as may be required, at from \$10 to \$14 (£2 to £3) per month, including rations. By this route, at the present rate of speed, passages can be made by railway and steamer from New York to California in fourteen days; and from London or Paris to Australia or China in forty-five days. Mr. Brown referred to the settlement of the Central American question recently arrived at as calculated to facilitate materially the proposed undertaking, and concluded by urging the adoption of the resolution.

Mr. J. C. Ewart, M. P., had great pleasure in seconding the resolution. The importance of the project could not be overrated. It was most desirable to improve the communication between the two oceans; and, with the guaranties of England, France and America, they could hardly doubt of success. He only hoped that he might live to see it carried out, although they all knew such a great undertaking as this required a good deal of exertion on the part of those engaged or interested in its accomplishment. (Hear, hear.)

Illinois Central Railroad.

We invite attention to the following letter addressed by the Land Commissioner for the company to the Directors.

LAND DEPARTMENT ILLINOIS CENTRAL R. R. CO., }
Chicago, Monday, September 1, 1856. }

GENTLEMEN—By the report, this day communicated, of the operations of this branch of the Company's service for the past month, it will be perceived that the land sales, including town lots, have amounted to \$381,744 09.

The extreme severity of the weather last Winter and Spring, materially interfered with our operations, and it was supposed that these causes, combined with the reduction in the prices of all kinds of farm products, and the great quantity of land offered by individuals, would have had a serious effect on our sales. Such, however, has not been the fact; for those sales, since the 5th of January last, including town lots, amount to \$2,007,522 48, embracing 136,590.62 acres disposed of in 1,179 different contracts, averaging 116.05 acres to each contract, and \$14.54 per acre.

So far as I am informed, or can judge, those sales were uniformly for purposes of actual settlement and cultivation, and not for speculation; and no section of our country, and of course none other, can produce a body of men of greater intelligence, industry and thrift, than those who have purchased these lands.

It is true that individuals have made large sales in the vicinity of our lands, equalling, probably, if not exceeding those made by the Company, as purchasers generally desire to get as near the road as possible for the facilities of transportation and travel furnished by it. These sales have supplied the demand so far which otherwise would have sought our lands; but as they have been made chiefly to actual settlers, while they thus interfere with our operations on the one

hand, the business of the road has been materially increased by the transportation and travel consequent on the cultivation of these lands, and of those sold by us. These sources of business will continue to increase as the settlement and cultivation of the lands along the road are extended.

The extraordinary fertility of the land, and the conveniences for transporting their produce to market, make them, in my opinion, the best investments now offered, and so long as they annually produce sufficient to cover their entire cost, as they now do with ordinary industry; their price or value can never be materially effected by fluctuations in the market.

Yours truly,

JOHN WILSON, Land Commissioner.

To the Executive Committee of the Illinois Central Railroad Company, New York.

Notice to Contractors.



OFFICE OF THE MILWAUKEE AND BELVOIR R. R. CO., }
Milwaukee, Sept. 10th, 1856. }

SEALED proposals will be received at the office of the Company in the city of Milwaukee until the 4th day of October next for the construction of the work from Milwaukee to East Troy, a distance of about 30 miles.

Plans and Specifications may be seen and any other information with reference to the work obtained at the office of the Engineer of said company on and after the 27th inst. The company reserves the right to reject any bid which may be offered for the performance of the work for want of satisfactory security, or other cause.

HORATIO HILL, President.
1138 D. C. SHEPARD, Chief Eng'r.

Notice to Contractors.



Chicago, Iowa and Nebraska Railroad.

SEALED proposals will be received at the Office of the Company in the City of Clinton, Iowa, until Wednesday, October 15th, inclusive, for the Graduation, Masonry and Bridging at De Witt, and extending to Cedar Rapids in Lion County.

The line will be divided into sections of about one mile in length. The sections may be proposed for separately, or connected as may suit parties proposing. Plans, profiles and specifications of the work will be ready for examination at the Office of said Company in Clinton, on and after the 25th day of September next. The Company reserve the right of accepting such proposals only as they may deem for their interest.

CLINTON, August 18, 1856. MILO SMITH, Chief Engineer.

Time and Journal please copy and send bill to this office for collection. 4138

Covington and Cincinnati BRIDGE.

PROPOSALS will be received between the 10th day of September and the 1st day of October, 1856, at the office of the Covington and Cincinnati Bridge Company, at Covington, Ky., for the cutting of stone and laying of 30,000 perch of masonry in the towers, anchorage, and abutments of the Covington and Cincinnati Suspension Bridge. All materials will be delivered by the Company. None need apply but experienced mechanics, who will superintend the work in person and without sub letting. Also proposals received for the foundation of the towers. The work is to be commenced forthwith. Plans and specifications to be seen at the office after the 10th day of September.

RICHARD A. RANSON, President,
JOHN A. ROWLING, Engineer. 3138

LOCOMOTIVES for SALE.

TWO first class Locomotives, 22 and 25 tons. 4 feet 8½ in. and 4 ft. 10 in. gauge.

For sale by 1m36 GEO. W. BILLINGS, 66 BROADWAY, N. Y.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILADELPHIA, Penna. 326

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on the paper 31x46 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON, Jersey City, N. J.

July 24th, 1856.

3m.

SOUTHERN RAILROAD.



State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the super-structure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track-laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The mass masonry for culverts amounts to 10,000 perches.

The cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the **FIRST DAY OF NOVEMBER NEXT**, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions: the first of 21 miles, the second of 28 miles, the third of 33½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one-third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps, profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a-half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

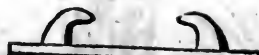
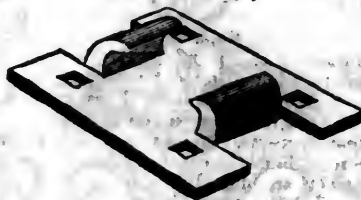
The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst this National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia, and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

6188

WM. C. SNEDES,
President of the Southern R. R.

NEW YORK Wrought Iron Railroad Chair Company,



THIS Company is prepared to receive orders for the manufacture of **Wrought Iron Railroad Chairs** of the best material, on a new and superior model, and by improved patented machinery.

The thickness of the Lips of the Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge;—so that a less weight of metal may be used and a strength required equal, if not superior, to that of a heavier Chair of uniform thickness.

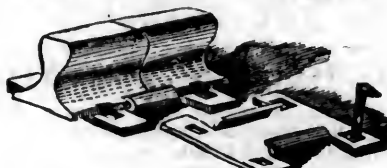
Our arrangements are now complete for executing work promptly, and all orders from responsible parties will be filled on short notice.

These chairs are used by the following companies:

Virginia Central R. R. Co.,
New Orleans Opelousas and Great Western R. R. Co.,
Black River and Utica R. R. Co.,
Oberlin and Darlington R. R. Co.,
Washington and Saratoga R. R. Co.,
Mississippi Central R. R. Co.,
Long Island R. R. Co.,
Illinois Central R. R. Co., &c., &c.

Address **JACOB ROWE, President,**
8 Broadway corner Beaver St., opposite the Bowling Green
New York.

RAILROAD SPIKES.



WROUGHT IRON

Chairs and Fastenings.

THE CALVERT IRON & NAIL WORKS continue to manufacture with increased facilities, **HOOK & FLAT HEAD RAILROAD SPIKES, and WROUGHT CHAIRS and FASTENINGS** of all patterns, also **CUT NAILS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES.**

Long experience in the manufacture of these goods enables them to produce an article of superior quality and finish. They are in use upon a large number of roads in the country and are highly approved.

Orders filled promptly, and at the lowest prices.

J. HOPKINSON SMITH,
Baltimore, Md.

Please direct the name in full.

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appurtenances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

H. S. WELLES & CO.,
No. 4 WALL ST., New York.

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 16th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 6 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural locks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't La C. and Mil. R. R. Co.

MILWAUKEE, August 1st, 1856 10:22

First Class Locomotive

FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and fire sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a FIRST CLASS PASSENGER ENGINE.

For particulars address

ELLIOTT & BOWLES,
118 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above. 25tr

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.
New York, July 21st, 1856.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Pine streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	8 00
do do Richmond.....	2 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.
GEORGE A. PARKER Supt.

New York and Erie R. R.

On and after Thursday, August 7, 1856, and until further notice,

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m. for Dunkirk.
MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
ROCKLAND PASSENGER, at 3½ p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m., for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroads, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c.,

D. C. McCALLUM, General Supt.

NOTICE TO RAILROAD COMPANIES. FIRE INSURANCE.



THE LIVERPOOL AND LONDON FIRE AND LIFE INSURANCE COMPANY.

37 CASTLE STREET,
LIVERPOOL.

Office, 56 Wall Street, New York.

20 and 21 POULTRY,
LONDON.

AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

PAID-UP CAPITAL AND SURPLUS AND RESERVED FUNDS,

THREE MILLIONS OF DOLLARS.—OVER HALF A MILLION INVESTED IN THIS COUNTRY.

THE LIABILITY OF THE SHAREHOLDERS UNLIMITED.

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ALEX. HAMILTON, Jr., Esq., *Counsel of the Board.*

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DIRECTORS IN NEW ORLEANS.

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5. " 15 " 1 1/2 to 1.	18. " 26 "	1 1/2 to 1
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8. " 16 " 1 1/2 to 1.	21. " 30 "	1 1/2 to 1
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10. " 18 " 1 1/2 to 1.	23. " 32 "	1 1/2 to 1
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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, September 27, 1856.

Atlantic and North Carolina Railroad.

From the second annual report of the Directors of this road, made on the 17th July, we learn that the affairs of the company are in a very satisfactory condition; that during the past year they have met with punctuality all their engagements, notwithstanding a large amount of work has been performed, and materials delivered and paid for, including 3,200 tons of rails.

In the last annual report it was stated that the road was under contract from Newbern to Goldsboro'; it was also stated that the eastern division, from Newbern to the harbor of Beaufort, would also have been let, but for difficulties experienced with the people of the latter place, on account of the location of the terminus; and that in consequence of their failure to make a subscription that had been promised, by a certain day, the engineer was instructed to make new surveys, on the west side of the river, and to the harbor of Beaufort, and plans and estimates of the work prepared to Caroline city and Shepherd's Point. As soon as the calculations could be made, the results of the survey were given by the engineer in a supplemental report. The contracts were shortly after let to highly responsible gentlemen for the Trent river viaduct, and the graduation, masonry, bridg-

ing and superstructure from that point to Beaufort harbor, the eastern terminus of the road, also for the arm to Caroline city. The entire road from Beaufort harbor to Goldsboro', with the exception of the line through Newbern, which the Board thought best to reserve and build, including wharves, warehouses, water stations and machine shops, is now under contract, and in the hands of gentlemen whose experience and zeal guarantee its construction in a workmanlike manner, and its completion at an early day. Although no arrangement had as yet been made for the purchase of iron for the road from Kinston to Goldsboro', and from Newbern to Beaufort harbor, no doubt was entertained but that they would be able to secure the rails for their contract in time to prevent any serious delay in the completion of the work.

In approaching Shepherd's Point, the road for three miles passes through Caroline city, and follows an air line immediately upon the margin of Bouge Sound, and for 3,000 feet before reaching White Rock, the track is constructed across marshes that are covered at high water, requiring a permanent and expensive protection against the action of the waters. But the great value of the location of the terminus directly at the confluence of Bouge Sound and Newport river upon eighteen feet water, affording the most perfect facilities for the interchange of freight between the cars and shipping, would certainly justify any reasonable expenditure of money, and can best be appreciated by those who have had to bear the heavy expense of the conveyance of goods through towns. The arrangements for transferring freights to and from vessels and boats, at the terminus of the branch roads at Newbern and Carolina city, will be of the most convenient and desirable character.

An amendment to the charter was obtained from the Legislature increasing the capital stock of the company from \$900,000 to \$1,600,000, and making the State a stockholder for two-thirds of the amount, when one-third was subscribed by individuals, and \$300,000 paid in. This amount having been paid into the Treasury on the 25th of August, 1855, on the 12th of September following, a subscription of \$1,066,666, (two-thirds of the capital stock) was made on behalf of the State.—There not being the necessary means in the Treas-

ury of the State to pay the instalments, bonds were promptly issued by the State Treasurer for that purpose, and bid off by the company at par. The bonds have furnished all the northern funds required by the contractors, and so far have been disposed of without loss. Before another instalment can be exacted from the State, an equal proportion of individual subscriptions must be paid. In order, therefore, that the contractors may be supplied with the necessary means for the construction of the road, the punctual payment of all arrearages both by corporations and individuals is insisted upon.

As the State has the appointment of eight Directors, in consequence of its subscription to the road—four only will be elected by the individual stockholders.

Much of the land required by the road has been released by the citizens along the line; and the Commissioners of Newbern have granted the right of way through that town.

The company have purchased about nine acres near the town, on the Neuse, for the warehouse, machine shops and station houses, and two lots on South Front street, where the road crosses Trent river, and four acres in addition to the land heretofore purchased in Goldsboro'. The company have also received from the town of Newbern, the water lot at the southern terminus of Hancock street, which affords greater facilities for crossing the river, and will make a convenient and desirable freight station for the road.

The company having agreed to provide the principal contractors with trains, for the transportation of iron and other materials, they paying the expenses incurred therefor, contracted, in September last, through their Engineer W. Beverhout Thompson, Esq., who visited the North for that purpose, for two locomotives, viz: the "Gov. Bragg," of Messrs. Rogers, Ketchum & Grosvenor, of Paterson, N. J.; and the "Charles F. Fisher," of Messrs. Breeze, Kneeland & Co., of Jersey City. They are first class engines, constructed with great care, finished in a superior manner, and are designed for either freight or passengers. They weigh about 40,000 lbs. each in running order, and are worked with the shifting link motion. The "Gov. Bragg" was placed on the road in March last, and up to the date of the report

had been running daily, with materials of all kinds for track-laying, masonry, etc.; during which time it had been run 1,959 miles, at a cost for repairs amounting to \$2.77½, which test proves that it comes up to the reputations of its builders in every particular. The "Charles F. Fisher" is finished, and from its appearance, and the thorough manner in which it seems to have been gotten up, will doubtless give equal satisfaction.

Mr. E. R. Stanly, having become interested in a contract on the road, resigned the office of Treasurer, which was subsequently filled by the appointment of D. S. Willis, Esq.

The work on the road shows abundant evidence of vigilance on the part of the Chief Engineer and his assistants.

The value of the work done upon the western division, 49½ miles, to July 1, 1856, estimated at contract prices was.....\$212,392 85
Do. upon the eastern division 44½ miles 199,240 22

Total.....\$411,633 07

Nine miles of the line is in condition for the running of trains, and are now used for the transportation of materials; 25½ miles are graded for the reception of the sills. There remains only about 9½ miles of clearing to be done upon the entire route; and a considerable amount of graduation upon both divisions is in an advanced state.

The following is a statement of the affairs of the Atlantic and North Carolina Railroad Company, July 1, 1856.

Capital stock paid in\$709,212 94
Balance and bills payable..... 166,720 65
\$875,933 59

Survey, grading, cross-ties, bridges and masonry	\$100,053 28
Iron rails, including charges.....	184,201 03
Engineering and superintendence....	12,292 39
Spikes, chairs, switches, frogs, &c. ..	20,161 46
Newbern station.....	5,862 42
Track-laying, road crossings, land damages.....	4,599 88
Locomotives.....	17,762 31
Platform and other cars.....	6,531 72
Real estate.....	21,928 25
Miscellaneous.....	6,604 50
Balances, mostly chargeable to real estate and construction	7,244 96
Cash, bills receivable and available bonds on hand.....	468,691 39
	\$875,933 59

In concluding his report the President says:

"In the month of November last we were honored by a visit from His Excellency Gov. Bragg, and D. W. Courts, Esq., Public Treasurer of the State. After an examination of the harbor of Beaufort and the work in the vicinity of Newbern, the Governor was shown at the office of the company, plans of our wharves, warehouses and bridges, and the profiles of that portion of the road he had not an opportunity to inspect personally. We are gratified in being able to say, that he was highly pleased with the substantial character of the work, and returned to the capital with renewed and confirmed confidence in the ultimate productiveness of the road, and its great importance to the State.

"In the management of this great work, we trust we have had the independence to act upon the result of practical experience, instead of the influence of public wishes. It has not been our desire to build a cheap road, that would after a few years, require for repairs a sum equal to one-half its original cost; but to pursue that policy

which true economy dictates, and construct every part of it in a thorough and substantial manner, and of the best materials—to lay it with a heavy rail of the best quality—to erect all the buildings necessary, with a view to durability and convenience, and to equip it with first class machinery, that it may be operated as economically and with as much safety as any road in the country."

The Iron Manufacture and Mr. Bessemer's Invention.

The interest which has been excited by the improvement recently proposed in the manufacture of iron and steel by Mr. Bessemer, and the vast importance to the country in general, and especially to this neighborhood, of the manufacture in question, render it unnecessary that we should apologize to our readers for occupying their attention with some remarks on the iron manufacture. In order that those whose studies or avocations have left them unacquainted with the general nature of this interesting manufacture may the better comprehend the exact bearings of a process which is exciting an attention unparalleled in modern times, we will give such a brief sketch of the process of manufacturing iron as will enable them, generally at all events, to estimate the importance of Mr. Bessemer's invention.

Iron is the most extensively distributed of the metals. It exists largely both in the mineral and organic kingdoms, being a constituent of an immense number of natural minerals, and existing as an essential element in the blood of vertebrate animals. The minerals from which iron may be extracted are numerous; but we will only notice those which are important in the British isles. Peroxide of iron (consisting of 56 parts by weight of iron, combined with 24 parts of oxygen) constitutes the mineral called red hematite, of which great quantities exist in Lancashire, Cornwall and elsewhere. This ore is used in England principally for mixing with other ores, but in Sweden and Russia iron is made from it direct. In France, brown hematite (a hydrated peroxide of iron, a mineral of the same composition as the last described, but containing water) is much used in the manufacture of iron. But it is the clay iron-stone which yields the enormous supply of iron produced in Great Britain. This ore is an impure carbonate of iron, containing about 30 per cent. on an average of pure iron. Pure carbonate of iron consists of 28 parts by weight of iron, and 8 parts of oxygen (oxide of iron), combined with 6 parts of carbon and 16 of oxygen (carbonic acid). The pure carbonate of iron is in clay, iron ore mixed with clay, oxide of manganese, lime, and magnesia.

The extraction of the metal from this compound is effected by a process, the general principles of which are very simple. First, the ore is roasted; that is to say, it is made into heaps with coal, and ignited; the carbonic acid and water of the mineral are driven off, and the ore is left in a porous state, favorable to the subsequent processes. We may regard the roasted ore as an impure oxide of iron, containing, of course, all the earthy matter, and whatever was not volatile in the native mineral. If we reflect for a moment on what we have to accomplish in order to obtain the iron from this compound, we shall soon be able to devise the means of doing it. We have iron combined with oxygen, and we wish to separate the latter from the former, so as to leave the metal free. How shall we accomplish this? Clearly only by presenting something to the compound which has a higher affinity for oxygen than iron has. What is this? It is charcoal or carbon. This element, so inert at ordinary temperatures as to be the most imperishable of things, assumes, when heated strongly, an affinity for oxygen more powerful than that of any other known substance; and there are few metallic oxides which do not yield oxygen to carbon at an elevated temperature, and thus liberate the metal in a reguline or metallic state. This process of depriving metallic oxides of their oxygen is called reduction, and the reduction of the ores of iron, copper, lead,

zinc, &c., consists mainly in heating them, after suitable preparation with carbon, and thereby de-oxydizing them. To reduce the iron, then, we have only to heat it with charcoal. But since the ore contains a large quantity of earthy matter, the particles of iron, when reduced, would be held in this porous earthy matter like water in a sponge, and, although reduced, the metal would remain in an unavailable form. How can we separate the earthy matter? Not by mechanical, but by chemical means. If we mix with the ore something which will form a ready fusible compound with the earthy matter, that earthy matter will liquify, and the particles of melted iron will fall through the liquid and collect together into a mass. Lime is used for this purpose. It is as though a sponge filled with water dissolved on the application of a gentle heat, the water in the sponge forming the lower stratum, and the matter of the sponge itself a light oily liquid, floating on the water. Our readers will now have a general notion of the process which they see carried on so extensively in the neighboring iron districts. In huge towers which stud the country, thick almost "as leaves in Valambrosa," day and night, and from year's end to year's end, toiling engines pour thousands of tons of the materials we have enumerated—iron ore, coke and lime. Blast engines force streams of compressed air into the ignited materials, and the mass slowly sinking in the tower melts into two strata, the one the slag, the other the iron. The former flows off from an upper opening, and the latter is drawn off at intervals from holes made in the lower part of the furnace. The molten metal is conducted along channels made in sand, and slowly filling rough moulds connected with these channels, gradually solidifies, and constitutes the pig iron of commerce. Let us pause awhile to ask our readers if they have ever seen the tapping of a blast furnace at night? If they have not, we tell them that within an hour's journey there is a sight the beauty and majesty of which they have no conception. The appearance of the furnace alone is impressive. The huge flames struggling up, like the panting breath of an imprisoned monster, lighting up the heavens with their fitful glare, and keeping time in their flickering with the groaning blast with which the fire is urged, form a picture which, when examined near, will not be soon forgotten. But what can compare with the beauty of the casting process! It is night, and the eye sees the beautiful net-work of moulds with which the earth is covered. The furnace is tapped, and out gushes the liquid fire; quietly at first, and afterwards more slowly, it finds its way into the various ramifications of the impressed sand, and in a few minutes the whole ground is covered with glowing fire streams. But let us approach. Hark! How the stream hisses as it travels on! And see, thousands on thousands of bright atoms shoot into the air from surface of the metal, burn with a beautiful scintillation, and fall hissing down "a hailing fount of fire."

But to return to our facts. The coke, we have seen, constitutes both the fuel from which the necessary heat is produced, and the reducing agent, by which the oxide of iron is de-oxydized; the lime makes the earthy matter fusible, and enables the iron to separate itself therefrom. If our object were to give a somewhat full account of the iron manufacture we should stop here to discuss the many important questions which present themselves at this point—the enormous quantity of air which is each day poured through these huge furnaces, the deeply interesting chemical changes which it undergoes as it filters through the fiery column, and the remarkable products which have yielded themselves at its exit, to the researches of Bunsen, Playfair, and others; the prodigious quantity of heat which is carried off by the blast of cold air, and the economy which has resulted from the heating of the air before its introduction into the furnace; the change in the fuel which has followed the use of the hot blast, and the change in the characters of the iron produced, which has followed that; the modifications

in the lime flux which different ores require, and the consequences which result from a too fusible or too infusible a slag; the objects to be attained by the mixture of ores, and the necessity for the application of minute chemical knowledge to the perfecting of a manufacture so simple in general principle, so obscure in its details; but all these things we must leave unnoticed, and confine ourselves to such particulars as have a direct bearing on the process proposed by Mr. Bessemer.

The method of manufacture we have roughly described produces iron, but not pure iron; that has never been produced but by the chemist, and but few eyes have ever seen it. The iron produced is cast iron, which consists mainly of iron, but is contaminated with a great variety of impurities, from which it is difficult to free it. Just as in the fermenting of grape juice, the principal change is the conversion of sugar into carbonic acid and alcohol, during the occurrence of which sundry small decompositions and transformations take place, giving rise to products on which the flavor or bouquet of the wine depends; so, in the reduction of iron from its ore, although we obtain a product containing perhaps 95 per cent. of iron, the remaining 5 per cent. consists of a long array of foreign ingredients, all existing in some form or combination in the materials employed; these have been so affected during the reduction of the iron as to have assumed a state in which they could combine with iron, and hence we discover that the iron drawn from the furnace is invariably contaminated with them. Although small in quantity, the effect which these impurities have upon the physical properties of the iron is truly wonderful. One per cent. of phosphorus or a scarcely larger proportion of sulphur, has a most prejudicial effect upon the iron containing it. The principal element which, in the blast furnace, enters into combination with iron is carbon or charcoal. The metal is capable of combining with 5 per cent. of its weight of carbon, and many kinds of cast iron contain nearly this quantity. Steel is a compound of iron and carbon, containing less carbon than cast iron; and the production of steel from cast iron is simply the removal of a portion of the carbon.

If cast iron from the blast furnace consisted of iron and carbon only, the production of steel and wrought iron therefrom would be easily effected; but cast iron contains, beside iron and carbon, the following impurities, some or all of them: silicon, sulphur, phosphorus; and, in minute quantity, aluminium, calcium and potassium. The conversion of cast iron into wrought iron consists in the removal of these impurities. This purification consists, in the ordinary manufacture, in submitting the iron to the action of air, and also to a mechanical kneading and squeezing process; these are effected in the refinery and puddling, and it is these processes which Mr. Bessemer proposes to supersede by his invention.

We ask the reader's careful attention to the following: namely, that the impurities in cast iron consist of substances all of which combine with oxygen at a high temperature; carbon forming carbonic acid; sulphur, sulphurous acid; phosphorus, phosphoric acid; silicon, silicic acid (silica, or the matter of sand); and so of the rest.—Now, the exposure of the cast iron to heat and air (containing oxygen) is sufficient to cause the substances to form oxygen compounds, either volatile or easily fusible, and incapable of entering into combination with metallic iron. But since these impurities are diffused in small quantities through the mass of the iron, it is with great difficulty that air can be brought to act upon them.—This, however, is done efficiently, but at great trouble; first in the refinery, and afterward more completely in the puddling process. The melted cast iron is exposed in the refinery to a strong heat, in contact with air, and a large proportion of the carbon contained in the iron is burned off, as carbonic oxide; the silicon becomes oxidized as silicic acid (silica), and the iron also oxidizing, supplies a base (oxide of iron), with which the silicic acid combines. This compound constitutes

the slag, which is formed in the process. The action of the slag itself upon the impurities yet contained in the iron is a most interesting chemical phenomenon, and will be noticed hereafter. Where a very superior iron is required, charcoal is used in this process instead of coke; and the iron so made is called "charcoal iron." The impurities contained in ordinary coke are in part communicated to the iron, and injure its quality. The minute details of the refinery we need not describe.

The iron thus partially purified is next puddled. It is fused on the bed of a reverberatory furnace, and vigorously stirred about, so as to expose it to the action of the air; oxygen is rapidly absorbed, and the gaseous carbonic oxide formed escapes in bubbles, giving the appearance of boiling, and burning at the surface with a blue flame. As the carbon is burned off, the fusibility of the mass diminishes, and although the heat is increased as the process proceeds, the molten metal passes from a fluid to a spongy, semi-fluid mass. The fearful labor of the puddler now commences. He approaches the furnace almost in a state of nudity, and on the end of an iron bar collects from the furnace as much iron as he can lift. This ball, or "bloom," he swings through the air under a forge hammer, or other compressing machine. The blows at first crush the soft mass like dough, sending out showers of sparks, and squeezing liquid drops from the interior of the metal. The ball cools, the blows of the hammer now ring, the fire shower grows faint, and the liquid drops are replaced by scaly masses, which fall from the now almost solid iron. The kneading process is continued by passing the metal between rolls, in the grooves of which it is drawn out and compressed; it is doubled up and rolled, and heated and doubled up and rolled again. Have you never seen, as you traveled by railway or otherwise at night, the mouth of a black furnace open on a sudden, sending a ray, as of sunlight, athwart the sky, and disclosing something within "so blinding white, so blasting bright," that the eye closed involuntarily? If you returned leisurely to the sight, you observed half naked men darting across the light beams, their motions seemingly more capricious and more sudden the dancing of the images in a phantasmagoria. In a stray beam of the quivering light you see now and then the heavy rocking head of the steam engine, and the greasy teeth of the cog-wheels shoot by, brighter than rows of pearls or falling water drops; the blows of the forge hammer shake the earth, and the whirling of the wheels makes you giddy. What is all this? It is puddling; the conversion of cast iron into wrought iron.

The metal so obtained is not pure, but is sufficiently so for commercial purposes. It contains carbon, silicon and other impurities, but in quantities so minute as not to affect its physical properties materially. It is a curious fact, worth here noting, that some of those impurities which have a most pernicious effect upon iron do not injure it in direct proportion to their quantity, but preserve their injurious action down to a certain point only, and below that proportion appear to be wholly inoperative.

The elimination of carbon, and the other impurities contained in cast iron, and its consequent conversion into wrought iron, takes place by virtue of that beautiful chemical process called cementation—a process in which a chemical change is propagated through a solid or nearly solid body, from the exterior inward, or the reverse. This process is beautifully illustrated by the annealing of cast iron, or the production of malleable iron articles, so largely practiced in Birmingham and its neighborhood. Small articles made of cast iron are imbedded in powdered peroxide of iron, and heated for many hours, or days. The oxygen in the oxide of iron combines with the carbon of the cast iron and withdraws it; in short, burns the carbon. This removal of the carbon, commencing at the surface, gradually proceeds inward, until the whole substance of the article has been decarbonized, and the cast iron converted into soft, wrought iron, without the article having

changed its form. The converse takes place in the manufacture of steel. In this case the wrought iron is heated with carbon, and the combination of the latter with the former, commencing at the surface, slowly penetrates the mass.

In precisely the same way are the carbon and other impurities removed from cast iron in its conversion into wrought iron; the slag containing oxide of iron playing a most important part. The air can only act superficially on a large mass of fused iron even when it is kept in motion; but the oxide formed superficially is mixed with the mass of the metal, and yields oxygen to the carbon, and other matters in its interior. The silicon becomes converted into silica, which dissolves more oxide, and the carbon into carbonic acid, which bubbles and burns as described. During the puddling and hammering, or shingling and piling of the iron, the slag is first thoroughly incorporated with, and, having effected its work, squeezed from the mass of iron.

Can these impurities be removed without this labor, time and fuel? The production of wrought iron direct from the ore can unquestionably be effected, and, where wood charcoal can be employed in the place of mineral fuel, perhaps economically. It is commonly done in the bloomery forges of America, and the Catalan forges of the Pyrenees; and these processes are but ameliorations of the earliest and rudest methods of making iron. Mr. Bessemer proposes to effect the same object by the use of air alone. He forces air into the fused cast iron in large quantity; the temperature rises very high, and the iron is said to be converted into wrought iron. The heat produced is thought to arise from the combustion of the carbon, the whole of which, together with the other impurities, is removed. It is surprising that the carbon, the maximum quantity of which is five per cent., should burn so rapidly as to produce the great heat described; and we wait anxiously for such accurate experiments as shall prove, that the iron itself is not largely oxidized. It will also be most interesting both to the manufacturer and the chemist to learn that the slag can be perfectly removed from the mass of the iron without resorting to the mechanical treatment we have described. We can readily imagine that Mr. Bessemer may reduce the percentage of carbon so low by his process as to make the iron approximate in composition to steel. This has been done three quarters of a century ago; and the patent lists show that from 1771 to the present day, scores probably of patents have been taken out for making steel direct from the ore. To effect this, however, is to do but little; what is wanted is not steel of an indifferent quality, but iron, from which the carbon has been so far removed as to leave the metal malleable. We can readily believe that Mr. Bessemer's process will expedite the manufacture of wrought iron; but extended experiments are required to show that he can dispense with the mechanical methods at present in use. Especially important, too, is it that accurate chemical analysis should be resorted to, to show the composition of this iron, and to prove that the new process will truly purge it of sulphur and phosphorus, as we understand Mr. Bessemer to say it will; elements, the presence of one per cent. of which is fatal to the quality of the iron. It would be scarcely possible by written description merely to make the mechanical contrivances intelligible which Mr. Bessemer describes in the specification of his patent. It will suffice to say that they consist of contrivances for effecting a rapid and complete action of air on the iron—to do, in short, more effectually that which is already done in the refinery furnace.

We cannot close our remarks without in justice informing our readers that there are at least "two Richmonds in the field." Since the announcement of Mr. Bessemer's process, Mr. Martien of New Jersey, in the United States of America, has pointed out a prior patent of his, the essential feature of which is the forcing jets of air or steam through molten cast iron for the purpose of decarbonizing it. Other claimants of minor impor-

tance have likewise presented themselves. Into the discussion of the question of relative merit between these gentlemen we shall not enter. We may in a future number give such extracts from the specifications of their several patents as will enable our readers to judge for themselves. Meantime, however, we believe it is our public duty to state that, although we hope and believe that Mr. Bessemer's experiments will result in a great improvement in the manufacture of wrought iron, nothing is more likely to check the realization of so important an object than the extravagant excitement which at present obtains. In the hope of allaying the fears which many entertain that something like a "revolution" in the iron manufacture is impending—a notion which may not only lead to unfortunate commercial results, but is sure to be followed by a corresponding disappointment and neglect—we assure our readers that in principle nothing new is proposed by Mr. Bessemer. The refining of iron by air is the only method of refining that has ever been practised. Mr. Bessemer, however, proposes a more direct and rapid method of supplying the air, which appears to be more successful than could have been anticipated.

This, as we have several times already said, we believe will prove to be a great improvement, but at present much remains to be done before these experiments can expand into manufacturing processes. In the interim, the iron manufacturer may safely proceed with his present operations, and, unless we are much mistaken, everything which he now possesses will be found of use when Mr. Bessemer's process has attained its highest perfection; for we think the invention under discussion will result in facilitating the manufacture of iron, by adding a process, or substituting an improved apparatus for the refinery. That the puddling of iron will be rendered unnecessary we very much doubt. In settling the position of rival claimants to the new method, we should also bear in mind that they differ from one another only in the details of the process; they all effect their object, more or less directly, by air. Iron, we repeat, has never been purified by any other means; and through a long succession of ages, though we may trace a gradually improved method of realizing the object aimed at, the principal has never varied. The Egyptian smith, whose race was finished before antiquity began, made his iron by calling into operation the ordinary agency of the air.—*Birmingham Journal*.

Marietta and Cincinnati Railroad.

The greatest public enterprise within the State of Ohio, is probably less generally appreciated, even here in Cincinnati, to whose advancement it will so powerfully contribute, than many undertakings of second rate magnitude, and inferior in sterling value, though they may be more widely advertised. We weigh our words in naming the Marietta and Cincinnati railroad, "the greatest public enterprise within the State." The men who conceived this gigantic work and have brought it thus near completion are not residents of this portion of Ohio, and that is the first fact that occurs to us in explanation of the lack of general information about the line. What is it? It is the extension to Cincinnati, by the same gauge, of the Pennsylvania Central railroad, from Philadelphia, and of the Baltimore and Ohio railroad, and is the only railroad having this strong advantage crossing the State of Ohio. It extends from Cincinnati eastwardly across Southern Ohio, through Chillicothe, Athens and Marietta, to the city of Wheeling, 253 miles. It is the central link in the southwestern system of railroads, from New York, Philadelphia, Baltimore and Washington, through Southern Ohio to Kentucky, Tennessee, Arkansas, Missouri and Southern Indiana and Illinois.

This road is now completed from Loveland [23 miles east on the L. M. R. R.] to Athens, and will be ready for passengers through to Marietta, on the Ohio river, by next December at the latest.

The present management of the Marietta and Cincinnati railroad is strong abroad as well as at

home. The brief synopsis of their sixth annual report—in the commercial department of this paper—will command the attention of those business men and capitalists who are looking to the permanence of the basis of Cincinnati's prosperity as compared with St. Louis and Chicago.—*Cincinnati Commercial*.

Railroad Convention at Cincinnati.

A convention, at which a large number of railroad companies were represented, was held in Cincinnati on the 17th instant, for the purpose of agreeing upon an uniform system of charges which should bring them up to remunerating rates. Mr. Ramsdell of the Erie Railroad was chosen President; and H. C. Lord of the Indianapolis and Cincinnati, and A. Wilkinson of the Michigan Southern, Secretaries.

The following resolutions embody substantially the action of the convention.

Resolved, That the fares between New York and common points in the West shall in no case exceed 2½ cents per mile through—and of this sum the roads between Crestline and New York shall receive \$14.60.

Under this resolution the fare shall be as follows:—

New York to Columbus.....	\$16 25
Do. Cincinnati.....	18 50
Do. Chicago.....	22 30
Do. St. Louis.....	27 75
Do. Terre Haute.....	22 00
Do. Indianapolis.....	20 00

Resolved, That these rates shall continue from the 1st day of November to the 1st of April, after which the fare shall be left for future adjustment.

Resolved, That second class tickets be received only on one train.

Mr. Brough, from the committee to whom was referred the subject of "Freights," reported as follows:—

Resolved, That the Committee recommend the adoption of the following rates, to commence on the first day of October, and continue until the taking effect of the winter rates on all westward bound freight from New York via the New York Central, New York and Erie, Pennsylvania Central and Baltimore and Ohio railroads, and to the several points hereinafter named, and further recommend that a committee of one or more from each of these four lines, and their Western connections, be here appointed, to meet at Baltimore on the 1st day of October, review, and, if needs be, modify the classification hereby jointly adopted, and at the same time to arrange through winter rates to common points over the respective lines represented.

	RATES.			
	Class—1st.	2d.	3d.	4th.
New York to Cincinnati—				
all rail.....	\$1.40	1.10	.95	.70
New York to Cincinnati—				
part rail and part water.	1.30	1.05	.90	.65
New York to Columbus—				
all rail.....	1.35	1.05	.90	.60
New York to Columbus—				
part rail and part water.	1.26	1.00	.85	.64
New York to Indianapolis				
all rail.....	1.50	1.20	1.00	.75
N. York to Indianapolis—				
part rail and part water.	1.40	1.10	.95	.70
Cincinnati to New York—Flour, \$1 25 per bbl;				
4th class, 65 cents per 100 lbs.				
Columbus to New York—Flour, \$1 10 per bbl;				
4th class, 58 lbs. per 100 lbs.				
Indianapolis to New York—Flour, \$1 30 per bbl;				
4th class, 68 cents per 100 lbs.				

On motion, so much of the resolution as refers to the calling of a convention at Baltimore was stricken out. The resolution, as amended, was then adopted.

On motion of Mr. Brough, it was

Resolved, That a convention be called to meet at Cleveland on the 18th day of October next, for the purpose of adjusting winter rates and fares, and such other matters as may be deemed important to railroad interests.

Mr. Stone, from the Committee on Enforcement of Rules, reported the following:—

Resolved, That if any company forming any part of a competing line between points where rates of fare or freight have been established by this Convention shall reduce such rates, the roads forming the competing lines may reduce their rates between the same points, and such reduction shall be shared pro rata per mile by the whole line; and that the company first making the reduction shall not be allowed to share in the advantage of such pro rata division, but shall submit to the whole loss of the reduced rates it makes.

Resolved, That if the rates fixed by this Convention, between any points, shall be changed by the mutual consent of all the roads interested, or if rates shall hereafter be fixed by mutual agreement by roads between competing points, not provided for in the rates now fixed, and any road shall reduce such rates in violation of such agreement, the same rule as to dividing the deduction shall be applied in such cases as is also provided.

Resolved, That in adopting their tariff of freight or passengers, roads forming competing lines shall not fix their local rates so that they shall be in the aggregate less than the through rates as now fixed or hereafter to be agreed upon; and that in case the local rates shall be fixed below the through rates, the same shall be deemed a reduction of through rates, and that reduction in competing lines may be made, and shall be shared by the roads as provided in the above resolutions.

The resolutions were adopted, as were also resolutions of respect to the memory of the late John H. Done, Esq.

The Convention adjourned to meet at Cleveland on the first Wednesday of October.

Racine and Mississippi Railroad.

The Racine and Mississippi Railroad was completed on the 15th inst. to Beloit, sixty-eight miles from Racine.

The earnings of the road for 46 miles, to Delavan, during the five months ending 30th of June were \$85,056.00
The receipts of July, (\$14,787.60,) and August, (\$17,943.22,) were..... 32,725.82

\$117,781.82

Receipts of passengers in the first two weeks of September..... \$2,169.36
Do. freights (estimated)..... 11,200.00

Total previous to the opening to Beloit, \$131,151.18

By this extension the road makes the following valuable connections: At Clinton, twelve miles beyond Delavan, the road unites with the Chicago, St. Paul and Fond du Lac railroad to Chicago, Janesville, Milton, Fulton and Madison. At Beloit, twenty-two miles from Delavan, the road unites with the Beloit and Madison railroad to Afton and Footville, and also with Galena and Chicago Union railroad, to Belvidere, Rockford, Picatinica, Freeport, Galena, Dubuque and stations on Illinois Central railroad, south from Freeport, making a direct railroad communication with the Mississippi river at Dubuque, thence connecting with steamers for St. Paul and other points on the Upper Mississippi.

Twenty miles beyond Beloit are also graded, and the iron for the track is on the ground, and is being laid. The cars commenced running to Beloit daily on the 15th inst. The company has an equipment of 15 locomotives and 172 cars.—Every car is in demand, writes the superintendent, and a full business is offering. The receipts in October, as estimated, will be \$40,000.

The total issue of bonds by the company amount

to \$680,000, and the stock is \$3,200,000, which is all held by the original subscribers along the line, numbering over 2,300, so that it is well distributed.

Canada.

Until within a very few years the people of the United States generally were under the impression that the Provinces of Canada were a cold, bleak, inhospitable country, with a barren soil, rude uncultivated population, primitive in their ideas and manners, and of but little account as a country or people, in the scale of civilization. The first great awakening in any portion of the United States towards the present and future prosperity of our sister Province, and the advantages to be derived from a closer connection with that country, emanated in this, the Queen City of the East. When the project was first started of building a railroad from Portland to Montreal, outside of Maine and Canada, the idea was hooted at with scorn and derision. On every side the plan was considered chimerical and impracticable, one that could never succeed. Regardless of the clamor and ridicule in our neighbor cities, the citizens of Portland persevered, and what has been the result of their labors? From a line originally intended and expected to be only 292 miles in length, has sprung one of the most gigantic Railroad enterprises of the world. Little did the most sanguine of its original projectors imagine, that in less than ten years a line of railway twelve hundred miles in length, extending from the Atlantic coast to the far West, would grow out of their labors. And now upon the eve of closing the last link of this mighty iron band, it seems meet and proper that a grand celebration should be held in commemoration of this great event, and that the citizens of Portland should be alive to the vast importance of such a glorious consummation.

It may not be amiss to glance a little at the resources and capabilities of our Canadian neighbor and see what the country is made of. Canada was formerly composed of two provinces, the upper and the lower, or now known as the eastern and western, consolidated into one. This province extends in length from the coast of Labrador to the western extremity of Lake Superior, sixteen hundred miles, with an average breadth of two hundred and thirty miles, being nearly three times as large as Great Britain and Ireland. It contains an area of about three hundred and fifty thousand square miles, diversified with broad lakes, gigantic rivers, fertile farms, dense forests, smiling villages, and large cities. Its population at the present time is not far from three millions of inhabitants. In western Canada the soil is unequalled for its fertility. In the year 1851 the wheat crop in upper Canada was 12,682,550 bushels. In the last ten years the growth of wheat in the whole United States increased 48 per cent., and that of Canada in the same period increased 400 per cent. In Indian Corn, the increase in the States for ten years was 56 per cent., and in Canada 163 per cent. Of oats, the increase in the same length of time has been in upper Canada, 133 per cent., against 17 per cent. in the United States. The increase in cattle, sheep and horses, has been in about the same ratio. From facts taken from the last census reports of Canada and the United States, (taken within a year of each other) it appears that Canada far exceeds the most productive State in the Union in wheat, peas, rye, barley, oats, hay, buckwheat, hemp, flax, hops, maple sugar and potatoes.

It is not, however, in agriculture that this country excels, but the products of the forests are immense and nothing has served to open up and develop the vast tracts of timber lands in Canada so much as the Grand Trunk Railroad. Upon the line of the road between Portland and Montreal immense saw mills have been erected, and vast amounts of lumber have been manufactured, and sent to various markets, making Portland the shipping port for this trade. One mill alone paid the Grand Trunk road, last year, the enormous amount of \$60,000 for freight; this is but one instance of many.

The amount exported of the products of the

forest in Canada in 1854, was \$10,000,000 in value; of mineral products in the same year, \$400,000; of the sea in 1855, \$500,000; of animals and their products about \$1,600,000; of agricultural products, about \$13,000,000; of manufactures, \$500,000; and other articles, \$70,000. Making in all, nearly \$27,000,000 in one year.

The amount of goods imported into Canada in the year 1854 was \$40,000,000, of which \$4,500,000 was imported through the United States under bond, nearly \$1,000,000 purchased in the United States in bond, and about \$17,000,000 the produce of the United States. The balance being the growth and manufacture other countries imported direct into Canada.

In ship-building the Lower Province takes the lead. In the year 1853, at Quebec alone, were built 48 ships with a tonnage of 49,000, valued at \$2,000,000; being an increase in one year of 22 ships.

In manufactures Canada is as yet in her infancy, though within the past few years she has made great improvements in that respect, while the upper Province is eminently calculated for agriculture. The lower Province is peculiarly adapted to develop manufacturing imports. The facilities in the lower province are very great for that purpose, it having the finest water privileges on the continent, and an abundance of mineral wealth, iron ore in inexhaustible quantities, marble, lithographic stone, plumbago, manganese, slate, and ores for paint. In the vicinity of Lakes Huron and Ontario the copper mines are not surpassed in the world for quantity and quality.

In manufacturing, Canada holds out great inducements to enterprise and talent. The field is immense to develop all branches of mechanical and manufacturing skill; and a sure and good market is always open to the artisan, in whatever branch of business he may be engaged. Of boots and shoes, there were imported from the United States into Canada the past year [1855] \$600,000 worth, paying a duty of 12½ per cent., while they have hides and skins in abundance, needing only labor and enterprise to have them made at home. Of hardware and iron, in the same year, Canada imported \$2,542,516, paying 12½ per cent. duties, while the raw material is within their own borders. We could go on enumerating a long list of goods imported into that country, paying duties, which could be manufactured as cheap and as well as abroad.

To develop and open these various sources of wealth, agriculture, lumbering, mining, and manufacturing, and to induce emigration from other sections requires facilities for transportation and travel by land and water. In this, the Grand Trunk railroad of Canada has done more toward the development of that great country, than all other causes combined. It has already opened new and immense fields for labor, given an impetus to business of all kinds, bringing forth from the earth its rich stores of mineral wealth, causing the country to be cleared and its fertile soil cultivated, making the land to teem with golden grain and other fruits of the earth. The products of immense forests heretofore inaccessible, are now being brought out, and made available for the use of man. Earth and sea are giving up their stores of wealth through its influence.

The Grand Trunk railroad not only makes Portland the entrepot of the vast importations and exportations of Canada, but the chain of business extends from the immense far West, passing thro' Canada to this city. For four months in the year, while the ice king locks up in his cold grasp the rivers and lakes of Canada, the iron horse regardless of snow or ice, is always ready to convey to and fro the stores of wealth from this city. With a harbor second to none on the coast, always open so that the largest vessel in the world can reach its wharves, it seems as though nature intended our city to be the great central point for that immense and rapidly increasing trade. As one channel of communication is opened, another follows in its wake, every new enterprise creates others before unthought of.

The line of steamers between Montreal, Quebec and Liverpool have been remarkably successful the past year. Their business has exceeded the most sanguine expectations of their warmest friends. The latest news we have had in the States has been via Quebec by those steamers, and the route must and will become a popular one. This will be seen by a glance from the fact that Quebec is nearer Liverpool by 400 miles than N. York or Boston, and from Quebec to the Atlantic Ocean is 500 miles down the St. Lawrence river, making a saving of nearly 1,000 miles in ocean travel,—almost one-third of the distance from New York to Liverpool.

Another very important matter in connection with the Grand Trunk railroad and Portland also, is its ability to divert the pleasure travel in the summer in this direction. During the past season there has been more travel through Canada, and to the White mountains, than was ever known before. Here, in and around our own city, hundreds, and I might almost say thousands, of our Canadian friends have spent the past summer, delighted with the cool sea breeze, and beautiful scenery of this section of the country.

The favorite route for travelers now seems to be to visit Niagara, come through Lake Ontario, down the St. Lawrence to Montreal and Quebec, thence to the White mountains, and from there to Portland: and it will not be many years before this, the Forest City, will be the home of thousands through the summer months. No city can present more inducements than ours, for the seeker after pleasure or health. Its broad and shady streets, magnificent scenery of mountain and ocean, the lovely bay dotted with its numerous islands, the pure bracing air, delightful sea breezes, added to the well known hospitality of its inhabitants to strangers, have already made Portland to a very great extent the favorite resort of the Canadian tourist. The proposed celebration will bring these advantages still more distinctly to the knowledge of our friends in Canada and the west, and greatly enhance their value.—*State of Maine.*

Grand Trunk Railroad.

The Railway Celebration.—The Grand Trunk Railway line is to be opened to Toronto at an early day in October. The length of this line is 333 miles, or 12 miles less than the former estimates of its distance.

The completion of this link makes a continuous line to Iowa city 1872 miles from Portland, as follows:—

	Miles.
Portland to Montreal.....	292
Montreal to Toronto	333
Toronto to Hamilton	38
Hamilton to London.....	76
London to Detroit.....	111
Portland to Detroit on broad gauge lines.....	850
Narrow gauge lines—	
Detroit to Chicago	284
Chicago to Mississippi river at Rock Island....	182
Rock Island to Iowa City.....	58

522

Total length of road from Portland to Iowa City 1,872 miles.

From Toronto west the Grand Trunk line is completed to St. Mary's, 91 miles, which is to be extended to London, 19 miles the coming year, making a double line between Toronto and London. From London a single line will be extended to Sarnia, operated for the use of the Great Western and Grand Trunk Companies.

From Toronto north a line extends to Lake Huron at Collingwood, on the 5½ feet gauge, a distance of 96 miles, so that the completion of the railway to Toronto furnishes a perfect connection between the seaboard at Portland and the Far West. We hope to see at the proposed celebration at Portland, a full representation of the business men of Canada and the Western States.—*State of Maine.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscoog & Kennebec.	56	588,042	1,622,905	2,210,947	209,476	110,247	none	10	South Western.	92	1,097,496	468,500	1,624,920	253,306	141,168	8	
Kennebec & Portland.	56	1,114,725	1,622,905	2,737,630	209,476	110,247	none	10	Tennessee and Alabama.	30	246,488		979,006	In progr.			
Portl., Saco, & Portland.	51	1,367,000	1,114,725	2,481,725	270,214	112,491	6	85	Tennessee and Massia.	170,931			176,340	In progr.			
Boston, Concord, & Montreal.	96	1,808,690	1,059,519	2,868,209	233,234	120,884	2	14	Memphis and Charleston.	217	2,179,440		4,023,796	811,631	159,572		
Cheshire.	58	2,085,925	899,313	2,985,238	310,687	143,565	2	74	Mobile and Ohio.	153	2,568,555	1,802,921	4,371,476	199,932	109,230		
Concord.	35	1,500,000	8,242	1,508,242	335,949	138,454	6	74	Miss. Central.	188	642,534		628,303	In progr.			
Northern, N. H.	82	2,768,400	none	2,768,400	370,529	138,299	2 1/2	40	N.O., Opelousas & G.W.	55	2,930,425	671,645	2,657,565	In progr.			
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,835,753	162,697	55,173	none	4	Vicksburg, Shreveport & Tex.	111	1,117,750		1,077,895	In progr.			
Rutland & Burlington.	120	2,238,376	2,682,396	4,920,772	394,971	140,377	6 1/2	82 1/2	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.			
Vermont Central.	127	1,830,000	325,635	2,155,635	489,754	140,377	6	55 1/2	East Tennessee and Va.	161	625,425	938,693	1,564,118	In progr.			
Boston and Lowell.	74	2,470,974	180,000	2,650,974	417,535	140,377	6	77 1/2	Nash. and Chattanooga.	151	2,819,330	1,497,081	4,316,411	316,090	112,177	none	
Boston and Maine.	74	2,240,300	1,518,671	3,758,971	489,754	140,377	6	77 1/2	Covington & Lexington.	99	1,302,504	2,235,939	3,538,443	264,973	138,964	18	
Boston and N.Y. Central.	65	3,169,000	359,132	3,528,132	658,671	210,689	63	83 1/2	Lexington and Frankfort.	29	430,055	158,099	588,154	637,071	43,635	6	
Boston and Providence.	68	4,600,000	655,428	5,255,428	1,008,004	404,461	6 1/2	82 1/2	Lexington and Danville.	99	694,444	62,734	757,178	In progr.			
Boston and Worcester.	47	681,690	280,598	962,288	119,221	65,527	3	40 1/2	Louisville and Frankfort.	65	998,236	668,061	1,666,297	244,014	96,902	8	
Cape Cod.	62	1,691,110	273,241	1,964,351	286,635	103,787	5 1/2	40 1/2	Atlantic & Gt. Western.	254	866,939	77,294	944,233	In progr.			
Connecticut River.	60	2,583,400	2,947,737	5,531,137	647,281	305,998	40	89	Bellefontaine and Ind.	118	1,881,635	2,025,925	3,907,560	298,293	140,823	none	30
Eastern, Mass.	167	3,540,000	153,700	3,693,700	681,163	226,071	69	89	Clev. Col. and Cin.	141	4,547,020	122,857	4,669,877	1,290,295	732,066	9	102 1/2
Lehigh.	30	800,242	225,585	1,025,827	In progr.				Cleveland and Toledo.	200	2,674,425	2,698,301	5,372,726	386,934	10	77	
North Eastern.	21	600,000	none	600,000	198,491	66,533	6 1/2	82 1/2	Clev. and Mahoning.	103			628,583	In progr.			
N. Bedford and Taunton.	87	3,016,100	292,650	3,308,750	653,499	295,738	6	82 1/2	Clev. and Pittsburgh.	133	2,780,744	3,043,992	5,824,736	581,877	309,518	59 1/2	
Old Colony and Fall River.	77	2,232,541	1,033,670	3,266,211	726,726	87,318	none	6 1/2	Cin. Hamilton & Dayton.	60	2,153,900	1,321,213	3,475,113	508,271	278,012	66 1/2	
Vermont and Mass.	155	6,150,000	5,966,420	12,116,420	1,869,673	633,013	7	88 1/2	Cin. Wilm. & Zanesville.	131	1,120,450	1,181,265	2,301,715	336,459	12		
Western, Mass.	46	1,141,000	205,565	1,346,565	290,780	76,760	2	43 1/2	Columbus and Xenia.	65	1,484,550	149,000	1,633,550	355,305	187,518	10	82
Worcester and Nashua.	43	1,510,020	335,461	1,845,481	310,430	138,057	7	70	Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	In progr.			
Providence and Worcester.	72	2,356,000	939,000	3,295,000	733,012	255,799	10	21 1/2	Dayton and Michigan.	140	1,076,602	395,011	1,471,613	In progr.			
Hartford and N. Haven.	123	2,008,110	2,030,686	4,038,796	265,685	119,611	none		Dayton and Western.	35	310,000	600,000	910,000	733,769	17		
Hart'd, Prov. and Fishkill.	123	2,008,110	414,240	2,422,350	338,196	171,427	none		Eaton and Hamilton.	42	454,900	904,489	1,359,389	171,929	65,000	20	
Housatonic.	57	1,031,800	524,244	1,556,044	220,459	93,768	25		Little Miami.	65	2,963,921	1,171,785	4,135,706	681,662	336,708	88	
Naugatuck.	82	3,000,000	3,378,803	6,378,803	884,306	338,777	none	25	Mad River and L. Erie.	205	2,451,650	2,672,932	5,124,582	446,661	15		
N.Y. and N. Haven.	50	738,258	735,165	1,473,423	88,007	30,318	none		Central Ohio.	138	1,620,927	3,485,078	5,106,005	243,443	Recently opened.	none	
N. Haven and N. London.	50	509,200	1,073,673	1,582,873	124,044	66,430	none		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	50
N. London, W. & Palmer.	66	509,200	1,073,673	1,582,873	124,044	66,430	none		Pittsburg, Mayv. & Cin.	50	371,350	31,000	402,350	In progr.			
Norwich and Worcester.	66	2,123,300	873,489	2,996,789	304,236	88,458	2 1/2	25	Sand'y, Mansf. & Newk.	127	1,350,000	2,206,387	3,556,387	328,958	164,479	none	
Albany Northern.	32	439,005	1,625,098	2,064,103	117,716	9,904	none		Scioto & Hocking Valley.	135	408,976	509,050	918,026	888,868	In progr.		
Black River and Utica.	35	643,330	317,859	961,189	In progr.				Spring Mt. Vernon & P.	113	1,000,000	950,000	1,950,000	In progr.			
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,989,057	172,476	66,333	none		Tol. Wabash & St. Louis.	242	2,600,000	4,630,000	7,230,000	In progr.			
Buffalo and N. Y. City.	92	798,439	2,587,849	3,386,288	389,392	131,896	none		Cin. Log. and Chicago.	255	4,196,679	1,008,126	5,204,805	In progr.			
Buffalo and St. Line.	99	1,300,000	1,040,000	2,340,000	679,750	355,763	10		Evansville & Crawfordsv.	109	706,945	1,177,596	1,884,541	127,400	64,552		
Canandaigua and Elmira.	47	434,111	922,393	1,356,504	174,089	69,506	none		Ind. and Cincinnati.	86	1,213,723	1,442,859	2,656,582	193,142	7	60	
Canandaigua & Niagara F's.	98	1,815,000	2,279,854	4,094,854	3,495,832	1,182,433	28 1/2		Indiana Central.	66	811,400	1,261,197	2,072,597	350,176	134,376	45	
Cayuga & Susquehanna.	35	687,000	508,689	1,195,689	135,437	48,649	none		Ind., Clev. & Pittsburgh.	83	826,825	1,099,400	1,926,225	226,058	93,010	none	
Hudson River.	144	3,785,466	9,250,362	13,035,828	1,812,037	608,946	none	28 1/2	Jeffersonville.	66	1,014,262	694,000	1,708,262	206,544	94,318	none	
Long Island.	95	1,875,148	668,949	2,544,097	301,793	116,462	26		Madison and Indianapolis.	87	1,647,700	1,336,816	2,984,516	286,148	112,890	none	
New York Central.	534	24,154,860	14,462,742	38,617,602	5,653,681	3,162,126	8	86 1/2	New Albany and Salem.	288	2,535,121	5,281,848	7,816,969	545,827	371,402	none	
New York and Erie.	404	16,727,100	12,666,669	29,393,769	4,548,938	2,627,118	none	62 1/2	Perru and Indianapolis.	73		858,314	1,205,000	286,148	112,890	none	
New York and Harlem.	133	6,011,000	4,069,769	10,080,769	1,538,677	734,126	none	15	Terre Haute and Ind.	73	974,800	604,855	1,579,655	287,512	189,702	10	16 1/2
Northern, N. Y.	118	1,633,022	4,406,874	6,040,896	1,530,153	734,126	1		Chicago and Rock Is. P'd.	182	3,141,500	2,387,155	5,528,655	1,077,312	97		
Oswego and Syracuse.	35	399,000	216,681	615,681	126,540	59,982	3 1/2		Chicago and St. Louis.	220			1,077,312	In progr.			
Pottsdam and Watertown.	29	467,200	294,189	761,389	149,683	71,909	none		Chicago, Burl. and Quincy.	58	1,639,100	1,684,736	3,323,836	722,580	379,821	20	
Rensselaer & Saratoga.	25	610,000	140,000	750,000	241,149	82,800	7		Central Military Tract.	68	1,202,500	2,133,050	3,335,550	471,399	219,588		
Saratoga and Whitehall.	48	500,000	395,000	895,000	171,909	21,089	none		Chic., St. Paul & F'd du Lac.	178	2,300,000	1,325,000	3,625,000	In progr.			
Syracuse & Binghamton.	50	768,369	1,578,804	2,347,173	169,454	22,503	none		Galena and Chicago.	269	5,441,500	3,318,039	8,759,539	2,315,786	1,102,042	22	119 1/2
Troy and Boston.	27	437,380	737,079	1,174,459	166,363	55,184	3 1/2	90	Illinois Central.	627	2,271,050	19,416,392	20,374,442	1,632,118	527,952	117 1/2	
Watertown and Rome.	97	1,370,378	700,979	2,071,357	404,374	172,474	3 1/2		Peoria and Quawake.	93	669,889	818,454	1,388,342	In progr.			
Belvidere Delaware.	64	1,000,000	1,619,000	2,619,000	101,135	76,534	none		Ohio & Miss. (Wat. Div.).	147	1,780,295	3,292,403	5,072,698	Recently opened.			
Camden and Amboy.	94	3,000,000	11,407,200	14,407,200	1,617,127	981,941	12	124	Terre Haute and Alton.	173	2,281,420	1,256,000	3,537,420	In progr.			
Camden and Atlantic.	60	369,320	1,622,131	2,000,000	122,417	50,000	none		Detroit and Milwaukee.	185	838,000	1,128,964	1,966,964	In progr.			
New Jersey.	30	3,482,850	690,000	4,172,850	681,514	500,747	10	121	Mich. Central.	282	6,032,444	5,996,013	12,028,457	2,215,283	879,550	10	92 1/2
New Jersey Central.	63	2,000,000	2,268,176	4,268,176	393,728	171,603	6		Mich. South'n & N. Ind.	475	6,928,900	6,319,224	13,248,124	2,410,000	875,000	10	90
Morris and Essex.	53	1,187,805	875,000	2,062,805	229,341	96,267	6		Green Bay, M.P. & Ch.	155	764,076	442,726	1,206,802	In progr.			
Albany Valley.	44	1,837,867	342,564	2,180,431	1,988,317	Recently opened.			Milwaukee and Miss.	106	1,820,428	2,467,899	4,288,327	691,843	417,443	17	77 1/2
Cataw. W. & Erie.	63	1,700,000	1,940,000	3,640,000	219,253	62,450	none		Milwaukee & Water'n.	72	384,861	132,000	516,861	In progr.			
Cumberland Valley.	56	1,099,500	12,211	1,111,711	148,911	66,994	6		Milwaukee and Horicon.	15	554,200		554,200	In progr.			
Del. Lack. & Western.																	

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1868	97 1/2	97 1/2
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Div's	"	1861-64	85	85
Do. do.	500,000	2d do. convertible	7	March, Sept.	"	1865	72 1/2	72 1/2
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	89	91
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July	"	1868	70	77 1/2
Cincinnati, Wilmington, and Zanesville	1,800,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	77	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	65	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	65	80
Covington and Lexington	400,000	Do. do.	7	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	62	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	81	81
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	90	90
Gaiana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	93 1/2	94 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	82
Indianapolis & Cincinnati (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84 1/2	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,600,000	Do. inconv.	6 1/2	May, 2 Nov.	"	1883	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	94 1/2	96
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	94 1/2	95 1/2
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	88	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	88	88
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	88	88
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1868-66	96	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	79	79
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	8	Jan'y, July	Phila.	1870	97 1/2	98
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	78	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,600,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	86 1/2	87
Do. do.	1,128,000	Do. do.	6	Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	105 1/2	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	95 1/2	97
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	96 1/2	97
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	85 1/2	85
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86 1/2	87
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1868-70	97 1/2	97 1/2
Do. do.	2,000,000	2d do. do.	7	10 June, 10 Dec.	"	1860	86	86
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	66	66 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1876	94	94 1/2
Do. (Free Land)	3,000,000	Mortgage 545,000 acres—priv. 7 shares	7	March, Sept.	"	1860	103 1/2	104
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1869	92 1/2	93
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	82	83
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	81	83
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	94	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	90 1/2	91
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	88 1/2	89
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	88 1/2	89
Do. do.	8,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec.	"	1864	100 1/2	101 1/2
Panama, 1st issue	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	100	100
Do. 2d do.	1,475,000	Do. do.	7	Jan'y, July	"	1868	100	100
Reading, issued 1843	1,575,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	89	89
Do. do. 1844, '48, '49	1,800,000	Do. convertible	6	Jan'y, July	"	1860	89	89
Do. do. 1844	3,460,000	Do. inconvertible	6	April, October	"	1870	86 1/2	87

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup. X	Divers	80	82 1/2
Do. 5 do. 1858-90	May,	92	97	New Orleans, 6 per ct. cp. R.R. X	Do.	77	80
Do. 5 do. 1870-75	August, and	94	94	N.Oreans, 6 per ct. cp. municip. X	Jan'y, July	82	86
Do. 5 do. 1880	November.	94	94	Philadelphia, 6 per ct. 1876-98	Jan'y, July	89 1/2	89 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August	97	100	Pittsburgh, 6 per ct. coup. X	Divers	74	75 1/2
Alleghany, 6 per ct. coup. 1872-77 X	Jan'y, July	97	98	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	85	85
Baltimore, 6 per ct. coup. 1879-90	Quarterly	97	99	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	95	100
Boston, 5 per ct. coup. 1873-78 X	April, October	97	100	Rochester, 6 per cent. coup. X	Do.	77 1/2	78 1/2
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101	102	St. Louis, 6 per ct. coup. Long X	Do.	80	81
Clev'd, 7 per ct. cp. W.V. 1879 X	Do. do.	101	102	Do. do. Municip. 1874 X	Do.	73	75
Cincinnati, 6 per ct. coup. X	Divers	89	90	Sacramento, 10 p.ct. cp. 1862-74 X	May, Novemb.	80	80
Chicago, 6 per ct. coup. 1872-77 X	Jan'y, July	100	100 1/2	S.F. elaco, 10 p.ct. cp. 1865, pay. N.Y. X	Do. do.	85	85
Do. 7 per ct. coup. 1880 X	Feb'y, August	101	102 1/2	Do. 10 p. ct. cp. 1871 X	Do. do.	85	85
Detroit, 7 per ct. cp. W.W. 1877 X	March, Sept.	101 1/2	102 1/2	Do. 10 do. pay. N.Y. X	Jan'y, July	85	85
Hubque, 8 per ct. cp. Long X	Jan'y, July	98	98	Do. 6 per ct. cp. N.Y. 1875 X	Do. do.	87 1/2	87 1/2
Jersey City, 6 p.ct. cp. W.W. 1877 X	Jan'y, July	98	98	Wheeling, 6 per ct. coup. X	Divers	81 1/2	81 1/2
Louisville, 6 per ct. cp. 1880-83 X	Divers	79	80	Do. 6 p.ct. cp. Mun. 1874 X	March, Sept.	81 1/2	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68	68	Zanesville, 7 do. X	April, October	97 1/2	97 1/2

Cincinnati Stock Sales,
By KIRK & CHEEVER.

For the week ending September 16th, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	86
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	48
Indianapolis & Cin., 2d Mort. 7 per ct.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	82
Hillsboro' and Cin., 7 per ct. 1st Mortg.	47 1/2
Covington & Lexington, 10 per ct. Income	54
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Do. do. due July 1, 1866	85
Little Miami, Dividend Scrip, issued June, 1856	79

STOCKS.

Bellefontaine and Indiana, 30.—Cin., Ham. and Dayton, 66.
—Col. and Xenia, 82.—Cincinnati, and Ohio, 8 1/2.—Covington & Lexington, 16.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 58.—Little Miami, 88.—Mad River & Lake Erie, 15.—Marietta and Cincinnati, 14.—Ohio and Mississippi, 5.—Hillsboro' and Cincinnati, 14.—Peru and Indianapolis, 12.—Cincinnati, Wilmington and Zanesville, 12.

By HEWSON & HOLMES.

For the week ending September 17th, 1886.

BONDS.	Per ct.
\$5,000 Covington & Lex., 7 per cent. 2d Mort.	65
3,000 Do. do. 6 do 1st do.	70
5,000 Ohio and Miss., 7 per cent. 2d Mortgage	50
2,000 Indiana Central, 10 per ct. Inc. due in '88	90
1,000 Cin. Ham. and Dayt. 7 per ct. due in '80, '82.	(& int.)
4,000 Cin., Wilm. and Zanev. 7 per ct. Income	20
725 Little Miami, Dividend Scrip, June, 1856	80
225 Do. do. issued Dec. 1855-83	85
112 Do. do. do June, 1855-85	90
500 Cin., Ham. & Dayt., 7 per ct. Divid., due in 1857	105

STOCKS.

108 Shares Indianapolis & Cincinnati	58
200 " Cincinnati and Chicago	3 1/2
29 " Ohio and Mississippi	5 1/2
25 " Do. do.	6
300 " Do. do. b60d.	6
100 " Mad River & Lake Erie	15
20 " Little Miami	88 1/2
50 " Cin. Wilm. and Zanev.	12 1/2
35 " Covington and Lexington	15
100 " Indianapolis and Cincinnati	60

Marie & Kan's Money Circular for the
European Steamer of the 24th inst.

[TRANSLATED EXTRACT.]

New York, Monday, Sept. 22, 1886.

Our last advices were dated Sept. 16, since, under a large speculative movement in Erie stock, the market has been rather fluctuating, reaching its highest point on Thursday last, but closing today with a downward tendency, prices of all railroad stocks, Erie excepted, showing a decline from last week's quotations. In railroad bonds and State stocks the usual amount of transaction has taken place without much change in prices. The week, altogether has been marked by great activity. There have, also, been some purchases made for European account, including Erie stock, La Crosse and Milwaukee, and Racine and Mississippi bonds, in larger amounts than usual. Money, notwithstanding the increased exportation of specie, has been in good supply, and rates of interest show hardly any change. State Stocks.—Virginia declined 1/2 and Missouri 1/2, with fair transactions. Tennessee 6 per cents sold at former prices, and California, 1875, advanced again 1 per cent. Railroad Bonds.—The purchases have not been very large. Illinois Centrals fell off 1/2; Erie bonds are firm, and scarce; 1875 bonds advanced 1; 1883 bonds 1/2; and 1871 bonds 3/4; about \$50,000 La Crosse and Milwaukee Sinking Fund bonds at an advance, and \$20,000 Racine and Mississippi bonds at 79 have been taken for Europe; City and County bonds remain inactive, with a very limited demand. Railroad Shares.—The transactions in Erie have been enormous, averaging from 10,000 to 15,000 daily, reaching 63 1/2, and closing still at an advance of 1 1/4 per cent.; Reading is very heavy, the decline from last week being 1 1/2; Michigan Central declined 1/2; Michigan Southern 1 1/2; Cleveland and Toledo 1 1/2; Cleveland and Pittsburg 5/8; Milwaukee and Mississippi 1/2. Money is without change; on call 7; discounts 7 1/2 for best names; 10 1/2 for paper less known. Exchanges are very firm, and Continental Exchanges were a fraction higher. London 109 1/2 109 1/2. Paris 5.16 1/4 5.16. Transactions limited.

MARIE & KANZ.

Extract from De Coppel & Co.'s Money Circular for the European Steamer of the 24th inst.

[TRANSLATED.]

New York, Tuesday, Sept. 23, 1856.

The general characteristics of our Stock market have not very materially changed since our last advices of 16th inst. A larger exportation of Specie during the week than had been anticipated, has produced but little effect upon the Money market; but stocks have been more affected by this fact. With general animation at the Stock Exchange there was a decline in prices, and after having in many cases risen above our previous prices, our to-day's quotations show some decline upon last week's. The shares of Erie Railroad have been the object of a lively speculation, with out the rest of the list sympathizing in the movement to any marked degree. The demand for Western railroad bonds continues very limited; a few parcels, however, have changed hands upon European orders. State Stocks—There was an active demand for Missouri 6s at a shade decline. Some Tennessee 6s without fluctuation, and Virginia 6s at a decline of $\frac{3}{4}$ have also been done.—City and County Bonds.—San Francisco 6s were in fair request, and have risen since the interest coupons have been taken up. There are but few offering. There continues to be great dullness in this class of securities, and we hear of only a few retail transactions in St. Louis 6s City and County; in Mobile 8s, and in Sacramento 10s. Railroad Bonds.—At the Stock Exchange there were large transactions in Illinois Central Construction.—Freeland Bonds with privilege have risen $1\frac{1}{4}$ per cent. Erie 7s, 1871, and Michigan Southern and Northern Indiana Sinking Fund Bonds were done at steady rates, and New York Central 6s at $\frac{1}{2}$ advance. At private sale there was bought upon European orders some La Crosse and Milwaukee 1st Mortgage, also some Milwaukee and Mississippi Third Section, and Burlington and Missouri 1st Mortgage, at well supported prices. Railroad Shares.—There was general activity in these securities, but Erie, in particular, gave rise to enormous transactions; it rose to 83 $\frac{3}{4}$, and closes at 63. Other shares are nearly all somewhat lower than our previous quotations. The transactions were animated in Cleveland and Toledo, closing at 1 per cent. decline; in New York Central at $\frac{3}{4}$; in Panama at $\frac{1}{2}$; in Michigan Central at $\frac{3}{4}$, and in Michigan Southern at $\frac{1}{4}$; in Illinois Central at $\frac{3}{4}$; in Reading at $1\frac{1}{4}$ decline. The latter fluctuated much, owing to rumors of some change in the administration. Money, without any very marked change, in active demand at 7 for short loans. Paper, Ball, according to names and length.

DE COPPET & CO.

Iron Bridge to Goat Island.

The proprietors of Goat Island have an iron bridge nearly completed on the foundation of the old wooden structure connecting Goat Island with the main land at Niagara Falls. There are five spans, or arches, supported by stone piers. The bridge will cost some \$20,000.

Insurance on Railroad Property.

The Liverpool and London Fire and Life Insurance Company have advertised to take fire risks upon all descriptions of railroad property, either upon all the perishable property of any corporation, or upon specific property or merchandise. This company was established in 1836, and now has a Board of Directors in New York and New Orleans, most of whom are large shareholders, and the whole comprising a list of some of the most respectable and substantial citizens of those cities. Among the New York Directors we observe the names of Messrs. Jas. Brown, Mortimer Livingston, Wm. S. Wetmore, Francis Cottenet, and Geo. Barclay.

The American Railroad Journal thus speaks of the proposal:

"Railroad companies have often greater reasons for insuring perishable property, than private individuals. Independent of risk of loss, a small

sum annually will insure regular dividends to stockholders, which are now often interfered with by heavy losses from fire. Every railroad should keep a portion at least of its perishable property insured. An excellent opportunity is now afforded in a company of the highest respectability and of ample means."—Savannah News.

American Railroad Journal.

Saturday, September 27, 1856.

Spartanburg and Union Railroad.

This road commences at Alston, 25 miles northwest of Columbia, on the line of the Greenville and Columbia railroad, and extends to Spartanburg, 67 miles. It is completed and running to Shelton, 20 miles.

John L. Young, Esq., who was elected President upon the resignation of Hon. D. Wallace, in Jan'y last, in a recent report to the stockholders, states that the financial condition of the company since his official connection with it, has been embarrassed. He found its credit prostrate, abused on all sides; as wanting in good faith, and unable to carry out its obligations. After devoting a large proportion of his time to the investigation of its condition, Mr. Young, in his report, gives a detail of all the transactions of the company since its organization. The following is a synopsis of the accounts:

Received from all sources in cash,	
stock and notes	\$650,733 62
Expended	631,108 92
Balance	\$19,624 70
To which add balance due by stock-	
holders	97,729 88
Assets yet unexpended	\$117,354 08
Amount expended on road and outfit ..	\$631,108 92
Amount due contractors	171,462 30
Cost of road	\$802,571 22
Estimated as necessary to finish the	
road to Spartanburg, including	
locomotives, cars, water stations,	
workshops, &c.	400,000 00
Total cost of road completed to	
Spartanburg	\$1,202,571 22
equal to 17,180 per mile including outfit.	
From amount due contractors as	
above	\$171,462 30
Deduct assets as above	117,354 08
Leaves	\$54,108 22

which is the debt of the company after all the assets are paid out. About \$40,000 of this debt is now sued on, and as judgments will probably be obtained, the property of the company will be liable to levy and sale, unless provisions are made for its payment.

After an examination of the work already completed, and the financial affairs of the company, the president is of opinion "that it is yet in the power of the stockholders to complete the construction of the road as originally intended, with profit to themselves."

At the last annual meeting an issue of coupon bonds to the amount of \$400,000 was authorized, but with such limitations as to the price at which they were to be disposed of, that they were never executed or offered for sale; to this is attributed the cause of the present embarrassment of the company.

The President is of opinion that while the most

practical way to raise money to build and equip the road is by the sale of bonds, they should not be issued all payable the same year, and proposed that the sum be divided as to time of payment—say in 20, 22 and 24 years.

In conclusion he says:

"It is evident that the work cannot progress without more means are afforded; it is for you to say, after so large an expenditure of money, and in view of the great benefits to be derived from the road, whether the enterprise shall be permitted to fail, for the want of the comparatively small sum required to complete it, or whether the money shall be promptly afforded. Every consideration of interest and patriotism suggests the latter course, and I know that the stockholders along the line of the road are able to afford all that is required without injury or hardship. It is to you I appeal. If aid is afforded, the road will be built; if not, the stockholders will lose what money they have already paid, and continue to be deprived of the means of speedy communication with the world, and fall behind our neighboring districts in progress and civilization."

Grand Trunk Railway.

A contract has been made with Messrs. Gzowski & Co. for the building of the line from St. Mary's to London, Canada West, for £8,000 sterling per mile, including the right of way and rolling stock, to be completed by January 1, 1858.

American Institute Fair.

The twenty-eighth annual Fair of the American Institute was opened in this city, on the 22d inst., and will continue till the 25th of October. More than a hundred workmen are now engaged making preparations for the reception of machinery and other articles. The exhibition of all the important material interests of the country will probably be much larger than at any previous Fair.

Maryland Institute Fair.

The ninth annual exhibition of American manufactures and the Mechanic Arts, under the direction and superintendence of the Maryland Institute for the promotion of the mechanic arts, will be opened at the Hall of the Maryland Institute, in Baltimore, on Wednesday, the 1st of October next, and continue to Wednesday, the 29th of the month. The Hall was opened for the reception of goods on the 23d instant. On the evening of the 1st of October, at 7 o'clock, the exhibition will be opened for the reception of visitors. The closing address will be delivered and the premiums announced on the closing evening by the President of the Institute, the Hon. Joshua Vansant.

Chicago, Iowa and Nebraska Railroad.

This road commences at the town of Clinton, on the west bank of the Mississippi, a few miles below Fulton, at which place it will connect with the Chicago, Fulton and Iowa Railroad. This latter road is 186 miles in length, and is almost an air line. It is completed and two daily trains each way are now running between Chicago and Fulton. Several miles of rails for the Clinton road have already been received, and it is expected that 20 miles will be completed this year. In October, 60 miles more, to Cedar Rapids, will be let, and the work commenced along the whole line. We learn from the Chicago Press, that the stock necessary to build the road to that point is already secured, and that it is the intention of the company to have the entire road (70 miles)

completed by the 1st of January, 1858. The first locomotive for this road arrived at Clinton on the 13th inst. It was transported across the Mississippi under the direction of the Chief Engineer, MILO SMITH, Esq.

Russian Rails.

The Russians have commenced to manufacture rails for their railroads, and they are said to be superior to the English, although somewhat dearer. Prior to the late war, all their rails were imported from England. Two great proprietors of Russian forges are engaged to manufacture all the rails required for the new railroads.

Rock Island and Chicago Railroad.

This company have just issued a report which covers two years ending July 1st.

The earnings for this period have been as follows:

From July 10, 1854, to July 1, 1855	\$1,242,906.19
From July 1, 1855, to July 1, 1856.	1,416,304.08

Total for two years. \$2,659,210.27

The disbursements of the same period have been for operating:

Expenses	\$1,326,995.20
Interest on debt	206,955.00
Bureau Valley road rent	125,000.00
Dividends	502,981.00

Total

Leaving a surplus of \$497,279.07.

The annexed statement shows the earnings for each month, of the Chicago and Rock Island railroad, from July 10, 1854, to July 1, 1856:

1854.	Pass'gs.	Freight.	Mails.	Total.
July [20 days]	\$31,560	21,146	1,591	54,298
August	50,430	41,037	1,591	93,059
September	76,303	49,409	1,591	127,304
October	110,435	55,810	1,591	167,837
November	87,480	54,070	1,591	143,141
December	46,801	31,747	1,591	80,140
Jan'y, '55	32,084	18,337	1,591	52,013
February	36,317	22,000	1,591	59,908
March	56,589	33,649	1,591	91,830
April	70,777	45,745	1,591	118,114
May	78,171	48,719	1,591	128,482
June	73,653	51,536	1,591	126,780
Total	\$750,600	473,205	19,100	1,242,906
1855.				
July	\$54,834	43,058	1,851	99,743
August	61,935	49,507	1,766	103,208
September	63,957	76,033	1,766	141,757
October	88,954	89,309	1,766	180,030
November	66,303	62,220	1,766	130,290
December	49,816	44,300	1,766	95,882
Jan'y, '56	38,180	34,134	1,766	74,082
February	38,183	30,035	1,766	69,984
March	57,575	37,772	1,766	97,114
April	75,800	55,677	1,766	133,244
May	82,951	63,885	1,766	148,604
June	74,284	66,366	1,766	142,416
Total	\$742,622	652,296	21,284	1,416,404

The following is a copy of the balance sheet of the Chicago and Rock Island railroad company July 1, 1856.

CREDIT BALANCES.

Capital stock	\$4,029,000
Mortgage bonds	1,971,000
	\$6,000,000
Unpaid dividends	5,900
Unpaid interest warrants	455
Northern Indiana R. R.	5,158
Bills payable [since paid]	102,572
Profit and loss	497,280
Total	\$6,611,365

DEBIT BALANCES.

Cost of road and equipment	\$6,048,235
Railroad bridge company	66,459
Illinois and Mississippi telegraph company	13,785
General agency of the company [since settled]	44,982
Chicago and Rock Island R. R. stock ..	142,800
Sundry small balances	873
Stock of fuel and materials on hand ..	168,799
Balance in Cashier's hands at Chicago ..	57,660
Cash in bank	67,772

Total

At the time this company commenced operating their road, this was the only line to the Mississippi river from the city of Chicago; since that time six other roads have been built, and have been for some time in full operation, having their termini at Chicago and on the Mississippi river, competing more or less for the same trade. Notwithstanding the completion of these six roads, the business of the Chicago and Rock Island road has regularly increased, and although the resources of the country through which it passes are even now but partially developed, the earnings of the road have reached an amount which insures satisfactory returns to the stockholders for their investment.

The Board have carried out the instructions of the stockholders as authorized at the annual meeting in December, 1854, and have erected a Grain House in the city of Chicago, at a cost of \$125,000, capable of containing over 700,000 bushels of grain. This is a larger and more expensive building than was contemplated in the report of the engineer, made at that time, but the experience of the spring of 1855 proved, that if built upon the original plan, it would be inadequate for the increasing business of the company, and your Board therefore deemed it advisable to change the plan and construct such a building as their necessities demanded. There has also been built a double track from Chicago to the Junction, a large amount of side track, station buildings and warehouses at different places on the road, and additional equipment has also been purchased, all of which were authorized at the meeting referred to. To meet the expense of these large improvements, they have been compelled to use a portion of the surplus earnings of the road, and by doing so, have been enabled not only to keep the capital stock and bonds within the limits authorized, viz: \$6,000,000, but to hold \$142,000 of their own stock, in lieu of the earnings thus appropriated, as will be seen by the balance sheet accompanying this report.

The Board take great pleasure in stating that the business of the road is steadily and rapidly increasing, and to meet such increase, they have resolved to purchase 250 additional freight cars, and 10 locomotives, all of which have been contracted for, deliverable in the months of September and October next, and also to extend their side tracks as rapidly as they can, without incurring a floating debt.

The equipment of the Company consists of 41 first-class locomotives, 33 passenger cars, 8 second-class do., 4 mail and express do., 9 baggage do., 418 box do., 199 platform do., 41 hand do., and 10 gravel do.

The railroad bridge across the Mississippi was completed in April last. Fifteen days after the trains commenced crossing, one span of 250 feet was destroyed by the burning of a steamer. This bridge has since been repaired, and trains are now crossing regularly. This bridge is under the joint control of the Chicago and Rock Island and the Mississippi and Missouri Companies, and has been constructed by the issue of bonds guaranteed by these two companies, and further secured by a deed of trust executed by the bridge company to A. C. Flagg, Esq. It is proposed to establish a sinking fund from the income of the bridge, which will be sufficient to return the bonds at maturity.

The Mississippi and Missouri Railroad is now

completed, and in operation to Muscatine and Iowa City, in the State of Iowa, 66 miles; and about 20 miles more will be finished this fall, and is now doing a much larger business than was done over the same number of miles of the Chicago and Rock Island road when it was first opened. The receipts during the months of April, May and June, notwithstanding the road was but partially completed and equipped, were over \$1,000 per day.

The earnings of the Peoria and Bureau Valley Branch are equal to the anticipations of the Directors, and we need only more facilities for doing the business offering from this road to largely increase our receipts from this source.

The expense of operating the road and keeping its road-bed, equipment, machinery and buildings in repair, for the period embraced in this report, was \$1,326,995 20, or a trifle less than 50 per cent. of its gross earnings for the same period.

It has been the policy of the Directors to charge to operating and repair account, every expense incurred in operating and maintaining the road and its appurtenances, and nothing has been charged to construction account, which has not been actually expended for land, fencing, new buildings and shops erected, grading and additional equipment obtained since the 10th July, 1854, and it is the intention of the Board of Directors to adhere strictly to this policy, they deeming the true interest of the shareholders will be promoted thereby.

The actual cost of the road and equipment to 1st July, 1856, was \$6,048,235 13, or a sum greater than the capital stock and bonded debt of \$48,235 13, and this cost will be still farther increased by the new equipment ordered, and by new station houses and freight depots now being erected on the line of the road.

The balance sheet shows to the credit of profit and loss account the sum of \$497,279.07 From this sum should be deducted the accrued interest on the bonds not due until 10th July, five months and 20 days, \$66,830.56 And the amount of accrued rent of the Peoria and Bureau Valley R. R. not payable until August 1st, 5 months, 52,083.34

118,913.90

Showing a credit balance of \$378,365.17 or within a fraction of 9 1/2 per cent on the capital stock.

This sum being a surplus of earnings above the operating expenses, interest paid and accrued, dividends and rent of Peoria and Bureau Valley Railroad to July 1, 1856.

The earnings of July and August, 1856, compared with the corresponding months of 1855, are as follows:

Earnings of July, 1856	\$157,678.57
" August "	176,774.69
	\$334,453.26
Earnings of July, 1855	\$99,742.68
" August "	103,207.91
	202,950.59

Increase in two months, \$181,502.67 Equal to nearly 65 per cent.

The Directors estimate the earnings for the year ending 1st July, 1857, to be \$1,650,000.

The following are the names of the Directors:

HENRY FARNHAM, President.
AZARIAH C. FLAGG, Treasurer.
FRANCIS H. TOWS, Secretary.
JOHN F. TRACY, Superintendent.
JAMES L. ELWOOD, Cashier, Chicago.

Directors.—Azariah C. Flagg, Thomas C. Durant, Irad Hawley, Francis H. Tows, New York; Charles W. Durant, Albany, N. Y.; William Walcott, Utica, N. Y.; Henry Farnham, Norman B. Judd, Isaac Cook, John F. Tracy, Chicago, Ill.;

Lemuel Andrews, Rock Island, Ill.; Theron D. Brewster, Peru, Ill.; Ebenezer Cook, Davenport, Iowa.

Executive Committee.—Thos. C. Durant, Henry Farnham, Wm. Walcott, Charles W. Durant, Azariah C. Flagg.

Honduras Railroad.

We copy the following from the *Liverpool Post* in reference to the above project which is attracting great attention both in this country and in Europe.

On the fourth of last month we gave all the particulars of the proposed "Honduras Inter-oceanic Railway," and hinted at the time that the popular Member of South Lancashire took a deep interest in the project. We might have stated it as a fact, for, at the meeting of the Chamber of Commerce, last week, Mr. Brown announced his concern in the scheme; and the extent of his interest may be inferred from the report of Captain Robert Fitzroy, R. N., made to Lord Clarendon. We subjoin the whole of this important report; but the following facts will enable the reader to appreciate more fully the details. The distance between New York and San Francisco, via Panama, is 5,224 miles; via Honduras, 4,121 miles; saving of distance of Honduras line over that of Panama, 1,103 miles. The distance from Liverpool to San Francisco, via Panama, touching at Kingston (Jamaica), is 7,712 miles; via Honduras, 6,881 miles; saving of Honduras over Panama, 831 miles. The distance from Liverpool to Sydney, via Honduras, has been calculated with care, and found to be 11,820 miles. At an average rate of steaming of twelve miles per hour, and allowing three days for coaling and transshipment, the voyage could be performed in exactly 43 days and 12 hours.

TABLE OF DISTANCES. From Miles. Liverpool.

Liverpool to Fayal.....	1,320	
Fayal to St. Thomas.....	1,860	
St. Thomas to Puerto Caballos....	1,320	
Puerto Caballos to Bay of Fonseca.....	160	4,661
Bay of Fonseca to San Francisco.....	2,220	6,881
Bay of Fonseca to Sandwich Islands.....	3,960	8,621
Sandwich Islands to Canton.....	4,920	13,541
Sandwich Islands to Shanghai.....	4,500	13,121
Sandwich Islands to Jeddo.....	2,760	11,361
Bay of Fonseca to Melbourne.....	7,680	12,341
Bay of Fonseca to Sydney.....	7,159	11,820
Bay of Fonseca to Auckland.....	6,004	10,665
Bay of Fonseca to Callao.....	2,359	7,020
Bay of Fonseca to Valparaiso.....	3,670	8,331

From New York.

New York to Bay of Fonseca by railroad and steamer.....	1,901	
Bay of Fonseca to San Francisco.....	2,220	4,121
Do. to Sandwich Islands.....	3,960	5,861
Sandwich Islands to Jeddo.....	2,760	8,621
Do. to Shanghai.....	4,500	10,361
Do. to Canton.....	4,920	10,781
Bay of Fonseca to Auckland.....	6,004	7,905
Do. to Sydney.....	7,159	9,060
Do. to Callao.....	2,359	4,260
Do. to Valparaiso.....	3,670	5,571

The time between New York and San Francisco, via Honduras, is estimated at thirteen days four hours. This calculation is based on an assumption of twenty miles per hour by rail and and twelve miles per hour by steamer. Mr. Steers, the well known architect of the yacht *America*, of the great steam frigate *Niagara*, and the Collins packet *Adriatic*, will contract to build steamers guaranteed to accomplish an average of sixteen miles in the Atlantic and twenty in the Pacific. Assuming this speed for steamers, and thirty miles for railway express, the distance between New York and San Francisco may be accomplished in eight days sixteen hours.

The following is Capt. Fitzroy's report:

MEMORANDA

Respecting a Project for the Construction of a Railroad through the State of Honduras, submitted to the Earl of Clarendon by the Hon. William Brown, M. P., from Liverpool.

The general character of the various lines hitherto suggested for railroads or canals being now so familiarly known, it appears to be unnecessary to do more than recapitulate them briefly, before advertent to the peculiarities of that route along which it is proposed to construct a railway across the State of Honduras.

For railroads, five distinct lines have been proposed; one of which, at Panama, has been executed.

I. *The Mexican Line.*—Between the Gulf of Mexico and Tehuantepec, wanting good ports, and not in the line of general intercourse between the two oceans.

II. *The Nicaragua Line.*—Equally deficient in harborage, and otherwise objectionable.

III. *The Chiriqui and Dulce Line.*—Between good ports and of promising character, but which has not yet been surveyed accurately.

IV. *The Panama Route.*—This is the shortest, crosses the lowest land, and is well situated; but has inferior harbor accommodation.

V. *The Darien Line.*—Between good ports, distant less than forty miles from each other; but crossing a ridge about 900 feet above the sea.

Canalisation is urged between the great river Atrato and the Pacific, but such a work as this must occupy a lengthened time.

Each of these projects has had, and has still, its earnest advocates; and one of the plans, the Panama Railroad, has been executed to such purpose, that the shareholders have lately been receiving more than 10 per cent. annually (15 per cent. has been stated) on their subscribed capital. Detailed information is given in the annexed pamphlets, which could hardly be compressed and embodied in this paper, conveniently.

The enterprise to which Mr. W. Brown (M. P. for Lancashire) has now drawn attention, viz: a railroad across Honduras, is one which has striking and obvious advantages, although scarcely noticed until lately.

Elaborate and complete surveys of the whole line, as well as of the excellent ports (between which the road is proposed), have been admirably executed. All the conditions are known, and appear to be favorable, excepting two, which are matters for calculation, viz: the consequences of the great elevation of the summit level, which is 2,200 feet, and the 160 miles in length of the line.

Before adducing instances of other lines surmounting high elevations successfully, references to the position of Honduras, geographically and politically, may be expedient, as general considerations affecting all others.

Measuring on a globe, by a thread, it appears that the Honduras line is as favorably situated for communication with Europe, America, (North and South), China, India, and Australasia, as any part of the great Isthmus, while the excellence of both ports, and their easy as well as safe approach, render its situation unimpeachable.

Political considerations are less complicated and easier to deal with than in any other parts of Central America. The whole line, and both ports, are under the sole jurisdiction of one State, from which a charter for 70 years has been obtained, on terms most favorable to the undertaking.

Looking especially to European communication, it may be observed, that a main or trunk line of steamers, calling at Jamaica, in traversing the West India Archipelago, would find a suitable terminus at Port Caballos, in Honduras Bay, where the north end of the railway will be; and that Fonseca Gulf, at the other end, is in the region of steady winds, and well situated for a direct track across the Pacific ocean, either to China or Australasia.

The climate, productions and population of Honduras are more in favor of such a work as a railway from sea to sea, than those of any other part of the great Isthmus, without exception; but,

as the length and elevation are great, these difficulties should be well considered.

1. As to length: This is a question of 160 miles against 40 (other things being equal, which, however, they are not), involving first cost, constant expense, and comparative local advantages.

The continual outlay on the Panama Railway, consequent on the nature of the locality, and many pile-supported structures, is great; while, in Honduras, there will be comparative durability of works. Fuel must be carried to Panama from distant ports, but it abounds near Fonseca Gulf. Rain prevails in the eastern part of the Isthmus of Panama, much more than it does in Honduras, where the climate is such that European trees and fruit thrive on the higher grounds.

2. With regard to the elevation, which seems at first sight rather deterring, it should be borne in mind that the greatest incline or gradient proposed is one in 88, and that only for a short interval, in a country where ice or snow are unknown; the general gradients being remarkably easy. Also, that as the country lies favorably, the line running along valleys, near rivers, and without crossings of any consequence, it is likely to be an economical line in this respect. All requisite materials, as well as native labor, are on the spot; and the Honduras woodcutters are well known.

The Honduras Railway Company is incorporated under the new Joint Stock Companies' Act of Great Britain, limiting the liability of the shareholders. Its capital is £2,000,000 sterling, or \$10,000,000, in 100,000 shares of \$100 each—in pounds and dollars, and transferable alike in New York and London. Wm. Brown, M. P. (Brown, Shipley & Co., Liverpool), is Chairman of the British Board; J. L. Ricardo, M. P., is Deputy Chairman. The President of the Liverpool Chamber of Commerce, Chas. Holland Esq., is a Director; also Thos. Sellars, Esq., President of the American Chamber of Commerce of Liverpool, and member of the well known Anglo-American firm of Dennistoun, Cross & Co.; also, Raikes Currie, Esq., M. P., banker; Wm. Dent, late East India Director; Abraham Darby, President of the Great Ebbwvale Iron Company—a millionaire; J. E. Ewart, Esq., M. P. from Liverpool; Capt. Robert Fitzroy, R. N.; Mr. Héywood, banker; R. W. Crawford, East India merchant, and several other first-class London merchants and bankers. The American direction numbers Paul Spofford (S. T. & Co.), Shepherd Knapp, Geo. W. Beebe, Daniel Embury, P. H. Holt, C. A. Macy, C. F. Moulton, &c. The prospectus will be out by Sept. 15th, in London, and the books for subscription opened at J. Hutchinson's, President of the London Stock Exchange, and Foster & Braithwaite, ore brokers; Heywood, Kimards & Co., bankers in London; Brown Bros. & Co., in New York; Rothschilds Freres, in Paris and Frankfurt.

Causes of Boiler Explosion.

Prof. Hunt, in a lecture lately delivered before the Polytechnic Society, called attention to some remarkable points in connection with the action of heat on water that contains no air, stating that arising from this circumstance, as well as from the spheroidal condition of the steam generated, we have two very active and predisposing causes of boiler explosions. Water is frozen by the loss of heat necessary to maintain its fluid state; ice formed during agitation contains no air bubbles, but under ordinary circumstances, the upper portion is filled with air bubbles in straight lines. It is a remarkable fact that water, in the process of congelation, has the power of rejecting everything; consequently all the air the water contains is expressed. If the access of air to water which contains no air be prevented, it will not boil at 212 degrees. In this state the temperature will increase to 230,

240, or even 250 degrees, and advancing to between 270 and 280 degrees. About these points the whole mass will explode with the violence of gunpowder. The condition of water is said to be not unfrequently formed in steam boilers, producing explosion—an important scientific fact.

New Orleans, Jackson and Great Northern Railroad.

The Jackson *Mississippian*, of Friday last remarks:

It is truly gratifying to the friends of this great enterprise to learn that it is rapidly progressing, under the management of those who are now conducting its affairs. We learn from a late *Holmesville Southron* that the cars are now running to Magnolia, bringing the "iron horse" ten miles nearer to us than Osyka, which for the last twelve months has been its stopping place. We also learn from Mr. Parker, one of the energetic contractors, that the road has been graded to Brookhaven, and is ready for iron to that point. Dr. Grant, one of the contractors, is now busily engaged in laying down the iron. Brookhaven is now thirty miles north of Osyka. Messrs. Cook, Buckingham and Bradford; Latimore McKie & Co.; Mr. Rains and Mr. C. A. Parker, contractors, are also working with large forces north of Brookhaven, at different points, and are hurrying it forward with all possible dispatch. We may safely predict from present indications that the road will be completed to Jackson by the 1st day of January, 1858.

Railroad Earnings.

The earnings of the Terre Haute and Alton road for August were \$70,000, and for September they promise to be 80,000.

The New York Central Railroad receipts for August were about \$716,000.

We give below the earnings of the Panama Railroad for the current year to date, compared with those for 1855:

	1855.	1856.
January	\$43,942 22	\$116,421 47
February	51,880 01	107,132 56
March	99,862 73	127,302 06
April	78,651 01	129,210 60
May	128,168 12	157,614 04
June	87,161 99	99,072 76
July	53,180 84	109,971 84
Total	\$542,882 92	\$846,724 83
Increase		\$303,891 91

The receipts of the Erie railroad thus far this year, compared with the same months of the previous year, have been:

	1854.	1855.
October	\$539,018	\$598,340
November	486,792	557,587
December	454,971	582,062
1855.		1856.
January	\$427,829	402,988
February	340,751	367,915
March	507,090	460,358
April	506,597	628,070
May	475,127	587,793
June	396,837	479,776
July	372,077	481,551
August	484,779	527,451
Total	\$4,941,868	\$5,683,891
Increase in 11 months		\$742,023

The following is a statement of receipts on the Virginia and Tennessee railroad, for the month of August, 1856:—

Passenger fare	\$19,650 66
Freight	16,609 10
United States Mail	1,534 87
Express freight	229 89
Total	\$38,024 02

Being an increase of \$9,228 17, or about 32 per cent. on the receipts of August, 1855.

Dinsmore's New Railway Guide for September.

The second edition of this useful publication has been on our table some days, but we have delayed speaking of it as it deserves, for want of time to examine it. It contains time tables of all the leading routes in the United States and Canada—with all the through and way fares and distances; together with the time of starting of all the inland and ocean steamers—with an index to each part, so that the "anxious enquirer" finds no difficulty in learning the way to the "desired h[e]aven." It also contains a gazetteer of the principal towns on the various routes, showing their situation and population, together with a map of all the roads sufficiently large to assist travelers in tracing their routes; with some dozen or more, in miniature, of the principal cities and vicinity—exhibiting all the roads leading from them. The whole combined furnishes information to the traveler worth several times its price, while it reflects much credit upon its talented editor RICHARD S. FISHER, Esq., the well known statistician, and the enterprise of the publishers DINSMORE & CO., whose experience guarantees the reliability of the matter contained in it.

Brooklyn City Railroad Company and the 9th Ward Inhabitants.

It seems to us that the Company are acting the penny-wise and pound-foolish game in not laying down their rails as agreed. The traffic may not be sufficient to pay them now, but no doubt very soon will be; as nothing but this is keeping this part of the city back, the rails must go first and people will follow; they will not go and wait for the rails.

This, however, is not the question. The Company agreed to carry the tracks to the city line, and they ought to keep faith with the people who gave them such a munificent grant. The inhabitants of the Ninth Ward have held a meeting to consider this subject and resolved to use all means in their power to compel the Company to fulfill the requirements of their charter.

Ottawa Ship Canal.

The Staff of Engineers with the assistants and axemen, &c., for the Survey of the Ottawa Ship Canal and the North Shore Railway from Pembroke to Lake Huron, numbering forty in all, arrived here on the 17th ult., and have been making preparations to commence this important work early next week. Jas. Stewart, Esq., Chief of the Staff under superintendence of W. Shanley, Esq., has opened his office and permanently fixed the head quarters of the survey in this town, four or five draughtsmen remaining in the office. G. H. Perry, Esq., one of the most able and energetic civil engineers in the Province, will commence on Monday the survey of the river downwards, from Pembroke to the Chats, triangulating the whole stream as he proceeds. To H. Munro Mackenzie, Esq., is allotted that section of the line of operations between the mouth of the Matawan and Lake Huron, the preliminary survey on French river being undertaken by Robert Shanley, Esq., a most talented and accomplished gentleman. J. D. Slater, Esq., a civil engineer who laid out the first railroad in Upper Canada, takes the superintendence of the railway survey, commencing at the contemplated terminus of the Brockville and Ottawa Railway upwards. Everything looks propitious, and this governmental undertaking augurs well for its final completion, as everything that professional skill and scientific attainment can do will be effected. Every unprejudiced mind must now be convinced that the Government is in earn-

est with respect to the Ottawa country, and grumblers may whine away their doleful notes, and disappointed politicians may storm as much as they please the work must go on, and the railway or the canal, if not both will be completed. Pembroke is now full of activity and bustle, and the interest taken by the government in this matter is guaranteed by the fact that the sons and nephews of some of its most prominent members compose part of the expedition. We may mention the names of Tache, Lemieux, Parent, Pemberton, Lindsay, &c., &c. The office of one department of the Board of Works now open here we hope to see stationary until the canal and railway is completed and open to commercial enterprise and to the public at large.—*Pembroke Observer*.

Central Ohio Railroad.

This road, by which the Baltimore and Ohio railroad is virtually extended westwardly into the heart of the State of Ohio, and there connects with the gigantic network of kindred lines covering that vast region, continues to exhibit a steadily growing development of its immense business resources. Under the judicious and energetic management of those who now direct its operations, its traffic and travel are prosecuted with an efficiency that must command constant accessions, and secure to the company, at an early day, a full and permanent release from financial embarrassment. We have before us the weekly statement of the gross earnings of the road for the six days ending on the 6th of the present month, which exhibits the highly gratifying result of an average receipt of very nearly three thousand dollars per day. The items are subjoined:

Passengers	\$7,451.92
Express	164.89
Mail service	540.54
Freight	9,398.42
	\$17,555.77

—*Balt. American*.

Springfield Mt. Vernon and Pittsburg R. R.

This project is not relinquished, and there is now hope of its final completion. A writer in the *Mt. Vernon Banner*, has been making inquiries at headquarters, and has obtained the facts contained in the tabular statement below:

Arrangements are about to be entered into with the Pittsburg, Fort Wayne and Chicago Railroad Co., by which that Company takes of Preferred Stock of the S., Mt. V. and P. road	\$75,000
A like arrangement is to be entered into with the Cincinnati, Hamilton and Dayton Railroad Co.	75,000
In addition to the above, an arrangement has also been made, by which contractors agree to take \$200,000 of second mortgage bonds, eastern division, S., Mt. V. and P. road, in payment on construction of work yet to be done, at 75 cents on the dollar	150,000
Unpaid subscriptions in Knox county available and not collected, at least	50,000
Unpaid subscriptions of O. and P. Railroad	23,000
	\$373,000

The above amount of cash means which the officers of the company are confident of having the command of in a very short time, is all to be applied to the construction of the road east of Delaware. Besides this, there will remain on hand \$158,000 of the Company's second mortgage bonds on the Eastern Division of their road. If those can be disposed of, on terms as favorable as has been obtained for those already sold, the company will have funds amply sufficient to complete the road, ready for the iron, in the best manner, and without any floating debt. The iron is expected to be purchased with the company's first mortgage bonds, Eastern Division, which are reserved for that purpose.—*Pittsburg Gazette*.

SOUTHERN RAILROAD.

State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the superstructure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track-laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perch.

Five cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the FIRST DAY OF NOVEMBER NEXT, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track-laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions; the first of 21 miles, the second of 28 miles, the third of 33½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one-third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a-half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holy Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

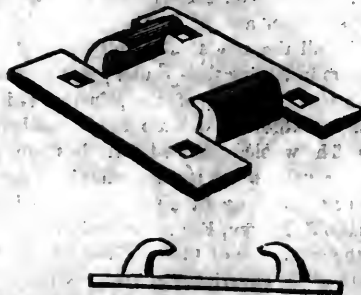
These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

WM. C. SMEDES,

President of the Southern R. R.

6188

NEW YORK Wrought Iron Railroad Chair Company,



THIS Company is prepared to receive orders for the manufacture of Wrought Iron Railroad Chairs of the best material, on a new and superior model, and by improved patented machinery.

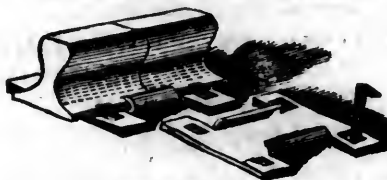
The thickness of the Lips of the Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge;—so that a less weight of metal may be used and a strength required equal, if not superior, to that of a heavier Chair of uniform thickness.

Our arrangements are now complete for executing work promptly, and all orders from responsible parties will be filled on short notice.

These chairs are used by the following companies:

Virginia Central R. R. Co.,
New Orleans Opelousas and Great Western R. R. Co.,
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Washington and Saratoga R. R. Co.,
Mississippi Central R. R. Co.,
Long Island R. R. Co.,
Illinois Central R. R. Co., &c., &c.
Address JACOB ROWE, President,
6 Broadway corner Beaverst., opposite the Bowling Green
NEW YORK.

RAILROAD SPIKES.



WROUGHT IRON

Chairs and Fastenings.

THE CALVERT IRON & NAIL WORKS continue to manufacture with increased facilities, HOOK & FLAT HEAD RAILROAD SPIKES, and WROUGHT CHAIRS and FASTENINGS of all patterns, also CUT NAILS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES.

Long experience in the manufacture of these goods enables them to produce an article of superior quality and finish. They are in use upon a large number of roads in the country and are highly approved.

Orders filled promptly, and at the lowest prices.

J. HOPKINSON SMITH,
Baltimore, Md.
164

Brooklyn Water Works.

NOTICE TO MACHINISTS.

SEALED PROPOSALS will be received at the office of the undersigned until the 1st of October at noon, for the construction of two Pumping Engines, Cornish or equal to Cornish, for the Brooklyn Water Works, of capacity to raise Ten Millions (N. Y.) gallons daily each, 170 feet high, with three boilers each, to be built and erected complete on the stone foundations prepared for them, and to be of first class workmanship.

Drawings in detail accurately defining the style and character of engines and appurtenances to be submitted by the proposers, with description.

Specifications and further information may be had, at the office of the Chief Engineer, J. P. KIRKWOOD Esq., No. 4 Halsey's Buildings, Brooklyn, or of the undersigned.

The right is reserved to reject any of the proposals made.

H. S. WELLES & CO.,
No. 4 WALL ST., New York.

8132

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural rocks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't LaC. and Mil. R. R. Co.

MILWAUKEE, August 1st, 1856. 10432

First Class Locomotive

FOR SALE AT A GREAT BARGAIN.

THE Engine is inside connected—4 ft. 8½ in. gauge—5½ ft. drivers—cylinders 14½ by 20 in. stroke. Independent cut off valve motion. Copper flues and flue sheets. Weight 20 tons. The above engine is nearly new, in fine condition, and in every respect a FIRST CLASS PASSENGER ENGINE.

For particulars address

ELLIOTT & BOWLES,

118 William st., N. Y.

Also a second hand Engine of smaller capacity, for sale as above. 25th

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.
NEW YORK, July 21st, 1856.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	5 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	15 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

New York and Erie R. R.

On and after Thursday, August 7, 1856, and until further notice,

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m., for Dunkirk.
MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
BOOKLAND PASSENGER, at 3½ p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.
EMBOURY, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Ganandisgia and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Beranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c., &c.

D. C. McCALLUM, General Sup't.

NOTICE TO RAILROAD COMPANIES. FIRE INSURANCE.



THE LIVERPOOL AND LONDON FIRE AND LIFE INSURANCE COMPANY.

37 CASTLE STREET,
LIVERPOOL.

Office, 56 Wall Street, New York.

20 and 21 POULTRY,
LONDON.

AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

PAID-UP CAPITAL AND SURPLUS AND RESERVED FUNDS,

THREE MILLIONS OF DOLLARS.—OVER HALF A MILLION INVESTED IN THIS COUNTRY.

THE LIABILITY OF THE SHAREHOLDERS UNLIMITED.

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In addition to their usual business, this Company is prepared to take Fire Risks upon
Railroad Property of all Descriptions,

AS FOLLOWS:

1. They will name a premium at a low rate upon a policy to cover ALL the perishable property of any Railroad Corporation.
New York, August 27th, 1866.

The Railroad Companies desiring insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2. This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1886.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1886.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

Railroad Iron.

700 TONS "Erie" pattern, 57 to 58 lbs. weight per yard, now in port, on ship board. For sale by
THEODORE DEHON,
10 Wall st., near Broadway.
Sept. 4th. 3137 New York.

Railroad Iron.

1,000 TONS Railroad Iron, "New York and Erie" pattern, best English make, on the way from England to New Orleans. For sale by
THEODORE DEHON,
10 Wall st., near Broadway.
Sept. 4th. 3137 New York.

BUSINESS CARDS.**DRAKE & CARTER,**

49 Merchants' Exchange, Wall Street.

THE subscribers have formed a Co-Partnership under the name of DRAKE & CARTER, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Lending Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be JAMES M. DRAKE and GALEN A. CARTER. EDWARD B. LITTLE Esq. has contributed Fifty Thousand Dollars as special partner. D. & C. will occupy the Offices No 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)
JAMES M. DRAKE. GALEN A. CARTER.

WILLIAMS & PAGE,

No. 44 Water Street,

BOSTON, MASS.,

RAILROAD SUPPLYING AGENTS

and Commission Merchants, for the Sale of
Iron Rails, Chairs, & Spikes,

ENGINES, CARS, AND MACHINERY,

BUSH & LOBBELL's and other kinds of WHEELS,

BEST HAMMERED FAGOTED AXLES,

LOWMOOR, BOWLING, AMES', and NASHUA TIRES,

Iron and Steel of all kinds for Railroad Shops,

CAR TRIMMINGS OF EVERY KIND,
and all articles used in Equipment and Repairs of Railroads,
Engines, and Cars, at manufacturers' prices.

THOS. S. WILLIAMS, PHILIP S. PAGE,
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SEYMOUR, MORTON & CO.

General Railroad Agency,

OFFICE-METROPOLITAN BANK BUILDING
110 Broadway, NEW YORK.

ARE prepared to contract for the construction and equipment of railroads in any part of the country; also to furnish corps of Engineers and Contractors; Locomotive Engines and Cars; Railroad Iron, Chairs, Spikes, [Switch-Irons, &c., &c.]

They will also sell or negotiate loans on all kinds of Railroad securities.

SEYMOUR, MORTON & Co. have to dispose of at private sale, in amounts to suit persons desirous of investing a large amount of valuable Railroad and other Securities.

The members of the firm having had a large experience as Civil Engineers, on some of the most important public works in this country, also tender their services as Consulting Engineers to those engaged in the construction of Railroads.

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NO. 83 WEST THIRD STREET,
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Public Stock Sales daily
AT 11 O'CLOCK A. M.,
AT THE THIRD ST. STOCK EXCHANGE AS ABOVE.

AT PRIVATE SALE.—J. L. H. & Co. always have for sale a choice variety of State, County, City and Railroad Bonds and Stocks; also, Bank and Insurance Works, and other Securities. NEGOTIATE LOANS on Stock, Notes, Bills of Exchange, Mortgages, &c. REAL ESTATE SALES, whenever required, at the STOCK EXCHANGE or on the premises.

CINCINNATI.**HEWSON & HOLMES,**

AUCTIONEERS AND STOCK BROKERS,
Have regular sales of Stocks, Bonds, and other Securities.

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At 1 o'clock at the Merchant's Exchange,
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SPECIAL SALES

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Offices—Nos. 83 and 85 Walnut street,

Where they offer at private sale

A GREAT VARIETY OF

State, County, City and Railroad BONDS and STOCKS,

NEGOTIATE

LOANS, NOTES, BILLS OF EXCHANGE,

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American and Foreign bar, boiler, and pig iron, Tyres, Axles,

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Dealers in Railway, City, County, and State

BONDS,

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We have on hand and for sale, of County Bonds—

Hardin County (Ky.), 6 per cts. Davidson City (Tenn.), 6 p. cts

Carter, Bath, and Montgomery (Ky.), 6 per cents. Iowa County (Wis.), 8 per cts.

Also a variety of CITY, COUNTY, and RAILWAY

SECURITIES in smaller lots.

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EXCHANGE, &c., are prepared to negotiate Stocks,

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WILL give prompt attention to the purchase and sale of

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CHAS. A. MEIGS, late Cashier Am. Ex. Bank.

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Bar Iron, all sizes, Manu-

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Plates, up to 7 inches.

Rounds and Squares,

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Railroad Spikes.

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Bridge Bolts, Screwed

and Tapped.

Strict attention paid to the quality and finish

of our IRON, and all orders promptly filled.

A sample of our machine-made chair may be seen at the

Bank of the Republic in New York.

August, 9, 1886.

3m

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THE undersigned may be consulted upon the location, con-

struction, equipment, and management of railroads in any

part of the United States or Canada, and upon the most ap-

proved modes of constructing heavy masonry for bridges and

the superstructure thereof, whether of wood or iron.

Also upon the best form of rail, and of laying down and

maintaining a permanent railway, and in general upon all sub-

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branches, and in its most difficult application.

A long and intimate connection with the construction and

management of our most important American railroads, and a

personal knowledge of those in Europe, should render the un-

derigned competent to give such advice or make such sug-

gestions, as will enable railroad companies to avoid errors of

location, construction and management which are more or less

inseparable from all new enterprises in our country.

Engineers of highest character and professional attainment,

and competent Superintendents can be recommended or sup-

plied to railroad companies for immediate service on surveys

and construction and on management.

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Consulting Engineer,

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employs Draughtsmen, and is at all times prepared to execute

his work with promptness. He will furnish Architectural and

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they will be lithographed in the HIGHEST STYLE OF THE ART.

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THE undersigned is prepared to furnish Specifications, Esti-

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bouts, Propellers, High and Low Pressure Engines, Boilers, Mill

Work, etc., etc. Particular attention given to the procuring and

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Machinery of every description.

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IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible situations on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

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Prichard, M. B.,

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Roberts, Solomon W.,

Ohio and Pennsylvania Railroad, Pittsburgh, Pa.

J. S. Sewall,

CIVIL ENGINEER, ST. PAUL MINNESOTA.

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Chief Engineer Brunswick and Florida Railroad, Brunswick, Georgia.

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Civil Engineer, 63 Trinity Building, 111 Broadway, N. Y.

Straughan, J. R.,

Ohio and Indiana Railroad, Fort Wayne, Ind.

Shanly, Walter,

Chief Eng'r Bytown and Prescott Railway, Prescott, Canada.

Steele, J. Dutton,

Pottstown, Pa.

Charles B. Stuart,

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Edward W. Serrell,

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Civil Engineer and Architect, Philadelphia.

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Chief Engineer, Susquehanna Railroad, Harrisburg, Pa.

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MANUFACTURERS of Mathematical Instruments to the U. S. Government, No. 23 South st., BALTIMORE, Md.

James W. Queen,

264 Chestnut st., PHILA., has for sale Engineers' Levels, Transits, Chains, Tapes, &c. Priced catalogues by mail gratis.

Swiss Drawing Instruments.

SUPERIOR to all others. Catalogues gratis. Sold only by AMSLER & WIRZ, 211 Chestnut st., PHILA., Pa.

Wm. J. Young

HAS removed his Engineering and Surveying Instrument Manufactory to No. 33 North Seventh Street, Philadelphia.

H. SAWYER

(of the late firm of SAWYER & HOBBY),

MANUFACTURER of Transits and Levels, has removed to Union Place, near Warburton Av., Yonkers, N. Y.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XII., No. 40.]

SATURDAY, OCTOBER 4, 1856.

[WHOLE No. 1,068, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, October 4, 1856.

Rock Island and Chicago Railroad.

We last week gave the annual report of this company. It presents a very favorable account of earnings for the two years past. The road has a good line, and is meeting with the success common to the numerous roads running out of Chicago.

The report is that of the President alone. It is the simplest possible statement of current receipts and expenditures, to which is added the total cost of the road, with the receipts to capital from stock, bonds and other sources.

From this statement it appears that the construction has increased \$1,489,528 since the previous report. No explanation or vouchers are given for the immense expenditure over previous estimates. This is the more extraordinary from the fact that in the previous report, the total addition to the capital necessary for placing the road in a condition to earn \$1,600,000, was stated to be \$559,400; making the total estimated cost of the road, \$5,118,108. There has been, therefore, an expenditure of \$930,117 beyond the estimate, for which no explanation is offered. On the contrary, the President in his last report states the "cost of the road will be still further increased by new equipment ordered, and by new station houses

and freight depots now being erected on the line of the road."

Now we think this and all reports of a similar character are properly open to censure. When the Directors in one report tell us how much their road has cost, and how much will be required to complete it, and when in their next report this estimate has been exceeded nearly \$1,000,000, should there not be some explanation for such excess? It seems that the Directors of this company entertained very excellent ideas upon this subject not long since, for we find in their report for 1855, pages 15, 16 and 17 the following very wholesome doctrine laid down—

"Freedom from debt, and the liberal earnings of the road, will enable this company to establish a sound financial and working system for the road, which will make the bonds, and the stock also, a solid and reliable security. But in order to do this, a sound system of finance must be adopted and adhered to. When the road is fully equipped for doing the business on the line, the construction account should be closed, with bars not subject to removal; and everything in the nature of repairs should be paid from current receipts, and the dividends should be limited to actual net earnings, after retaining a surplus for depreciation of the work, which is rapid, and increases with the increase of business."

"The great financial error in the railroad system generally seems to be, that the construction account is permitted to run with the road; whereas, when the road is completed and in operation, the construction account should be stopped."

"When a new road is in successful operation, the claims of the stockholders for a dividend of all the earnings beyond running expenses are very strong; and often, the desire of profitable operations by inflating the stock, has a still stronger influence in producing large dividends. As the stock becomes desirable, every requisition for an increased expenditure is promptly met by a new issue of stock. The result is, that at the end of five or ten years, the capital stock on which dividends are to be declared, is found to be double what it was understood to be at the time the road purported to be finished. And the stockholders, after luxuriating for years on 10, 12 and 15 per cent. dividends, with an occasional extra dividend in stock, are informed that a dividend will be paid to them provided they will take the amount out of a new issue of stock or bonds at par.

"The severity of the times, and the illegal issue of a limited amount of stock, has produced investigation and developed the great errors in the financial management of the railroad system

generally. Commencing operations at the very time of these developments, shall we be held blameless if we fail to correct the errors which now must be apparent even to those who have been tempted to commit them?

"If the course above suggested had been generally adopted fifteen years ago, and firmly adhered to, it would have saved a hundred millions of dollars to those confiding men who have aided these important improvements by putting their money in them. And resting on such a broad and firm basis, the public confidence in the great mass of railroad securities could not have been so completely broken up, and its withering influence extended to twenty thousand miles of these works of conceded utility, interwoven with all the business interests of the country and essential to their success, by an over-issue of two millions of dollars, confined to a single railroad, sixty miles in extent."

When this company received the road from the contractors, the latter were allowed an extra compensation of \$536,783. As before stated, the Chief Engineer of the company estimated as necessary to place the road and its equipment in a condition in which it could earn \$1,600,000, an additional expenditure of \$559,400. The road earned the past year \$1,416,000. There have been expended in construction, in the meantime, \$1,489,527, and we are informed that further and, probably, large expenditures will still be required. Now we object to the last report for the following reasons—

1st. It is simply a statement in general terms, signed by the President, and is accompanied by no reports from the Superintendent, Treasurer, nor Engineer. We hold that a report of the operations of a road of the magnitude of the Rock Island and Chicago, should have minute and carefully drawn-up statements from all the heads of the several departments.

2nd. It does not appear that the excess of expenditure of \$930,117 over the estimate was applied to any useful purpose. It may have been entirely lost to the company.

3rd. The report does not give any estimate of the expenditures yet necessary to complete the road. When further sums are required for construction, we think the objects of such expenditures should be carefully set out. The report of 1855 contained such

estimates of the sums necessary to place the road in a condition in which it could earn \$1,600,000, with the items of such expenditure.

4th. The report should have stated the cost and earnings of the Bureau Valley Branch. Upon this road the company pay an annual rental of \$125,000. Thus far no statement has been given to the public of the cost of this branch. It interests the public to know whether this road was completed when it came into the hands of the company. If not, what sums were required to complete it. The earnings and the cost of operations of this branch should have been stated, that the public may know whether the leasing of the travel was a good thing for the stockholders.

We are more free to submit these remarks for the reason that none know better how a report should be drawn than the officers of this company, and none better understand the importance of having all the acts of the Directors affecting the interests of the stockholders properly spread before them. The moment men enter upon the charge of a railroad, there is great danger that they will lose sight of the interest of its owners in efforts to promote their own. The only safeguard against such tendency is publicity given to all their acts. Where stockholders know exactly what they are about, they have always a check in their hands upon the misconduct of the latter. For the importance of a proper system of management and reports we cannot do better than refer to the eloquent extracts already given which are taken from Mr. Flagg's elaborate report annexed to that of the Directors for the year 1855. We cannot reconcile with his great experience in financial matters, his known thoroughness in all his official relations, and his incorruptible integrity, the entire omission of a report from him, for the present year. We certainly had a right to expect an indignant rebuke for the violation, by the very company of which he is a member, of a policy, which, in his official relations with this company, he pronounced to be the only one that could preserve railroads from destruction and restore the confidence of the public so severely shaken by incompetent or corrupt management.

Cattawissa, Williamsport and Erie R. R.
At a meeting of the managers of the Cattawissa, Williamsport and Erie Railroad, held on 24th ult., Thomas Kimber, Jr., was elected President, in place of William D. Lewis, who resigned some time since. At the same time Samuel V. Merrick, Morris L. Halliwell and Joseph B. Myers were elected managers, in place of Robert Bayard of New York, Alexander Diven of Elmira, and Francis N. Buck of Philadelphia, resigned.

Toledo and Detroit Railroad.

The Toledo and Detroit railroad is to be so far completed as to take the locomotive by the first of December. But it is not contemplated to finish the road this fall between this city and Monroe, but to expend all the energies of the company on that part lying between Monroe and Detroit, as the opening of that portion will open a communication between Detroit and the Southern road, and between Detroit and this city by a circuitous route through Monroe and Palmyra. The road is already graded through a great part of the distance between Detroit and Monroe, and 25 miles of it are ready for the rails. We understand that the iron is now on its way from Wales, and that

seven hundred tons have arrived at New York and will soon be in the hands of the workmen. The road will be most important during the winter season, and its completion this fall, so far as to bring it into use, will be a matter for general rejoicing.—*Toledo Blade.*

Vermont Central and Vermont and Canada Railroads.

An attempt is now being made by the parties interested in these roads to extricate them from the difficulties in which they are involved, and to place them in a position to realize the largest possible sum from the investment in them. For this purpose, committees representing the different interests, consisting of the following persons, viz.:—Peter T. Homer, Wm. P. Mason and Geo. M. Barnard, on behalf of the Vermont and Canada railroad; Charles Hudson and Wm. Thomas on behalf of the first mortgage bondholders of the Vermont Central; John C. Prall and Mark Healy on behalf of the second mortgage bondholders; and H. W. Pickering, John W. Labaree and Henry Homer on behalf of the stockholders in the Vermont Central company, have submitted a plan, the outlines of which we give. The committee commence their report by stating that the road cannot be expected to earn a dividend upon its whole cost; but that with good management, it could probably be made to earn six per cent. upon \$3,000,000 or \$4,000,000. That to earn this sum it is necessary that all the interests be harmonized, instead of being in conflict, as they are at the present time. The report then goes on to say—

It may be necessary to a full understanding of this subject to state briefly the character of these claims respectively. The Vermont Central railroad company, forseeing the importance of a connected line of road from Connecticut river to Rouse's Point, so as to connect with the Ogdensburg railroad, and thus secure the business of the West, took a lease of the Vermont and Canada road, agreeing to pay them annually, for the use of their road, eight per cent. upon its cost. To secure the payment of this annual rent, it was agreed between the parties, that if the rent at any time should remain unpaid for the space of four months after it became due, the Vermont and Canada might "enter or take possession of, and use and run, not only the Vermont and Canada, but also the Vermont Central railroad, together with all the lands, depots and other property, rights and privileges, then owned and enjoyed by each of the aforesaid companies—and having thus entered, it shall be lawful for the said Vermont and Canada railroad company to receive all tolls, fares and other lawful income receivable for the use of said roads;" and the money so received by the Vermont and Canada railroad company, was, after paying the necessary expenses, to be applied to the payment of the rent then due or accruing to the Vermont and Canada railroad company. This contract was entered into July 9, 1850; and may be regarded as the first lien upon the property of the Vermont Central railroad.

Subsequently, the Vermont Central railroad, having agreed to issue two millions of dollars worth of bonds bearing an interest of seven per cent., executed a mortgage to William Amory, Chas. O. Whitmore and John Smith, trustees for the holders of these bonds. This instrument or mortgage conveyed "the railroad and franchise of the Vermont Central railroad company, as the same is located, constructed and improved, and as the same may be hereafter legally located, constructed and improved by said company, together with all the real estate belonging to said company, also, the stations, engine houses, shops, wood houses, iron, sleepers and other appendages, as they now are, and as they may be, if repaired and improved, together with all the locomotives, engines, passenger, freight, dirt, hand and other cars, and all the

other personal property belonging to said company, as the same now is in use by the said company, or as the same may be hereafter changed or renewed by said company, subject however to all the rights and privileges which the Vermont and Canada railroad company have in the above granted premises." This mortgage was dated, October 20th, 1851, and created the second lien upon the Vermont Central road.

Still later, another issue of bonds was made by the Vermont Central railroad company, and these bonds were secured by a like mortgage of the road, franchise and property, subject to all the legal rights granted to the Vermont and Canada company, and also to the holders of the first mortgage bonds. This mortgage was given in 1852, and creates the third lien upon the property of the company. The last class of creditors are either the holders of certain bonds or notes of the corporation not secured by any mortgage, or certain claims arising from diverse transactions with the company or its agents.

The Vermont Central railroad company, therefore, appear to have three distinct classes of preferred creditors, and one class not preferred.—Now, whether the instruments creating these liens are legal or not—whether a railroad corporation can lawfully mortgage its franchise—or whether a mortgage will pass subsequently acquired property—or whether bonds sold under par are vitiated by the usury laws—as the original parties acted in good faith, and as the corporation received the stipulated consideration, it is not for the corporation to raise any of these questions, or avail itself of any of these pleas. The faith of the company has been pledged, and by that pledge it is bound to abide.

But the different classes of creditors stand in a different relation to each other. There is no pledged faith as between them. The corporation has contracted and covenanted with its creditors—it has given its pledge which should be held sacred. But there is no such contract—no covenant—no pledged faith between the different classes of creditors. The mortgage to secure the first bonds was made subject to the Canada lease, and the mortgage to secure the second bonds was made subject to the first mortgage and to the Canada lease; but nothing is contained in these latter instruments, which stipulates that the prior securities shall be valid, or that guarantees the payment they were given to secure. The holders of the later securities stipulate with the corporation that they will take those securities subject to the legal rights of those who hold prior securities; but they feel themselves perfectly free to contest these prior liens. In fact, suits have already been instituted to test their validity, and the corporation's money has already been expended to maintain or defend these suits; and unless the matter can be compromised, it is probable that all the net earnings of the road will be absorbed in litigation for years to come.

It is not the prerogative of this committee to pass upon the numerous legal questions with which this subject is surrounded. Nor should we feel ourselves competent to decide questions on which the best legal talent is divided. But the fact that there are grave questions of law connected with all these titles, which, if prosecuted, will require years of litigation, and involve a great expense to all parties, should teach them a lesson of wisdom, and induce them to adopt any plan of compromise, rather than lose their tempers and squander their means in vexatious and ruinous suits.

Though we shall give no opinion upon the legal questions to which we have alluded—and though we think it a matter of great doubt how they would be decided by the appropriate judicial tribunal; we feel bound in fidelity to state them, that the different parties interest may be able to see the doubtful ground on which they respectively stand. Some of our best lawyers maintain, and with a great show of truth, that no railroad corporation can legally mortgage its franchise without express authority from the Legislature in granting the

charter. The position they take is this: A railroad charter involves one of the highest prerogatives of sovereignty, that of taking private property without the consent of the owner—a power which the sovereign himself cannot exercise, unless it be demanded by a public exigency. When, therefore, our Legislature grant a railroad charter in virtue of their right of eminent domain, they actually confer one of the highest prerogatives of sovereignty upon the corporation, and the corporations assume a responsibility of which they cannot divest themselves, without the consent of the sovereign. The corporation is made a special agent of the State to exercise a high trust, and meet a crying want of the public; and it has no right to transfer this delegated power to another, without the consent of the principal. If this position be a sound one, the mortgages by which the first and second class of bondholders are supposed to be secured must be void, so far as the franchise is concerned, and hence the security would become materially impaired.

The peculiar position and guarded language of the Canada lease, might save that instrument from the objection stated above; but it is nevertheless open to other objections of a very serious character. It is alleged that the lease itself was never legally authorized by the stockholders of the Vermont Central road;—but as that company has taken possession of the Vermont and Canada, and has run the road under that lease, they have morally, at least, waived all objection of that sort, and are bound in honor to abide by the provisions of that instrument. Another position however has been taken, which may seriously impair the remedy provided in the additional lease. It is maintained by high legal authority, that a mortgage cannot pass subsequently acquired property; that all personal property must be clearly described in the mortgage, and that all those general designations, such as "whatever property they may then possess," or, "as the same is then owned or used by them," are too vague and indefinite to convey property. And further, it is maintained that it would be a fraud upon the lender of money to pretend to secure him by giving him a mortgage upon the very property, to pay for which this identical money was borrowed, if a previous creditor could hold this property under a mortgage given before the property was created, and when it could be only a matter of hypothesis that such property ever would exist.

If this doctrine be sound, and no mortgage can convey subsequently acquired property, every security held by these parties would be seriously impaired. The Vermont and Canada might in case of the non-payment of their rent, take possession of the road; but those holding later securities might come in and take the rolling stock out of their hands; in which case, they would be under the necessity of equipping the road themselves, before they could obtain anything towards the payment of their rent. Nor would the injurious effects of this doctrine be confined to the Vermont and Canada; the holders of the first and even the second mortgage, would find this doctrine a two-edged sword, which would sever their claims from a portion of the property on which they have been fondly leaning for the security and payment of their debt.

These and other questions vital in their character, have been raised, and whether they may be sound or not, they will have their influence, and greatly impair the market value of these securities.

As wise and prudent men, the holders of each class of these securities had better compromise than take the risk of the law's delay and the law's uncertainty. The litigation which has already taken place between the different interests, the unexpected decisions which have already been made, and the numerous questions which are now being raised, furnish a foretaste of what may be expected in case no arrangement is made. There is at the present time a good feeling and a strong disposition among the high-minded, liberal, and most intelligent men of each class, to adopt

some plan of accommodation; and unless they suffer themselves to be blinded by extreme men and extreme measures, we trust that an arrangement will be made.

The plan we would recommend, is one of consolidation of bondholders, stockholders and creditors of the Vermont Central, leaving the Vermont and Canada out of the arrangement. But as the latter corporation would be benefitted by this consolidation, they shall so modify their lease as to require six per cent. instead of eight as the rent of their road; and as their claim is now prior to any other, so, under this arrangement they shall remain in the character of first preferred creditors, the first net earnings of the road being appropriated to the payment of their rent; and in case the net earnings of the road shall not in any year be sufficient for the payment of said rent, the net earnings of the road shall be appropriated to that object; and no dividend shall be paid upon any of the stock of the Vermont Central company, till all arrearages shall have been paid upon the lease of the Vermont and Canada road.

The basis of consolidation shall be this: The first Mortgage Bonds shall be converted into stock at the rate of seventy-five cents on the dollar; the second Mortgage Bonds shall be converted into stock at the rate of thirty-five cents on the dollar; and the other Bonds not secured by mortgage, and all other demands against the Vermont Central Company when the same shall have been allowed, shall be converted into stock at the rate of twenty-five cents on the dollar. The present stock of the Vermont Central, consisting of 100,000 shares, and standing on the books of the corporation at an average of fifty dollars per share, shall be converted into 8000 shares of one hundred dollars each.

The Vermont and Canada, and all the creditors of the Vermont Central shall relinquish all rent or interest which shall be due when this arrangement shall go into operation, except as hereinafter provided; and if the net income of the road shall not in any one year, be sufficient, after paying the Vermont and Canada all the rent due them at that time, to pay a dividend of six per cent. on the stock of the new company hereby proposed to be created, the stockholders of the said new company shall receive the excess, if any there be, in full satisfaction for the dividend of that year, so that in no case shall there be an accumulation of dividends due on the stock.

As certain coupons for six months interest, have been detached from the bonds issued by the Vermont Central, and are held by third parties, it is proposed that these coupons for six months interest up to Nov. 1, 1854, on the first mortgage bonds, and to July 1, 1854, on the second mortgage bonds, whether separated from the bonds or not, be converted into stock on the terms and conditions of the class of bonds to which they respectively belong.

We would also recommend that six months interest be allowed on the Bonds of 1852 and 1856, to be paid in stock at twenty-five cents on the dollar, that being the basis of the floating debt.

All the stock of the proposed company shall consist of shares of one hundred dollars each; and whenever the net income of the road shall be more than sufficient to pay six per cent. on the Canada lease, and a dividend of six per cent. on the stock of the consolidated company, the excess shall be divided pro-rata upon the capital stock of the Vermont and Canada, and of the consolidated company.

If this, or a similar system be adopted, it would be necessary to apply to the Legislature of Vermont for the passage of an act authorizing such consolidation, and providing the necessary steps to be taken, in case any portion of the creditors or stockholders refuse to come into the arrangement. If a new company be formed, it would be the lawful successor of the present Vermont Central, and so would be bound to pay the debts of the present company; and the holders of claims which have now only a nominal value, would then

come in as first preferred creditors, and must be paid in full, and hence the necessity of some statute provision to meet such cases. Or, as the Supreme Court of Vermont are clothed with full chancery powers in the case of such corporation, perhaps on the petition of a major part of each interest, the court might issue a decree meeting all points in the case.

We are aware of the difficulty of satisfying every interest. Each class will naturally feel that the plan proposed requires too great a sacrifice of them. We have not the vanity to suppose that we have estimated with unerring accuracy the exact value of each class of these securities. We are aware that we could please each class, better by estimating their respective securities higher than we have; but if this favor were meted out equally to each class, nothing would be gained by either. The whole earnings of the road will be divided on the present estimate, and the amount to be thus divided would not be increased by a higher valuation of the securities. It is to no purpose that we increase the principal, if we must in consequence reduce the interest in the same proportion. Whatever may be said of the estimates we have made, we are confident that each class of these securities would rise in the market, the moment this arrangement should go into effect; and certainly a scheme which is sure to promote the interest, of every creditor is deserving of consideration, and should at once be adopted unless some better can be devised.

The committee are firm in the conviction, that the plan recommended of having but one class of stock, and permitting every interest to be represented therein, discriminating as to priorities of line, by differences in the amount of their distribution proportion, is the true one. It presents a common platform on which all may meet and save something of value, and by making one interest, will effectually prevent the conflict and controversy likely to arise, if several different classes of stock, representing the several liens, had been created.

All classes of bonds, floating debt and stock have a valuable interest in the property, and we have attempted to adjust their interests on an equitable basis.

In the estimate which follows, we are not able to state precisely the amount of interest due on the coupons, or the sum of the floating debt; we can, however, approximate to the amount, aiming rather above than below the actual sum.

1st Mortgage Bonds...	\$2,000,000 + 75 =	\$1,600,000
2nd do. do.	\$1,600,000 + 35 =	685,000
Interest on Coupons, say		75,000
Floating Debt, say	\$600,000 + 25 =	150,000
The Capital Stock....	\$10,000,000 + 8 =	800,000

Total new stock.....	\$3,050,000
Add the Vermont and Canada	1,350,000

Sum on which to make Dividends.... \$4,400,000

We have probably estimated the floating debt above what it may prove to be; but in organizing a new corporation some expenses may arise which cannot now be anticipated. It would also be wise to obtain authority to issue \$100,000 of new stock to meet any contingency which may arise. But the capital should not be increased beyond that sum.

There is one consideration of great consequence to the Vermont and Canada, and through them to the other interests, which should induce all parties to favor some plan of consolidation. By their charter the Vermont and Canada are required to extend their road into Burlington. This would be attended with considerable expense, and the company are not in a condition to raise funds for that purpose. The wants of the public do not in fact require the construction of this branch; and if an arrangement be made by which the stockholders, bondholders, and creditors of the Vermont Central, will unite with the Vermont and Canada, and petition to the Legislature, there is every reason to believe that they would release

the Vermont and Canada from that condition of their charter. This would be for the interest of the Vermont and Canada, and all the creditors of the Vermont Central. Without this union they could hardly expect to succeed, and with it, they could hardly be denied by a Legislature of a State truly democratic, and where the will of the majority is so fully heeded, and readily carried out.

In accordance with the above recommendation an agreement for consolidation has been prepared in Boston, and is awaiting the signatures of the parties interested. Some plan like the one proposed would certainly seem expedient, if not absolutely essential, to relieve the company from its present embarrassed position, and render the road productive if possible.

The gross earnings for 1855 were \$722,326. Total expenses exclusive of the rent due the Canada railroad, \$709,826. The Trustees having charge of the road expended, however, for permanent improvements, \$180,000. With the road in good repair, as it is now represented to be, there would seem to be no doubt that with proper management net earnings to the extent of \$250,000 could be immediately realized.

The Appalachian Range of Mountains.

The following paper upon the Appalachian Range of Mountains was read by Prof. Guyot before the Scientific Association recently assembled in Albany.

Prof. GUYOT commenced by saying that for the last few years he had been endeavoring to form an idea of the general structure of the Appalachian system of mountains; and, although he had been interrupted for two or three years, he had tried this year to complete his view by the examination of the southern or higher portion of the system. He had previously examined the White Mountains of New Hampshire with a great deal of care, and made a partial exploration of the high peaks of Essex county, New York, and therefore had been more desirous of making observations on the southern portion. Before speaking of those explorations, he begged leave to make a few remarks on the general structure of the whole system.

The great Appalachian range is, as is well known, composed of a system of parallel ranges, somewhat resembling the folds of a garment. But this comparison may lead to views of the structure of the system which will need modification. On the western side, the system does not consist of single chains, but of a high table land, elevated in some parts about 2,500 feet above the sea being from 50 to 100 miles in breadth. This is the case in New York State, where between Lake Champlain and Lake Ontario there is a plateau 1,500 feet above tide water, on which are placed high points, such as Tahawus, the high peak of Essex. We find that in Virginia, through which he had just passed, the bottom of the valley is about 1,700 feet above the sea, behind the Alleghenies, and westerly from this extends a plateau lying 2,000 feet above the sea. Thence on for a hundred miles west we find an elevation of from 1,500 to 2,000 feet, not on a level plateau, but one rough with longitudinal ridges. It was the same thing in Tennessee, with the long plateau of the Cumberland Mountains. So that wherever we make a cross section of the Appalachian system, we should find in the general profile, first, a gentle slope from the Atlantic, then a sudden rise to the highest elevation, then a more gradual descent on a table land westward. Thus in New England the eastern foot of the mountain range is about 800 feet above the sea, the western, in New York, 1,500. In Pennsylvania the eastern foot of the

range is elevated about 600 feet, the western 1,000 feet. Still further south we have the eastern foot, 1,200 feet, and the western about 2,500 feet above the sea.

These are the general features of the profile. But we find that the beautiful law first pointed out by Prof. Rogers, is common to this and to the Jura Mountains; that while the whole range is steeper to the East than to the west, the particular chains are just the reverse, and have their steepest slopes towards the west. He was the more desirous of mentioning this, because when he had stated it on a former occasion for the Jura, he had been misunderstood. The middle region of the Appalachian system is, on an average, much the lowest portion of the whole—the peaks are lower, the table land lower, and the valleys lower; the highest points in Pennsylvania being little more than 2,000 feet. But also low, it is here unbroken. The only clean cut to the whole system is, as was remarked by Prof. Henry, the great valley of the Mohawk, in which we attain at the highest point, an elevation of only 400 feet. As we come north from Pennsylvania, all the elevations increase. Instead of elevations of 2,000 feet, we have at the Catskill nearly 3,000, among the Adirondacks 5,000, and among the White Mountains 6,000. And all the other great features—the height of the valleys and of the table lands—the general swell of the base increases in like proportion. As we go south, on the other hand, all the features in like manner become more grand. The high valleys in Virginia are over 1,000 feet above tide water, and in North Carolina is a tract from 100 to 150 miles in length, at an elevation of 2,000 feet. It is on this that the Black Mountains rest.

One of the marked features of the Appalachian system consists in a series of great central valleys running in the same direction as the whole range, as, for example, what is called the Great Valley in Virginia, and the valley of the Connecticut in the more northerly part of the chain. It is these valleys, in connection with the great swells of the land, that decide the course of the rivers. But the whole system is curiously divided into two parts, a northern and a southern; one apparently twisted toward the east, the other toward the west; that is to say, all the streams in the northern part of the system take their rise upon the western plateau, and break through the eastern ridges on their way toward the sea; while in the southern portion the streams rise in the eastern plateau, and break through the western ridges, on their way towards the Mississippi. The twist changes in Montgomery county, Virginia, at a place marked by no extraordinary features, but well defined by branches of the New river, called, near the Ohio, the Kanawha, and also the head waters of the Roanoke, which breaks through the Blue Ridge near the Peaks of Otter. The division lies between Christiansburg and Salem. North of this point the name Alleghany is given to the dividing ridge, or water-shed. The dividing line south of this point is called the Blue Ridge.

With these preliminary remarks, he would now indicate the exact position of the Black Mountains, and also of the White. They were both on the east, on the very border of the system, having the whole of the high plateau west of them. There is, it is true, a portion of the Blue Ridge running east of the Black Mountains, as there is a range lying east of the White Hills; but in both cases they are, as it were, additions to the east to the main central system. At the point where the Black Mountains occur, the distance from the Blue Ridge to the Tennessee border mountains is from thirty to fifty miles. At this place the structure of the intervening mountains, also, is, like that of the White Hills, different from that of the great Appalachian system. Instead of having the general trend of the range, there are transverse ranges reticulating the country into cross valleys, in which the rivers run at right angles to the usual trend of the mountains. Now this structure is not found in any other parts of the Appalachian system. The lowest points of these cross-valleys

are about 2,000 feet above the sea, as at Ashville, on the French Broad River, in Buncombe county. The valley of the Toe River, at Burnsville, Yancey county, has an elevation of about 2,500 feet. Between these valleys rises a vast, anomalous mass of hills, consisting essentially of two ranges, one running from north to south about ten miles, the other starting from this southern point and running about ten miles to the north-west, forming a vast horse shoe, open to the north-west, and giving rise to Cane River.

Although masked somewhat by other mountains about them, they are well marked by that circumstance, which has given them the name of Black Mountains. The vegetation of their summits resembles somewhat that of Lake Superior. Instead of the oaks, chestnuts, and tulip poplars that make the other mountains green, the tops of these, from 5,300 or 5,500 feet upward, are clothed with a dense forest of the balsam fir. These mountains already attracted the attention of travelers in the last century. The Michaux, both father and son, traveled about them, and called the attention of the scientific world to the interesting field which they opened. They were also visited by Nuttall and Rafinesque. The first who has the honor of attempting measurements was Dr. E. Mitchell, of Chapel Hill, in 1835. His first barometer was poor, but he obtained tolerably good results, making the height of the peak he visited 6,476 feet. In 1844 he found a still higher elevation, of 6,672 feet.

Prof. Guyot mentioned that the Hon. Thomas Clingman of the House of Representatives, a great amateur in mountains, gave a very good description of the Black Mountains, and found a peak further north which he made 209 feet higher. All this uncertainty of measurements induced Prof. Guyot to go, provided with good barometers and assistants, to make more careful measurements. He would describe some of his processes, that the Association might know how far they could rely on his numerous results. One of the first objects in barometric measurements is to get rid of local variations by having two barometers, one kept stationary on a well-determined point. But it is usually difficult to find well-determined places sufficiently near. In his measurements of the White mountains, when the stationary barometer was within ten or twenty miles of him, he found himself liable to an error of fifty feet in altitude. The second cause of error is less guarded against, and more difficult to get rid of, and that is the correction for the temperature of the air. The mean of the temperature of the two places may not at all represent the actual temperature of a great layer of air—four, five or six thousand feet in thickness. The errors from this cause may readily amount to thirty or forty feet, as the whole correction is frequently 300 feet. In the Black mountain measurements he started from a point whose level had been determined by a railroad survey, within seven miles of the nearest hill. By frequent barometric comparisons, during two different days, between this point and a house half way up the mountain he avoided the errors from great distance, and from great difference of altitude, which he had pointed out. Thence he determined by comparisons the height of one of the nearer mountains. Bringing now both barometers to the tops of the mountains, he compared peak with peak by the barometer. His single observations differed only two or three metres from the means, and the mean of one day scarcely differed one metre [3 inches] from the mean of another. All the peaks had been determined twice, and some of them several times. His great wish was to induce gentlemen to use more frequently the barometer to measure mountains. It is so convenient, and so accurate only provided that you know how to use it well. His measurement of Mt. Washington, 6,285 feet, differed but three feet from the determination of the Coast Survey, made afterwards, and even that might arise from the difference of the tide-level assumed by the survey, and by the Railroad Engineers, who gave him the level of Gorham, N. H.

So that he would recommend very much all observers, who may be interested, to take hold and multiply observations on the height of mountains and inland places. If I am traveling, said he, and I find I have not my barometer, I do not feel comfortable. I would carry it *always* in my pocket if it were not so long. At the request of the guides he had given names to the peaks, and a path had been made to one of them. The names were chiefly taken from natural features. All the measurements of heights of course depended for their reference to tide-water on that point determined by the railroad. The great mass of the mountains terminates abruptly to the north and to the south. It was mica slate and gneiss, probably wholly azoic—but he could not tell much about it, as his attention was absorbed with the other work he had undertaken. Few men can be obtained willing to accompany you through the forest—to go up and down through it on the mountain side is work for a giant. One great difficulty is in the beautiful groves of rhododendron. This choice green-house plant grows there in vast thickets, 15 or 20 feet high, almost impenetrable. Your path may be through flowers, but it is a struggle for life. It extends even to the tops of the mountains, even under the Balsam Firs, intermingled with the beautiful Kalmias and Azaleas. The great art in getting through is to go round; to keep on the crests; to follow the bear trail, the only help, and a great help. Yet it often compelled them to go like the bears, on all fours. This is the culminating point of the Appalachian system in all respects. The average of the group is higher by 500 feet than the average of the White Hills, and the bases are nearly double the height of those. The notches between the groups round Washington have an elevation of only 2,000 feet above the sea, but in the Black Mountains the notches are more nearly 3,000 feet above the sea. Even the great chains of the Tennessee border give heights of 6,000 feet; and the Blue Ridge of 6,000 to 6,000; and the very cross-ridges furnish peaks as high as the White Hills, and chains of 5,000 feet in elevation. Indeed, the main Appalachian chain here, on the Tennessee boundary, maintains a height of 5,000 feet for more than 160 miles. The following are a few of the heights of the Black Mountain groups: Black Dome, the highest point, 6,760; Hairy Bear, 6,660; Balaam Cone, 6,668; Black Brother, 6,626; Cat-tail Peak, 6,616; Deer Mount, 6,213; Long Ridge, 6,244; Bowler's Pyramid, 6,340.

Preston and Berlin (Ga.) Railway.

We learn that the contract for this important road has been let to Messrs. G. L. Reid and S. C. Ridley, who have engaged to have the track laid and ready for public traffic by September of next year. The contractors are determined to push the work with vigor, and will have 1,000 men at work on the line within a fortnight.

The Maryland Coal Trade.

We learn, from the most reliable source, that the fears that have been so generally expressed that the recent action of the Baltimore and Ohio railroad in advancing the rates on the bituminous coal freights, would result injuriously to both the railroad and coal interests, are likely to prove entirely unfounded. The advance in question, coupled as it was with an assurance of increased facilities of transportation on the part of the road, has, we are authorized to state, met the full approval of the most important consumers at the East.

The company has, we are informed, within three days past, received such assurances and guarantees from high quarters as warrant it in urging forward the preparation by our Baltimore mechanics of the additional five locomotives for this particular trade, and it is said that it is likely to do an unusually heavy month's work in October, upon the first day of which the advance takes place.

It will be remembered by Baltimore consumers of this species of coal, that a drawback of 25 cents per ton is to be allowed on all that may be consumed in this city.—*Balt. American*.

Journal of Railroad Law. NEGLECT OF PERSONS INJURED.

The rule that one cannot recover damages against a railroad corporation for injuries, without proving that the accident was occasioned by the negligence of the company and without the fault of the plaintiff is well settled. And although the corporation is in fault, still if the accident were occasioned in part by the negligence of the plaintiff or his agent he cannot recover. For the law will not weigh the negligence of the two parties to determine which was the greater. If both were in fault the law leaves the loss of that fault wherever it fell. It is by no means always easy to say what degree of imprudence constitutes such a neglect on the part of the injured party as to exculpate the railroad company in such cases. It is not every error in judgment. The negligence must be something gross, and the accident must be the necessary consequence of it.

The following recent case is illustrative of this point.

Sheffield & Herrenden against Rochester and Syracuse R. R. Co. XXI. Barbour, 339.

This action was brought to recover damages for the loss of the plaintiffs' horse and wagon occasioned by a collision with the defendant's cars in the town of Manchester in Ontario county, in May, 1852. At the place of the collision the public highway crosses the track diagonally. The railroad is perfectly straight at that point and an approaching train can easily be seen at the distance of half a mile. The track is elevated on an embankment some three or four feet above the meadow through which the road runs. At the place of crossing a sign had been erected by the defendants with the customary warning: "Railroad crossing. Look out for the cars while the bell rings."

The accident occurred at about four o'clock in the afternoon. The wagon was occupied by one James Swayne, who was driving, and by a woman and child. The wagon had a covered top, and Swayne held an open umbrella in hand as it was raining slightly. All the witnesses agreed that the team was driven and had been driven on a slow walk. It was disputed whether the bell of the engine was rung or not; but the testimony in the negative seemed to be the stronger.

Just as the wagon was crossing the track the train in question, which was one of the fastest on the road, struck the wagon from behind, completely demolishing the wagon and instantly killing the woman and the horse.

In the inferior court judgment was given for the plaintiffs, but on appeal this judgment was set aside and a new trial ordered.

The opinion of the Court (Monroe General Term, March, 1856,) was delivered by Judge Welles.

WELLES, J.—The case seems to me to present a case of utter recklessness on the part of the driver of the horse. If he had been desirous of courting destruction it is difficult to conceive a course better adapted to the object than the one he pursued. He knew that he was in the vicinity of the railroad, for he had been driving upon a walk in plain sight of it for half a mile. He knew also that the road led across it, for he had passed over it that morning. The most ordinary care and caution would have prompted him to cast his eyes backwards and forwards upon the

road to see if a train was approaching, and if he had done so he could not have failed to discover the train in question.

The question is not whether they (the railroad company) observed all the precautionary measures which the law imposed upon them; but whether there was any fault or carelessness on the part of the person in charge of the plaintiffs' property, which was destroyed. Upon this question it seems to me a single glance at the evidence will remove every doubt. The defendants moved for a non-suit on the ground of negligence on the part of the plaintiff, which was denied. We think the non-suit should have been granted and consequently that the verdict should be set aside, and a new trial granted with costs to abide the event.

Pike County Railroad.

At a meeting of the stockholders of this road, held in Griggsville, Ill., on the 11th ult., the following persons were elected directors, viz: Alexander Starne, Josiah Lombard, James McWilliams and O. M. Hatch, of Griggsville; Wm. F. Hooper, Salem; Richard Hayes, Hadley; George Wike, Barry; J. B. Helm, A. S. Robards, and Geo. W. Shields, of Hannibal.

At a subsequent meeting of the directors, the following officers were elected: Alexander Starne, President; O. H. Hatch, Secretary; Marshall Ayres, Treasurer. We learn that a comparatively small sum only remains to be subscribed to insure the building of the road.

Manassas Gap Railroad.

A meeting of the citizens of Rockingham, Page and Shenandoah, is called in New Market, on Saturday next, for the purpose of considering the propriety of building a stem from that place to connect with the Manassas Gap railroad at the nearest practicable point.

Hudson River Bridge.

The following gentlemen have been elected Directors of the Hudson River Bridge Company at Albany: Erastus Corning, Albany; Dean Richmond, Buffalo; Chester W. Chapin, Springfield; Samuel Sloan, New York; William H. Swift, Boston; John J. Schoolcraft, Albany; Elisha M. Gilbert, Utica; Sydney T. Fairchild, Cazenovia; John V. L. Prunyn, Albany. For Inspectors of Election: Gerrit Y. Lansing, Albany; Palmer V. Kellogg, Utica; Charles P. Walter, Albany. Subsequently the following officers were elected: President, Erastus Corning; Treasurer and Secretary, Gilbert L. Wilson. The site for the bridge has been selected, after much discussion and a full consideration of the various plans afforded. At Albany the bridge will be commenced so as to form a continuous line, with a slight curve only, from the New York Central Depot to a point at East Albany near the depot of the Hudson River Railroad and the Western Railroad.

Knoxville and Kentucky Railroad.

The Common Council of the city of Knoxville, have issued an order for an election to be held on the 4th inst., to ascertain the sense of the qualified voters of the corporation upon the question of a subscription for fifty thousand dollars of the capital stock of the Knoxville and Kentucky railroad company—said subscription to be paid for in bonds out of the appropriation of one hundred thousand dollars heretofore made for water-works and other improvements.

Such a subscription will, we understand, place the speedy commencement of work upon the road and its rapid prosecution to completion, beyond a contingency, and we trust that the proposition will be heartily endorsed by our citizens.

We commend it to the favorable consideration of every voter.—*Knoxville Register*.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Share.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Share.
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.	141,168	8	---
Androscog. & Kennebec.	66	588,042	1,022,905	2,210,947	209,475	110,247	6	10	South Western.	92	1,097,496	466,500	1,824,920	263,306	141,168	8	---
Kennebec & Portland.	66	1,114,725	1,061,236	2,470,500	---	---	---	---	Tennessee and Alabama.	30	246,486	---	679,906	In progr.	---	---	---
Portl., Saco, & Portm'th.	61	1,367,000	110,237	1,486,237	276,214	112,491	6	62	Tennessee and Mississ.	---	170,931	---	175,540	In progr.	---	---	---
Boston, Concord, & Montreal.	93	1,808,666	1,066,512	3,771,510	233,234	120,834	---	---	Memphis and Charleston.	217	2,179,440	2,127,002	4,028,796	811,631	169,572	---	---
Quebec.	63	2,085,925	899,813	3,179,687	380,221	143,565	2	14	Mobile and Ohio.	153	2,568,555	1,802,921	4,536,412	199,932	100,236	---	---
Concord.	36	1,800,000	8,242	1,412,676	335,949	136,464	6	74	Mia. Central.	188	642,534	---	623,303	In progr.	---	---	---
Northern, N. H.	82	2,763,145	---	3,016,633	370,629	138,299	2 1/2	40	N. O. Opelousas & G. W.	56	2,930,425	671,645	2,657,545	In progr.	---	---	---
Conant & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	162,687	55,173	---	---	Vicksburg, Shreveport, & Tex.	---	111,760	---	107,896	In progr.	---	---	---
Rutland & Burlington.	120	2,235,376	2,662,396	5,378,428	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Vermont Central.	117	1,830,000	3,550,236	4,463,366	820,119	214,793	1 1/2	---	East Tennessee and Va.	16	625,425	938,593	1,033,781	In progr.	---	---	---
Boston and Lowell.	83	4,076,974	150,000	4,179,535	854,426	339,000	6	76	Nash. and Chattanooga.	151	2,310,330	1,497,051	3,843,604	316,090	112,177	---	---
Boston and Maine.	74	2,240,300	1,618,671	3,463,181	89,917	8,740	---	---	Ovington & Lexington.	98	1,302,504	2,235,939	3,738,175	264,978	138,694	---	---
Boston and N. Y. Central.	55	3,160,000	359,132	3,677,154	568,671	219,689	---	---	Lexington and Frankfort.	29	430,055	158,099	637,071	93,263	43,635	---	---
Boston and Providence.	68	4,500,000	655,428	4,865,419	1,008,004	404,461	6	82	Lexington and Danville.	---	894,444	52,734	747,178	In progr.	---	---	---
Boston and Worcester.	47	681,690	280,538	997,252	119,221	65,527	3	49	Louisville and Frankfort.	65	698,236	669,061	1,889,566	244,014	96,902	---	---
Cape Cod.	52	1,591,110	273,241	1,809,244	286,653	103,787	5	40	Atlantic & Gt. Western.	254	866,939	77,294	613,231	In progr.	---	---	---
Connecticut River.	60	2,683,400	2,947,737	4,021,016	647,281	305,998	---	---	Bellefontaine and Ind.	118	1,881,685	2,025,925	2,852,662	296,293	140,323	---	---
Eastern, Mass.	60	3,640,000	153,700	3,765,998	681,163	225,071	---	---	Clev., Col., and Cin.	141	4,547,020	122,557	4,613,722	1,290,296	732,066	9	102 1/2
Lehigh.	30	800,242	225,635	968,521	In progr.	---	---	---	Cleveland and Toledo.	200	2,675,425	2,689,301	5,124,690	336,272	396,986	10	76
North-Eastern.	21	600,000	---	633,953	198,491	64,533	6	---	Clev. and Mahoning.	103	---	628,533	In progr.	---	---	---	---
N. Bedford and Taunton.	57	3,015,100	292,650	3,362,949	663,499	295,738	6	82 1/2	Clev. and Pittsburg.	133	2,780,744	3,043,992	5,837,466	581,877	309,518	---	---
Old Colony and Fall River.	77	2,232,541	1,033,670	3,209,727	265,726	87,318	---	---	Cin. Hamilton & Dayton.	60	2,163,900	1,321,213	2,987,757	608,271	278,012	---	---
Vermont and Mass.	155	5,150,000	5,906,420	10,496,906	1,869,673	633,013	7	80 1/2	Cin. Wilm. & Zanesville.	131	1,120,450	1,811,265	2,326,459	---	---	---	---
Western, Mass.	46	1,141,000	208,565	1,351,271	204,780	75,760	2	42	Columbus and Xenia.	55	1,454,550	149,000	1,481,733	356,366	187,513	10	82
Worcester and Nashua.	43	1,510,920	338,461	1,806,666	811,430	138,667	---	---	Dayton, Xen. & Belpre.	63	437,838	422,655	860,496	In progr.	---	---	---
Providence and Worcester.	72	3,500,000	639,000	3,313,932	730,012	352,799	10	19	Dayton and Michigan.	140	1,076,602	393,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven.	122	2,008,110	2,030,665	4,060,969	268,685	119,611	---	---	Dayton and Western.	35	310,000	500,000	733,769	---	---	---	---
Hart'd, Prov. and Fishkill.	119	2,000,000	414,240	2,431,773	339,196	71,427	---	---	Easton and Hamilton.	42	454,690	904,489	1,155,135	171,929	65,000	---	---
Housatonic.	57	1,031,800	524,244	1,580,723	220,459	93,768	---	---	Little Miami.	65	2,963,921	1,171,786	3,045,172	681,662	336,708	---	---
Naugatuck.	62	3,000,000	876,803	3,876,803	384,300	338,877	---	---	Mad River and L. Erie.	206	2,461,560	2,572,932	4,446,661	---	---	---	---
N. York and N. Haven.	60	738,258	735,165	1,450,318	88,007	30,318	---	---	Central Ohio.	138	1,520,927	8,485,076	4,283,443	Recently opened.	---	---	---
N. Haven and N. London.	60	738,258	735,165	1,450,318	88,007	30,318	---	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,620	662,117	9	50
N. London, W. & Palmer.	66	609,200	1,073,673	1,594,383	124,044	66,430	---	---	Pittsburg, Mans. & Cin.	50	371,350	81,000	390,933	In progr.	---	---	---
Norwich and Worcester.	68	2,123,300	875,489	2,997,143	304,230	88,458	2 1/2	25	Sand. Mans. & Newk.	127	1,350,000	2,206,357	3,552,367	328,968	164,479	---	---
Albany Northern.	32	439,005	1,625,098	1,840,605	117,710	9,904	---	---	Scioto & Hocking Valley.	135	403,975	609,050	888,858	In progr.	---	---	---
Black River and Utica.	35	643,330	371,859	974,323	In progr.	---	---	---	Spring Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,871	1,501,183	2,819,096	172,476	66,333	---	---	Tol. Wabash & St. Louis.	242	2,500,000	4,530,000	---	In progr.	---	---	---
Buffalo and N. Y. City.	92	798,439	2,587,849	3,401,868	288,392	31,896	---	---	Cin., Log. & Chicago.	255	4,196,679	1,006,125	2,080,433	---	---	---	---
Buffalo and St. Line.	69	1,300,000	1,040,000	2,494,304	679,750	355,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,662	---	---
Canandaigua and Elmira.	47	434,111	922,398	1,275,796	174,080	69,506	---	---	Ind. and Cincinnati.	88	1,213,723	1,442,359	2,178,641	356,012	193,142	7	60
Canandaigua & Niagara F'a.	91	1,315,000	2,279,854	3,495,832	---	---	---	---	Indiana Central.	66	611,400	1,261,179	1,907,911	350,176	134,375	---	---
Cayuga & Susquehanna.	35	687,000	606,689	1,187,562	135,433	48,649	---	---	Ind., Clev. & Pittsburg.	83	826,952	1,099,400	1,831,226	226,058	93,010	---	---
Hudson River.	144	3,758,466	6,250,362	12,737,808	1,812,087	603,946	---	---	Jeffersonville.	66	1,014,252	694,000	---	206,544	94,318	---	---
Long Island.	95	1,876,148	668,949	2,555,986	301,793	110,462	---	---	Madison and Indianapolis.	87	1,647,700	1,336,816	1,205,000	286,146	112,880	---	---
New York Central.	534	24,154,360	14,862,742	25,523,913	6,663,581	3,162,126	8	85	New Albany and Salem.	288	2,535,121	6,281,848	6,643,189	645,827	871,402	---	---
New York and Erie.	44	10,923,968	25,126,669	33,439,431	5,489,932	2,627,118	---	---	Peru and Indianapolis.	78	---	858,314	---	150,000	90,000	---	---
New York and Harlem.	133	5,717,100	4,069,769	7,588,203	1,035,477	234,126	---	---	Terre Haute and Ind.	73	974,800	604,355	1,602,166	287,512	180,702	10	16 1/2
Northern, N. Y.	118	3,033,022	4,066,874	5,470,714	520,153	135,754	---	---	Chicago and Rock Is'd.	182	3,141,500	2,387,155	6,214,152	In progr.	---	---	---
Oswego and Syracuse.	35	399,000	216,681	723,888	126,540	59,962	3 1/2	---	Chicago and St. Louis.	220	---	---	1,077,312	---	---	---	---
Pottsdam and Watertown.	29	467,200	294,189	749,683	211,149	82,600	---	---	Chicago, Burl. and Quincy.	58	1,539,100	1,684,736	2,884,622	722,580	379,821	20	---
Rensselaer & Saratoga.	25	610,000	140,000	896,423	241,149	82,600	---	---	Central Military Tract.	88	1,202,500	2,188,050	2,920,241	471,399	219,588	---	---
Rensselaer & Whitehall.	48	500,000	395,000	719,000	21,089	---	---	---	Chic. St. Paul & F'd du Lac.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Saratoga & Binghamton.	80	768,369	1,176,804	2,272,777	150,484	22,503	---	---	Galena and Chicago.	259	5,441,500	3,138,039	7,742,614	2,315,788	1,192,042	22	100
Troy and Boston.	27	437,830	737,079	1,109,822	156,363	55,184	---	---	Illinois Central.	627	2,271,050	19,416,392	20,374,446	1,532,118	527,962	---	---
Watertown and Rome.	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	90	Peoria and Ogawaha.	93	569,889	818,454	1,388,342	In progr.	---	---	---
Walden Delaware.	64	1,000,000	1,619,000	2,619,000	161,355	75,534	---	---	Ohio & Miss. (W. Div.).	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---
Camden and Amboy.	94	3,000,000	11,407,200	6,836,523	2,017,127	961,941	12	124	Terre Haute and Alton.	173	2,281,420	2,260,000	3,637,424	In progr.	---	---	---
Camden and Atlantic.	60	369,320	1,522,131	1,724,642	122,417	50,080	---	---	Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.	---	---	---
New Jersey.	30	3,482,850	690,000	4,310,011	861,514	500,740	10	121	Mich. Central.	282	6,032,444	9,996,013	10,688,155	2,215,283	879,656	10	91 1/2
New Jersey Central.	63	2,000,000	2,864,176	3,683,149	392,728	171,603	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,045,208	2,410,000	875,000	10	88
Morris and Essex.	53	1,167,905	876,000	1,668,550	229,341	96,267	6	---	Green Bay, Mil. & Ch.	155	764,074	442,726	1,193,765	In progr.	---	---	---
Albany Valley.	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee and Miss.	100	1,826,428	1,467,889	3,578,757	691,843	417,443	17	76 1/2
Ontario, W. & Erie.	61	1,700,000	1,940,000	3,640,000	219,253	62,450	---	---	Milwaukee & Water'n.	72	354,361	1,237,000	514,238	In progr.	---	---	---
Camden Valley.	56	1,099,500	12,211	1,191,333	140,381	66,994	---	---	Milwaukee and Horicon.	15	654,200	---	354,109	In progr.	---	---	---
Del. Lack. & Western.	109	3,061,622	3,884,702	6,022,667	528,911	259,263	6	80	Milwaukee & La Crosse.	51	1,351,332	532,131	1,883,963	In progr.	---	---	---

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	---	85 1/2
Buffalo and State Line	500,000	Do. inconvertible	7	1st April, October	"	1866	---	97 1/2
Bellevue and Indiana	600,000	Do. convertible	7	1st Jan. July	"	1866	---	85
Do. do.	200,000	Real estate, convertible	7	1st Jan. July	"	1868	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	1st Feb'y, August	"	1869	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	1st Divers	"	1861-64	---	51
Do.	800,000	2d do. inconvertible	7	1st March, Sept.	"	1865	---	72 1/2
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	1st 20 Jan. 20 July	"	1867	88	90
Do. do.	465,000	2d do. do.	7	1st May, Novemb.	"	1880	90	94
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	1st Jan'y, July	"	1868	70	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	1st May, Novemb.	"	1862	---	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	1st Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	1st Feb'y, August	"	1860	---	93
Do. do.	1,200,000	Do. on Branches	7	1st March, Sept.	"	1873	77	80
Cleveland and Toledo	525,000	Do. inconvertible	7	1st Feb'y, August	"	1863	---	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	1st April, October	"	1862-72	65	80
Do. do.	1,200,000	Do. inconvertible	7	1st April, October	"	1862-72	65	80
Covington and Lexington	400,000	Do. do.	7	1st April, October	"	1867	75	80
Do. do.	1,000,000	2d mortgage, convertible	7	1st March, Sept.	"	1883	63	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	1st April, October	"	1875	---	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	1st Jan'y, July	"	1873	---	80
Gaiana and Chicago	2,000,000	Do. inconvertible	7	1st Feb'y, August	"	1863	---	84
Do. do.	2,000,000	2d mortgage, do.	7	1st May, Novemb.	"	1875	85	86 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	1st April, October	"	1868	---	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	1st 10 April, 10 Oct.	"	1868	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	1st April, October	"	1873	---	75
Indiana Central	600,000	Do. convertible	7	1st May, Novemb.	"	1866	---	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	1st Jan'y, July	"	1860-61	80	82
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	1st March, Sept.	"	1866	---	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	1st May, Novemb.	"	1874	84 1/2	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	1st Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconv.	6 1/2	1st May, 2 Nov.	"	1863	---	80
Michigan Central	1,000,000	No mortgage, convertible	8	1st April, October	Bost.	1860	100	101
Do. do.	600,000	Do. do.	8	1st March, Sept.	"	1869	101	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	1st Jan'y, July	N.Y.	1862	---	96
Do. do.	650,000	Do. 2d do. 1858	8	1st April, October	"	1863	---	95 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	1st June, Decemb.	"	1877	87	89
New Albany and Salem	600,000	Do. 1st section	10	1st April, October	"	1858-62	---	80
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	1st May, Novemb.	"	1864-75	---	80
Northern Cross	1,200,000	1st mortgage, convertible	8	1st Jan'y, July	"	1873	---	95
Ohio and Indiana	1,000,000	Do. do.	7	1st Feb'y, August	"	1867	---	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	1st Jan'y, July	"	1865-66	---	96
Do. do.	2,000,000	Income, convertible	7	1st April, October	"	1872	---	79
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	1st Jan'y, July	Phila.	1860	96 1/2	97 1/2
Racine and Mississippi	680,000	Do. conv. sink'g 'd	8	1st Feb'y, August	N.Y.	1875	78	85
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	1st May, Novemb.	"	1861	---	80
Stouenville and Indiana	1,600,000	Do. convertible	8	1st Jan'y, July	"	1866	---	80
Terre Haute and Indianapolis	600,000	Do. do.	7	1st March, Sept.	"	1866	98	100
Terre Haute and Alto	1,000,000	Do. do.	7	1st Feb'y, August	"	1867-72	77	79
Do. do.	2,000,000	2d do. do.	8	1st Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	1st April, October	Balt.	1885	87 1/2	87 1/2
Do. do.	1,238,500	Do.	6	1st Jan'y, July	Balt.	1875	87	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1853	7	1st 10 Jan. 10 July	N.Y.	1870	92	93
Erie Railroad	3,000,000	1st mortgage	7	1st May, Novemb.	"	1867	105 1/2	107
Do. do.	4,000,000	2d mortgage, convertible	7	1st March, Sept.	"	1859	95 1/2	97
Do. do.	6,000,000	3d mortgage	7	1st March, Sept.	"	1863	95 1/2	96
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	1st Feb'y, August	"	1875	94	94 1/2
Do. do.	4,351,000	Convertible, Inscription	7	1st Feb'y, August	"	1871	86	86 1/2
Do. do.	8,500,000	Convertible	7	1st Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	1st Feb'y, August	"	1869-70	95	97 1/2
Do. do.	2,000,000	2d do. do.	7	1st 16 June, 16 Dec	"	1860	95	95 1/2
Do. do.	3,000,000	3d do. convertible	7	1st May, Novemb.	"	1870	66	66 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	1st April, October	"	1875	94 1/2	94 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 shares	7	1st March, Sept.	"	1860	103 1/2	107
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	1st May, Novemb.	"	1860	93 1/2	---
New York and Harlem	1,500,000	Do. do.	7	1st May, Novemb.	"	1861-72	82	83
New York and New Haven	7,750,000	No mortgage, do.	7	1st June, Decemb.	"	1856-60	80	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	1st Jan'y, July	"	1873	---	94
Northern Indiana	1,000,000	Do. do.	7	1st Feb'y, August	"	1861	90 1/2	---
Do. Goshen Branch	1,500,000	Do. do.	7	1st Feb'y, August	"	1863	83	84 1/2
New York Central	8,287,000	No mortgage, do.	6	1st May, Novemb.	"	1863	58	58 1/2
Do. do.	3,000,000	No m'ge conv. from June 67-69	7	1st 15 June, 15 Dec	"	1864	100 1/2	101 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	1st Jan'y, July	"	1866	---	100
Do. 2d do.	1,475,000	Do. till 1858	7	1st Jan'y, July	"	1866	---	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	1st Jan'y, July	Phila.	1860	---	95
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	1st Jan'y, July	"	1860	89	---
Do. do. 1849	3,469,000	Do. inconvertible	6	1st April, October	"	1870	86 1/2	86 1/2

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York 7 per ct. 1857	Feb'y,	100	101	Milwaukee, 7 per ct. coup.	X	80	85
Do. 5 do. 1858-60	May,	94	95	New Orleans, 6 per ct. cp. R.R.	X	80	85
Do. 5 do. 1870-75	August, and	92	94	N. Orleans, 6 per ct. cp. municip.	X	80	85
Do. 5 do. 1880	November.	93	94 1/2	Philadelphia, 6 per ct. 1876-93	X	80 1/2	80 1/2
Albany, 6 per ct. coup. 1871-81	Feb'y, August.	97	100	Pittsburgh, 6 per ct. coup.	X	80	85
Allegheny, 6 per ct. coup.	Jan'y, July	97	100	Quincy, 8 per ct. coup.	X	80	85
Baltimore, 6 per ct. 1879-90	Quarterly	97	98 1/2	Racine, 7 per ct. coup.	X	80	85
Boston, 5 per ct. coup.	April, October	97	98	Rochester, 6 per cent. coup.	X	80	85
Brooklyn, 6 per ct. coup. Long	Jan'y, July	99 1/2	100 1/2	St. Louis, 6 per ct. coup. Long	X	80	85
Clev'rd, 7 per ct. cp. W.W. 1879	Do. do.	101	101 1/2	Do. do. Municipal	X	80	85
Cincinnati, 6 per ct. coup.	Divers	88 1/2	89	Sacramento, 10 per ct. cp. 1862-74	X	80	85
Chicago, 6 per ct. coup. 1873-77	Jan'y, July	89	90	S. Francisco, 7 1/2 per ct. cp. 1865, pay N.Y.	X	80	85
Do. 7 per ct. coup. 1880	Jan'y, July	100	100 1/2	Do. 10 p. ct. cp. 1871	X	80	85
Detroit, 7 per ct. cp. W.W. 1873-78	Feb'y, August	101	102 1/2	Do. 10 do. pay N.Y.	X	80	85
Do. 8 per ct. cp. Long	March, Sept.	101 1/2	102 1/2	Do. 6 per ct. pay N.Y. 1875	X	80	85
Jersey City, 6 per ct. cp. W.W. 1877	Jan'y, July	94	96	Wheeling, 6 per ct. coup.	X	80	85
Louisville, 6 per ct. cp. 1880-83	Divers	80	80	Do. 6 per ct. cp. Mun. 1874	X	80	85
Memphis, 6 per ct. coup.	Jan'y, July	88	89	Zanesville, 7 do.	X	80	85

Cincinnati Stock Sales,
By KIRK & CHEEVER.

For the week ending September 23, 1866.

BONDS.	Per ct.
Little Miami, 5 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	86
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	50
Indianap. & Cin., 2d Mort. 7 per ct.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	82
Hillsboro' and Cin., 7 per cent. 1st Mortg.	47
Covington & Lexington, 10 per ct. Income	54
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Do. do. due July 1, 1866	85
Little Miami, Dividend Scrip, issued June, 1856	80

STOCKS.

Bellefontaine and Indiana, 30.—Cin., Ham. and Dayton, 67.
—Col. and Xenia, 84.—Cincinnati, and Chic, 3 1/2.—Covington & Lexington, 16.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 61.—Little Miami, 88.—Mad River & Lake Erie, 16.—Marietta and Cincinnati, 14.—Ohio and Mississippi, 5 1/2.—Hillsboro' and Cincinnati, 14.—Peru and Indianapolis, 12.—Cincinnati, Wilmington and Zanesville, 12.

By HEWSON & HOLMES.

For the week ending September 24, 1866.

BONDS.	Per ct.
\$5,000 Cov. & Lex., 10 per cent. Income	55
11,000 Little Miami, 6 per ct., 1st Mortg.	80 (& int.)
1,000 Cov. & Lex., 6 per cent. 1st Mortg.	71
2,300 Colum. & Xenia, 7 per cent. Div. 10 year	35
4,000 Ohio and Miss. 7 per cent. 2d Mortgage	50
2,000 Marietta & Cincinnati, 7 per ct. 1st Mortg.	75
1,000 Marietta & Cin., 7 per ct. Domestic	35
225 Little Miami, Dividend Scrip, June, 1856	80
300 Indianap. & Cin. 7 per ct. Dividend	70

STOCKS.

100 Shares Indianapolis & Cincinnati	61
154 " Cincinnati and Chicago	3 1/2
60 " Ohio and Mississippi	6
66 " Little Miami	88 1/2
29 " Do. do.	89
20 " Indianapolis and Cincinnati	62
142 " Covington and Lexington	15
50 " Do. do.	16
17 " Hillsborough and Cincinnati	15
60 " Cin., Harrison and Indianap.	8
200 " Junction (Ind.) 60 d.	7 1/2
10 " Cin., Ham. and Dayton	67 1/2
78 " Columbus and Xenia	85
24 " Cincinnati, Hamilton, & Dayton	70

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 1st inst.

[TRANSLATED.]

NEW YORK, Monday, Sept. 30, 1866.

Our market, since our last advices of the 22d inst., shows a pretty general decline. The effect of further considerable specie shipments during the week, was partly counteracted by a full complement of the usual gold receipts from California; but, on the receipt of the Liverpool news to the 17th inst., which successively reached us, bringing the advices of an increased demand for money in the principal banking cities of Europe, an unfavorable influence was exercised on our stock market. Animated transactions through the week were continued, but accompanied by a decline in prices more particularly marked in railroad shares. Those of the Erie and Reading railroads have continued to give rise to much speculation. Spite of the reduction of the amount of specie and deposits, in the banks of the city of New York, according to the last weekly report, there is no scarcity of money, although the demand is rather more active. State Stocks.—Missouri 6s at 3/8 advance; Virginia 6s and Indiana 5s, at a shade decline, were actively dealt in; Tennessee 6s, with few transactions, declined 1 1/2 per cent. City and county bonds continue very quiet. A pretty large amount of New York city 6s, 1859, and 5s and 7s of 1860, changed hands at well sustained rates. Railroad Bonds.—With moderate activity Illinois Central Construction have advance 3/4. Freeland's, with privilege, after touching 107, close at a decline. There was a good demand for Erie 7s, 1871, at well maintained rates; for 7s, 1875, at 1 decline, and for New York Central 6s, at 3/4 decline. Railroad Shares.—Much activity prevailed in Erie, Reading and Cleveland and Toledo, the two former closing at 1 1/2 and 1 1/2 decline, the latter at 1 1/2 decline. With the exception of Illinois Central, which have risen 1/4, the decline is general. There were also transactions of some importance in the following; with a decline as follows on

Chicago and Rock Island of $1\frac{1}{4}$; on Michigan Central of 1, on Michigan Southern of $1\frac{1}{2}$, and on N. Y. Central of $\frac{1}{4}$ per cent. Money, without being difficult to procure, is in better demand at 7 for call loans, and 8a12 for paper. Exchange, flat; London, $109\frac{1}{2}$ a $109\frac{3}{4}$; Paris, $5.15a5.16\frac{1}{4}$.

Marie & Kans' Money Circular for the European Steamer of the 1st Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, Sept. 30, 1856.

Since our advices of the 22d inst., the tendency of the market has been downward. The transactions, though active in Railroad Stocks, especially in Erie, Reading and Michigan Southern, have been only limited in State Stocks and Railroad bonds. This decline was mostly caused by some feeling of uneasiness on account of the heavy exportations of Specie during the last fortnight, and also by the report of a tightening Money market in London, received by Canada. The *Baltic's* news received yesterday morning, reporting a rise in the English Funds, and an almost entire cessation of the purchases of Gold for account of the Bank of France, had a favorable influence upon our market, but later in the day the announcement of a loss of about \$1,400,000 of Specie in the weekly Bank Statement, inspired new confidence to the speculators for a decline, and the whole market, except Erie, leaves off dull. In the meanwhile Money remains in sufficient supply, only Discounts having slightly advanced, and there is every reason to believe that the exportation of Breadstuffs and Cotton will very soon reduce the figure of gold shipments, and prevent the duration of a pressure in Money if there should be any. State Stocks—Virginia decline $\frac{1}{4}$; Tennessee 1; Missouri $\frac{1}{4}$; Indiana, without change. City and County Bonds—There is an improvement in this kind of securities; the demand remains as limited as it has been for many weeks past. Railroad Bonds—Without much animation, Illinois Central Bonds have not changed. Freeland Bonds, with privilege, sold at 107; Erie Bonds, a trifle lower; nothing done in Western Railroad Bonds. Railroad Shares—The business done has been considerable; Erie touched 63 $\frac{1}{2}$, falling back to 61 $\frac{1}{2}$, and closing at 62 $\frac{3}{4}$; Reading declined $3\frac{1}{8}$; New York Central $1\frac{1}{2}$; Panama $2\frac{1}{4}$; Michigan Central $\frac{1}{2}$; Michigan Southern $1\frac{1}{4}$; Cleveland and Toledo $1\frac{1}{8}$; Chicago and Rock Island $1\frac{1}{2}$; Cleveland and Pittsburgh $\frac{1}{2}$; Galena and Chicago $\frac{3}{4}$; Milwaukee and Mississippi 1; Hudson River $1\frac{1}{2}$; La Crosse and Milwaukee rose 1; Illinois Central $\frac{1}{4}$. Money has been in good demand on call, but with an adequate supply. Discounts are a trifle higher, say 8a9 for first-class bills; 10a12 for names less known. Exchanges—Dull for Sterling, firm on the Continent. London $109\frac{1}{2}$ a $109\frac{3}{4}$; Paris $5.15a5.16\frac{1}{4}$.

Wabash Valley Railroad.

In relation to the opening of this road to Attica, 224 miles from Toledo, the *Lafayette Courier* says—

"That portion of the road now in operation is built in the most thorough manner, and all the appointments characterized by strength, solidity and durability. The passenger traffic, now only local, is very fair and constantly increasing, and the local freight is already over-tasking and beyond the capacity of the company to transport, although their equipment is large. Beyond all doubt, this line is soon to become the largest and most important thoroughfare in the Western States."

But 17 miles remain to be completed to the State line nearly all of which is graded. Danville is but a few miles further, where it will connect with the Great Western Railroad of Illinois, soon to be completed to that point. This will then form one of the most direct routes from St. Louis to the East.

We learn that it is the intention of the President, A. BOODY, Esq., who is now on the spot, superintending its construction, to remain until the whole

line is finished, and the connections with other roads formed. When the warehouses for storing grain have been completed, for the want of which no corn has been brought over the road thus far, it is the opinion of the managers that there will be no limit to the freighting business of the road other than its ability to transact it.

American Railroad Journal.

Saturday, October 4, 1856.

The Difference between Successful and Unsuccessful Roads.

The difference between a road that goes along swimmingly, and one that becomes embarrassed, and perhaps breaks down, is often not so great as is supposed. It may consist not so much in management, nor in their respective merits, as in skill in raising money. Given two roads, the estimated cost, and the means provided for construction of which, in both cases are the same. Both roads are opened, though only partially completed.—The cost of both has exceeded the estimates, and both require more money for the payment of debts, and further expenditures. One succeeds in getting it, the other does not. The successful one shows large earnings, and becomes a general favorite.—The public regularly get good dividends. This is all they care for. They pay no attention to the fact that while they have been receiving them, the cost of the road may have been increasing by three or four times their amount. Whether these expenditures have been made for proper or improper objects; whether running expenses have been charged to capital, is all the same to them. Their attention is never aroused till a crash comes, or an inability to borrow renders dividends no longer possible.

With the other road the story is soon told. Being unable to borrow, it necessarily puts its earnings into construction. It is forthwith voted a nuisance—a flagrant instance of bad faith, and a stain upon the fraternity of railroads. It may even fail to pay interest on its funded debt. Indignation then knows no bounds. All parties connected with the management of such a road are deemed fit subjects for the Penitentiary.

The difference in the two cases may consist simply in a superior faculty for borrowing; a faculty not always to be commended, and not always followed by the best results. More money has been lost and wasted from our railroads having a credit better than they deserved, than it not having one so good. Some companies that go on spending money as long as they can borrow, would have been taught prudence by necessity, which seems to be the only mode in which such a crowning virtue can be learned.

It is a very bad thing for a railroad company not to have a sufficient sum to complete their works. The sails for a ship cost only a small sum, but they are indispensable to its success. So a road that is to cost \$5,000,000 may remain comparatively useless after \$4,500,000 have been expended upon it, for the want of the difference between the two sums. But an undoubted credit joined to expensive tastes or habits, or to a want of proper watchfulness as to the expenditures, may raise the cost of the road to \$10,000,000—a sum twice what it should be. Here then is \$5,000,000 squandered, the loss of which, if by hook or by

crook dividends can be squeezed out, even by borrowing, the public never detect.

Our successful railroads lose to their owners more money, and need looking after much more sharply than unsuccessful ones. When a man has lost his credit, that is the end of him. So with an embarrassed road. It can lose no more for its owners in the same way. It gets no more money on a predicated success. They find out their loss early, and make it. It is a great art in business to know when to make a loss. By holding on, thousands have been ruined, to one who sold out, or cut short his advances, the moment he saw matters going wrong.

We will give, without meaning anything invidious, an illustration of how distinctions are made where there may be no great difference. Take the Rock Island and Chicago railroad. This road is in high credit, paying large dividends, with its stock nearly at par. The company have since their last report increased their construction account by an amount much larger than the whole net earnings of their road. We will assume such expenditures to have been necessary. Suppose at the same time the company unable to borrow. What would have been the result? Neither dividend, nor interest on the bonded or floating debt would have been paid. A complete break-down of a road now standing as high as any other in the public confidence would have followed, with all its concomitants.

An appalling (if we may use such a word) illustration of the disasters that may follow a good credit, is the Vermont Central. Had this road enjoyed only an ordinary credit, and had it broken down when it first became embarrassed, millions that have been wasted upon it would have been saved. The project itself stood high, and a succession of able men were brought to its support, who used and exhausted their own credits in their attempts to sustain the road, till all fell in a common ruin.

We feel that we have touched a very important point in railway economy. We throw out the above remarks by way of suggestion, for the consideration of those interested in railroads or entrusted with their management.

Virginia and Tennessee Railroad.

This great work is completed to the Tennessee Line. Its whole length is 205 miles. It occupies one of the most important routes in the United States. At the State Line it connects with the East Tennessee and Virginia Railroad, extending to Knoxville. Upon about one-half of this road the rails are laid, with the work progressing on the balance at a rapid rate. This road will be completed within a year, when a continuous line of railroad will be formed extending from Richmond to Memphis, and soon after to Mobile and New Orleans. This route must become the great avenue for travel between the north and south,—the most direct and most attractive.

The Virginia and Tennessee road traverses for nearly its whole length the Alleghany range of mountains, which are filled with the more valuable kind of minerals, together with salt and coal. It also opens a hitherto isolated, though populous and fertile section of the State. In every respect the road is of the first importance, and its completion a matter of general congratulation.

The Locomotive.

No. 8.

By THEODORE KRAUSCH, Civil and Mechanical Engineer.

The arrangement for producing the necessary draft, consists of a blast pipe, which conducts the exhaust steam from the cylinder through the chimney.

The steam, having been used in the cylinder to produce a reciprocating motion, and by communication with the driving wheels, a rotary, escapes into the exhaust with nearly the same pressure. Suppose it amounts to 75 pounds per square inch, the velocity of the draft in the smoke stack being the same as that of the escaping steam will amount to 1843 ft. per second. This being much more rapid than the natural efflux of the smoke, it would seem that a vacuum is produced into which the smoke rushes from the flues, when it is seized by the current and carried away into the atmosphere. This theory is much doubted. It is more generally believed by scientific men that the body of steam escaping into the atmosphere becomes dilated, and for the instant possesses less density than the atmosphere into which it has passed, that the pressure of the column of atmosphere is for the time lessened, and into the partial vacuum thus formed the smoke is forced by the aspirating power of the exhaust steam, which power is increased by the increased pressure in the cylinders.

The form of the blast is conical—securing a contraction of the *embouchure*, which produces an increase in the velocity by which the exhaust steam escapes, and also the duration of its action. To a certain extent these advantages are neutralized by the reaction of the steam pressure against the pistons. And this back pressure is increased as the blast orifice is contracted.

If the motion of the train be slow, the influence of the blast orifice will be diminished. At high speeds, however, the blasts following one another with great rapidity, the pressure in the contracted portion of the pipe is almost uninterrupted, and the effect on the piston will be constant.

For example: An engine of 6 ft. drivers, running at a rate of 40 miles an hour, an usual rate for express passenger trains in this country, makes 186 revolutions per minute. Each revolution requires four cylinders full of steam. Hence $186 \times 4 = 744$ blasts per minute; or $12\frac{1}{2}$ per stroke will be made. With a stroke of 24 inches the speed of the piston per second is equal to $\frac{186 \times 2 \times 2}{60}$

or 12.4 ft. And if $\frac{1}{20}$ represents the proportion between the area of the orifice and the area of the piston, the velocity of the exhaust steam will be $12.4 \times 20 \times 2$ cylinders = 496 feet per second. But this velocity is increased because the steam escapes with more power at the commencement of the exhaust than at the close.

A blast pipe much curved will increase the reaction considerably. And while the reaction is increased by contracting the size of the orifice, the draft is also increased. These facts led to the construction of the variable orifice, the object of which is to economize fuel; regulating the force of the draft by the size of the blast according to the demands of the engine.

The arrangements by which the variable opening is regulated are various. One of the oldest

consists of a single cock attached to the blast pipe and communicating with the engine driver's stand by a small rod. This cock being opened a certain portion of the exhaust steam passes directly into the atmosphere without going through the chimney. Of course, the result is to weaken the draft. Closing the cock produces the contrary effect.

Another, a new and improved construction is a cone which is set in the head of the pipe like a valve. The opening for the escape of the steam is annular, surrounding the cone. The elevation or depression of the cone increases or decreases the area of the ring and thus affects the draft.

The same results are obtained by Stephenson's regulator. The end of the blast pipe is enlarged and covered with two flat circular plates or a "register" in which the openings are radial to the circumference as in the parlor registers of heating furnaces. There is a constant opening in the center. This gives the minimum orifice with the strongest blast; the other openings are in the control of the engine driver. This regulator is certainly better than any other in use. The second form mentioned, sometimes produces trouble by being filled up between the cone surfaces and the sides of the pipe, by the cinders and wash water in the boiler which form a sort of cement difficult of removal.

An important desideratum presents itself in reference to the blast orifice. Can it be enlarged at high rates of speed and the necessary force of draft maintained? This would save fuel and power also.

It is customary for engine drivers to attempt economy after steam is up by running with a low fire, and also by opening the door of the furnace. These methods have their disadvantages. If a low fire be used, the smallest quantity of fuel thrown into the fire-box cools the furnace now rendered extremely sensitive. If the fuel be coke, a loss of the material itself ensues, because the coke-bed being thin and light, is raised, and the smaller particles sifted through the grate between the bars. A mischief resulting from opening the doors of the furnace produces unequal contraction of the tubes, thimbles and fire-box—and hence affects the joints of the work. A good engine driver will rarely resort to this mode of reducing the steam production, unless his engine contain too large a proportion of fire surface.

At present a second regulator or damper is attached to locomotives inside the smoke-box, or to the open side of the ash-pan. One object of it is prevent the too sudden admission of cold air when the fire is removed from the furnace, the consequences of which have just been mentioned.

Mechanical Drawings at the Fair.

There are now on exhibition at the Crystal Palace a set of working drawings for the re-construction of a passenger engine on the New York and Erie railroad. They are executed by THEODORE KRAUSCH, an accomplished Engineer in the service of that company. We call the attention of scientific men to them. They are the most complete and most elegant specimens of draughting we have ever seen; we have heard them so pronounced by several intelligent American and European Engineers. One beautiful feature is a new style of shading, that gives a richer and a deeper tone to

the picture, while it saves much time. Mr. KRAUSCH designed this style for his own use; we hope he will in some manner make it known to his profession. We understand that by this method he performed labor in four hours that could not otherwise have been done in two weeks, if at all, on that quality of paper.

Scioto and Hocking Valley Railroad.

This company was organized under a special charter passed by the Legislature of Ohio, Feb'y 20th, 1849, subject to the restrictions and provisions of the "act regulating railroad companies," passed Feb'y 11th, 1848. The original route contemplated was from Portsmouth on the Ohio river up the valley of the Scioto river, passing through the towns of Piketon, Chillicothe, Circleville, Amanda and Lancaster to Newark. Subsequent considerations induced a change of route; and additional legislation was obtained in 1851, by which the charter was so amended as to allow of the construction of the road through the counties of Scioto, Jackson, Vinton, Hocking and Perry to Newark, in Licking county, and the commissioners of the above counties were authorized to subscribe to the stock of the company, subject to the ordinary restrictions and regulations. The road was accordingly so located, and a portion of it, (44 miles in length,) extending from Portsmouth to Jackson, was put under contract in the spring of 1851. It was completed and put in operation in the autumn of 1853. The balance of the road, 91 miles was put under contract in February, 1852, and the work for a time was carried on with considerable activity, until the pressure of the times compelled a reduction of the force employed.

In December, 1855, another portion, from Jackson to Hamden, a distance of $11\frac{1}{2}$ miles, to the junction with the Marietta and Cincinnati railroad, was open for business.

Between Hamden and Somerset, a distance of 55 miles, the grading is completed on 18 miles, and well advanced on the balance. From Somerset to Newark, a distance of $24\frac{1}{2}$ miles, the grading is completed and ready for the superstructure, with the exception of dressing up at a few points, and the wood work of two bridges.

The general character of the work is light, there being but three heavy points upon the route; one a tunnel, 2,400 feet in length, 12 miles south of Somerset, a heavy cut at Somerset, and the "Five Mile Summit," in Hocking county. Of these, the cut at Somerset is two-thirds completed, and the excavation at the "Five Mile Summit," nearly done. A large proportion of the expense of the tunnel is in the approaches, which are of rock, amounting in the aggregate to 4,500 feet in length of excavation, averaging 20 feet in depth. The north approach is completed, and the excavation carried in the tunnel for 150 feet. Four months' work will complete the southern approach. The material met with in the tunnel is principally sandstone, which will form a durable roof without arching.

The road, with the exception of the tunnel, can be ready for business in eight months' time, and under favorable circumstances, the tunnel can be completed in fifteen months. A temporary track could, however, be made over this at a slight expense, and the whole road thus be put in operation at once.

The entire road, when completed, will be 135

miles in length, traversing the rich mineral region of Southern and Eastern Ohio for about 100 miles. Cannel and bituminous coals of a superior quality are found in quantities which may fairly be pronounced inexhaustible, and the iron ores are equally abundant and rich. Before the construction of this road, but few furnaces were in existence in this region, but at this time upon the 56 miles in operation there are in blast nineteen charcoal furnaces, each producing on an average 2,000 tons of pig metal annually; all of which passes over the road to the Ohio river. When a northern outlet is obtained, the great bulk of this will go in that direction, thus adding largely to the receipts of the road. These furnaces have uniformly been in advance of the road; and in Hocking county upon that part now under construction, there are three furnaces in blast. The fuel used in the smelting of ores until very recently has been charcoal, but within the past two months a furnace has gone into operation using the raw bituminous coal, and with such marked success as will lead to the immediate erection of others, thus developing still further the almost boundless resources of this region for the cheap and profitable manufacture of iron. The coal trade will be a no less important item of business, both because the coals are of a superior quality, and it is to this portion of Ohio that the Northwest and Lake country must look for its supply of fuel, a demand which is constantly increasing. The cannel coal is found to be of superior quality for the production of burning and lubricating oils, and works of large capacity are now in successful operation upon the line of road, and others undoubtedly will soon be erected, owing to the peculiar facilities for obtaining this variety of coal at a low cost.

A company to mine the bituminous coals of Hocking and Perry Counties, and manufacture iron in large quantities, has recently been organized with a capital of \$1,500,000—located about 6 miles from this road, and making connection with it by a branch.

In addition to the furnaces directly upon the line of the road, there are in the vicinity of Portsmouth and Ironton, both in Ohio and Kentucky, thirty-five others, making in all fifty-six furnaces in this region in active operation. The average annual product of all these furnaces is about 112,000 tons, which, at a minimum price (now selling at \$35) of \$30 per ton, gives \$3,360,000. The annual consumption of the products of the country by these furnaces is about \$625,000.—The capital invested is \$4,200,000. At Portsmouth, Ironton and Hanging Rock are seven rolling mills employing about \$1,050,000 capital. In the nail works, foundries and machine shops in the same territory are invested about \$250,000. All of these improvements have been made within a few years, and are owing to the great resources of this section of country; and it is only necessary that the road should be completed, to have its whole line studded with furnaces and rolling mills, since, on the part now under construction, the iron ore is as abundant and rich as in the region now occupied, and the coal is of much superior quality. And since it can no longer be regarded as an experiment to smelt the ores with the raw bituminous coal, and the iron can be manufactured much more cheaply with this than charcoal, and with a much smaller capital, the fur-

naces must increase in number at a much more rapid rate than at any previous time. Thus a large, constant and profitable business will always be secured to the road.

The connections of the Scioto and Hocking Valley Railroad are numerous and important. At Portsmouth it will connect with the Maysville and Big Sandy Railroad, in process of construction, and thus with the long chain of roads through Tennessee and Kentucky, and the far south-west. The same connection will be made by means of the Ironton Railroad, now in operation to within ten miles of this road, which short link will undoubtedly soon be built. The Ironton road will connect with the Lexington and Big Sandy Railroad, now in process of construction, and which runs through a highly productive region, as also one abounding in minerals, and for which the Scioto and Hocking Valley Railroad will afford an important outlet to the North and East. At Hamden it connects with the Marietta and Cincinnati Railroad; six miles south of Somerset with the Cincinnati, Wilmington and Zanesville Railroad; and at Newark with the Central Ohio, Steubenville and Indiana, and Sandusky, Mansfield and Newark Railroads. With the last named road, it will form a direct line from the Ohio River to the Lakes. With the Steubenville and Indiana Railroad, it will form an important connection between the Southern and Eastern roads, and by the Central Ohio it connects directly with the Baltimore and Ohio road on the East, and the long chain of roads on the West. It will connect the vast system of water navigation of the great Lakes with the still more extended navigation of the Ohio and Mississippi Rivers and their tributaries, and will form a chief medium for the interchange of commodities and of travel for the great populations of the wide region watered by these lakes and rivers.

In 1852, an issue of \$300,000 Bonds was made, secured by a mortgage upon the 44 miles from Portsmouth to Jackson, which were sold at good rates. In 1853, another issue of \$1,000,000 was made, being a first mortgage upon the extension from Jackson to Newark, 91 miles, and a second lien upon the division between Portsmouth and Jackson. But a few of this issue were sold, and the issue being found insufficient to the completion of the road, owing to the rise in the price of iron, and the depreciation in securities, it was resolved by the Directors to retire this emission and issue in its place new bonds to the amount of \$2,200,000, which would be amply sufficient to complete the road and equip it, and retire its floating debt. In accordance with this resolution, which was ratified by the stockholders at their annual meeting in May last, the new issue has been made, and arrangements are now in progress to retire those of the \$1,000,000 already sold.

These new Bonds are due in 1881, bearing seven per cent. interest, payable semi-annually, and convertible into the stock of the company within ten years. To provide for their payment at maturity, a sinking fund of five per cent. on the gross earnings has been created, to be paid into the hands of the Arcade Bank of Providence, R. I., Trustee of the fund.

The estimated cost of the road, 135 miles in length, including equipments, fixtures, depot grounds, contingencies, &c., is \$4,000,000 and the

resources relied upon to meet this expenditure are as follows.

County and City Subscriptions.....	\$300,000
Individual Subscriptions, including amount taken by contractors and for right of way.....	1,200,000
Mortgage Bonds on 44 miles from Portsmouth to Jackson.....	300,000
Mortgage Bonds on whole road, 135 miles.....	2,200,000
	\$4,000,000

For the present fiscal year beginning May 1st, 1856, the earnings to August 1st, from passengers have been.....	\$8,645 95
Freight.....	18,955 56
Mail and Express.....	800 00
	\$28,401 51

This is in an unfavorable season of the year owing to the low water in the Ohio river, which renders the shipping of freight from Portsmouth difficult.

For the same period in 1855 the earnings were as follows:

Passengers.....	\$5,447 70
Freight.....	14,154 26
	\$19,601 96

showing an increase in receipts of \$8,799 55. Additional motive power has recently been obtained, and the receipts will be much increased thereby. The road has been run and kept in repair at about 35 per cent. of the gross earnings.

The average earnings per mile of 95 railroads in the United States for the year 1855 was \$6,690. Considering the many favorable features of this road it is safe to assume that its receipts will be equal to this average.

Length of road 135 miles, at \$6,690 per mile, \$903,150.

The road runs through a country where fuel is, and always must be, remarkably cheap. It has no competing or rival lines, and hence will not be under any necessity of encountering the cost of high rates of speed. It has few bridges on the line, and is not exposed to the hazards of freshets in the water courses. These and other considerations warrant the assumption that the annual expenses of sustaining and operating the road will be considerably below the average. But allowing 50 per cent. of the gross receipts to be applied to the annual expenses, leaves as net estimated annual income \$451,575.

The Directors are Joseph Riggs, Geo. Johnson, C. A. M. Damarin, J. W. Laird, J. K. Will, F. Case, John Webster, E. A. Spencer, and W. J. Richart.

President—E. A. SPENCER, of Somerset.

Vice President—Geo. JOHNSON, of Portsmouth.

Treasurer—THOMAS DUGAN, do.

Secretary—J. W. COLLINS, do.

Superintendent—THOMAS KENDALL, do.

Chief Engineer—J. W. WEBB.

Fort Wayne and Chicago Railroad.

Only about twenty-five miles of track of the Pittsburg, Ft. Wayne and Chicago road remains to be laid to complete the connection by rails with the first named road at Plymouth. Some seven hundred hands are now employed in laying the twenty-five miles of track, with rails and cross-ties, which will be completed by the 20th of October. When this is done, a new and direct communication by rail with Chicago will be opened from Philadelphia by way of Pittsburg, Fort Wayne and Laporte. A satisfactory running ar-

angement has already been made with the Michigan Southern and Northern Indiana roads.

Tennessee and Alabama Railroad.

We are in receipt of the fourth annual report of this company recently published, showing their operations for the year ending 30th June last.

Since the date of the last report, an abstract of which was published in the JOURNAL of Oct. 13, 1855, but little has been done toward extending the road from its then southern terminus, the work of construction having been principally confined to laying the track, and improving that portion of the road already running, and building the extension to Broad street, in Nashville. On the 23rd of August, 1855, the road was completed to Thompson's, 26¾ miles from Nashville, and trains commenced running regularly on that day.

It was expected that the extension to Broad st. would be completed, and the cars commence running early in August.

The ground purchased for a depot at Broad st. are very contracted. But little has been done towards depot building during the year. A few platforms have been built where the business of the road imperatively demanded them. At Thompson's station a small passenger house, platform, freight shed and turn-table have been built. But as the track is soon to be extended half a mile beyond its present terminus to more convenient depot grounds, the Superintendent recommends, that measures should be taken to erect such buildings and provide such convenience, as will enable the business of the road to be conducted in a rapid and satisfactory manner.

The company were originally anxious to have the road run through the town of Columbia, and when the first experimental surveys were made, were at much expense in having lines run with that view; but owing to the location of the town, it was found impracticable to adopt an economical line, in consequence of the increased distance, and the consequent increased cost of construction. Yet, knowing the anxiety of the citizens of Columbia, to have the road run through their town, the Board of Directors aided in obtaining an act of the last Legislature, in which there is a provision, that the road shall be located and built through the town of Columbia, provided the citizens of Maury County shall subscribe within six months a sufficient amount of stock to do the local work, from the present terminus of the road near Spring Hill to the town of Columbia—the distance being about 11 miles; thus giving them an opportunity to locate the road by or through their town to suit their own views and wishes, upon their subscribing an amount sufficient to do the local work for about one-third of the whole distance through the county, notwithstanding it might increase the cost of construction, and the length of the road.

The amount had not been subscribed at the date of the report, nor had the time mentioned expired.

The stringency in the money market and the continued high price of railway iron are the principal reasons why the Directors have not placed more of the road under contract.

Being desirous of settling the question of right of way before commencing operations, a special agent was appointed to visit all persons owning land along the line for that purpose.

The Engineer had been instructed to place immediately under contract all those sections which were subscribed for to be paid in labor, lying between Spring Hill and Mount Pleasant.

The Legislature of Tennessee, at its last session, increased the State aid to this road, by authorizing the issuance of \$115,000 of State bonds, to build the bridges across Duck and Buffalo rivers. An act was also passed, authorizing the endorsement by the State, of \$200,000 of the company's bonds. This will increase the means of the company upwards of \$300,000, and should stimulate them to renewed exertions in pushing forward the construction of the road.

In concluding his report the President says:

"When the road shall be finished, and has the advantages of its many and valuable connections, especially that of the Gulf of Mexico, on the south, and of the Lakes on the north, the stock will be of the highest value, yielding, annually, large dividends.

"It is only necessary to view its locality and its proper connections, to satisfy every one that it will be one of the great thoroughfares and main route of connecting all the cities and States of the North with the principal towns and country bordering on the Gulf, crossing, as it will, the various parallels of latitude, and being the medium of interchanging and exchanging in both directions, on every mile of its length, ensures to it a very lucrative and permanent business. Your charter, and the natural position of the country and location of your road, protects you against improper competition, and being at a considerable distance in the interior from any navigable stream running parallel with it, your local business will be immense, besides having a full share of the through business; and your road being constructed in the most durable and substantial manner, your expenses being light, your profits will be large."

By reference to the report of A. Anderson, Esq., Resident Engineer, it appears that the whole expenditures for the year ending June 30, 1856, were for—

Grading, masonry, bridging, &c.....	\$21,005 18
Railroad iron	153,384 93
Miscellaneous	32,987 11

\$207,377 22

Expenditures as per last report..... 465,085 88

Total to June 30, 1856..... \$672,463 10

The length of road graded and ready for the iron, from Broad street to Spring Hill, is 32½ miles. The total length of track laid down is 28 miles.

Two daily trains have been run regularly on the road during the year. The receipts have been—

From Passengers.....	\$27,307 05
" Freights	11,921 31
" Mails	367 88

\$39,586 24

Expenses..... 22,208 36

Net earnings 44 per cent..... \$17,377 88

The capital stock of the company is \$1,014,856 66, composed of individual subscriptions, \$814,856 66, Davidson county subscription, \$200,000. To which may be added to constitute the entire capital, the State aid, \$1,225,000, and endorsed Bonds \$200,000—making \$2,439,856 66.

The officers for the present year are:

JOHN S. CLAYBROOKE, *President.*

FRANK HARDEMAN, *Treasurer.*

ROBERT H. BRADLEY, *Secretary.*

JOHN CHILDE, *Chief Engineer.*

A. ANDERSON, *Resident Engineer and Supt.*

The Sarnia Railway.

It will be gratifying to know that the works on the Sarnia Railway are progressing favorably.—Up to the 1st of August, the sum expended on them is reported to have been £123,596, while the amount of the contract for the construction of the line amounts to £350,000. Though the works have been pushed on with considerable vigor, it is not expected that the Railway will be in running order, before next summer. About that time a railway will have been constructed to Port Huron, opposite to Sarnia, connecting with Detroit, Grand Haven, and in communication with Milwaukee.—*London Free Press.*

Androscoggin Railroad.

We learn by the Lewiston Falls *Advocate* that the extension of this road from Livermore Falls to Farmington, in Franklin county, is in hopeful progress, one-third of the distance having already been graded, and another third to be made ready for the rails before winter. When this extension is effected, it will open a very desirable avenue for the considerable travel and traffic to and from the valley of the Sandy river, which has been not inaptly termed the garden of the State, and is really one of the pleasantest sections of New England.—It will greatly facilitate travel to the region about the upper waters of the Umbagog Lakes, the beauty and wildness of which is only to be known to attract thither crowds of summer excursionists.—*State of Maine.*

La Crosse and Milwaukee Railroad.

In yesterday's paper we made brief mention of a very important arrangement entered into on Saturday last by the Milwaukee and Watertown and La Crosse and Milwaukee railroads, whereby the two companies have become consolidated, and their interests become the same. The intelligence gave universal satisfaction in our city, and must be highly acceptable to all who are interested in either enterprise. Under the terms of the arrangement the Watertown road will be merged in the La Crosse, and the consolidated companies will be known as the La Crosse and Milwaukee railroad company. Messrs. W. B. Hibbard, Alexander Mitchell and Eliphalet Cramer, of the Watertown Board, go into the La Crosse Board, and will prove valuable accessories. Mr. Hibbard, who has filled the post of President of the Watertown company for some months past, has shown himself to be a most efficient and energetic officer, and has contributed not a little, by his efforts and influence, to the favorable result of the negotiations between the two companies. His business energy, proverbial tact and excellent administrative qualities will still be usefully employed in prosecuting the La Crosse road.

The consolidation must have a very favorable effect upon the La Crosse and Milwaukee railroad. This road will connect at Portage and Columbus with the Land Grant road, running 300 miles and upward north-westerly, and will offer to the trade and travel to and from Minnesota and North-western Wisconsin the shortest and best route between the Upper Mississippi and Lake Michigan. It must, therefore, from the nature of things, take the bulk of the business, and cannot fail to prove a profitable stock. And as, in addition to this north-western feeder, it enjoys a connection with the Horicon, Berlin, and Stevens' Point road, running northerly, it would be difficult to over-estimate the amount of traffic likely to pass over its line. We see no reason to doubt that it will be one of the busiest and best paying roads in the West, and that its stock will speedily become a favorite one in Wall-st.

Another advantage of the consolidation is the harmonizing of rival railroad interests, hitherto conflicting, and the resulting union of their exertions and influence for the common good. This is a vast benefit, as well to our city and the several roads leading out of it, as to the State at large.—All can now cordially co-operate in measures calculated to advance the interests of both city and State; and if, as we cordially anticipate, the Legislature shall make a wise disposition of the Land

Grant, and confide the administration of this important trust to honest, experienced and capable hands, the railroad system of our State will be placed on a secure basis, and will be pushed forward to completion under the most favorable auspices.—*Milwaukee Sentinel.*

U. S. MAIL AND EXPRESS ROUTE DIRECT FOR Iowa, Kansas and Nebraska.



CHICAGO, BURLINGTON & QUINCY RAILROAD.

THE ONLY DIRECT ROUTE FROM
CHICAGO TO AURORA, MENDOTA, PRINCETON,
GALESBURG, QUINCY, BURLINGTON, ANY PART
OF SOUTHERN OR CENTRAL IOWA, KANSAS
OR NEBRASKA.

PASSENGER TRAINS leave the Central Depot, foot of South Water street, CHICAGO, daily as follows:—
9.00 A.M.—**MORNING EXPRESS.**—Connecting at Mendota with Illinois Central Railroad, north for Amboy, Dixon, Galena and Dunleith, south for La Salle, Bloomington, Decatur, Springfield, Jacksonville, St. Louis, Cairo, &c.; at Galesburg with Northern Cross R.R. for Quincy, &c.; and at Burlington with Burlington and Missouri River R.R., and with Packets for points up and down the Mississippi river.
8.45 P.M.—**EVENING EXPRESS.**—Making same connections as above.

NO TRAIN SATURDAY EVENING.

ONE TRAIN SUNDAY, 8.45 P.M.
BAGGAGE CHECKED THROUGH TO BURLINGTON AND QUINCY.

THROUGH TICKETS can be procured at all the principal eastern railroad offices and in Chicago at the Depot and at the Michigan Central R. R. office, corner of Lake and Dearborn streets, opposite the Tremont House.

SAM'L POWELL,
Gen. Ticket Agent.

O. G. HAMMOND,
Gen. Supt.

HUDSON RIVER BRIDGE. Notice to Contractors.

OFFICE OF THE HUDSON RIVER BRIDGE CO., AT ALBANY, September 25th, 1856.

PLANS and Specifications for the Superstructure of the Bridge to be erected by this Company across the Hudson river, at Albany, will be received by the Directors at any time within sixty days from the date hereof, at their office in the Exchange, in the city of Albany. The plans may be for a Superstructure of either Wood or Iron.

By the terms of the charter, the Bridge is to be constructed with a draw of sufficient width to admit the free passage of the largest vessels navigating the river, and at least two hundred feet in width; or two draws of at least one hundred and fifty feet each.

Information may be obtained at the office of the Company, as to the location of the Bridge; and all the particulars necessary to be understood by those who may wish to submit plans and specifications.

The Plans must be in detail, accompanied with an estimate of the cost of all the items.

The Company reserve the right to reject all the plans, or to adopt portions of any of those which may be submitted.

A Premium of Five Hundred Dollars will be paid for the plan which may be accepted by the Directors, or if portions of different plans be adopted, the premium will be divided in such manner as the Directors may deem proper.

By order of the Board,

6140

G. L. WILSON, Secretary.

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 55 lbs. per yard, of Messrs. GUNST & CO. and BAILEY BROS. & CO.'s make, shipping from England during the present month for New York. For sale by J. BOOKMAN, JOHNSTON & CO.,

Sept. 25th, 1856.

2m

90 Broadway,
NEW YORK.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.

NEW YORK, July 21st, 1856.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address

JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1856.

3m.

SOUTHERN RAILROAD.



State of Mississippi, City of Vicksburg, OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the superstructure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track-laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perch.

More cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the **FIRST DAY OF NOVEMBER NEXT**, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track-laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, commencing with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions; the first of 21 miles, the second of 23 miles, the third of 38½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one-third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps, profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railroad, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with those places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans; and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus National, it appeals especially for aid to southern men and southern enterprise; for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over-estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

WM. C. SMEDES,
President of the Southern R. R.

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kilbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural rocks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,
Pres't LaC. and Mil. R. R. Co.

MILWAUKEE, August 1st, 1856.

10:32

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the OGDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILA DELPHIA, Penna. 32tf

Philadelphia, Wilmington & Baltimore Railroad. UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	8 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati	\$17 00
do do Louisville	19 00
From New York to Indianapolis	19 00
From Philadelphia to Cincinnati	16 00
do do Louisville	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER Supt.

New York and Erie R. R.

On and after Thursday, August 7, 1856, and until further notice,

PASSENGER TRAINS will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m. for Dunkirk.
MAIL, at 8½ a.m. for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m. for Dunkirk.
ROCKLAND PASSENGER, at 8½ p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 5 p.m. for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.

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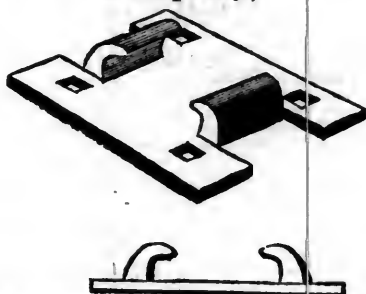
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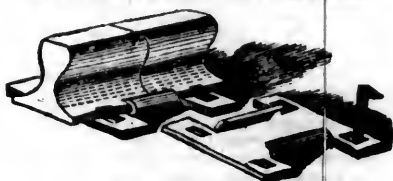
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ROBINSON'S IRON PAVEMENT,

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3d. The most economical pavement, because the wear and tear of both beasts and vehicles, of pleasure and burthen, are less upon it than upon any other in use.

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6th. The least noisy pavement to use or reside near.

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All additional information that may be desired will be promptly communicated, and orders promptly executed, by letter or in person, to the undersigned, **GENERAL MANAGERS OF THE COMPANY'S BUSINESS, AT THEIR OFFICE IN THIS CITY, NOS. 8 AND 10 WALL STREET.**

We are also allowed to refer for general information on the subject, to the gentlemen whose names are subjoined, as Honorary and Consulting Directors, not interested as shareholders in the Company's business.

SMITH, ELEVETH & ROBINSON,

General Managers for the Iron Pavement and Street Railway Company

HONORARY AND CONSULTING DIRECTORS.

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HON. J. V. O. SMITH, Esq., { Treasurer of Union Telegraph Company, Boston, Mass.

HON. H. F. FRENCH, Associate Judge, Superior Court, { Essex, N. H.

HON. JOHN M. WOOD, (Member of Congress,) Port- { land, Me.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorized European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, October 11, 1856.

Strike on the Erie Railroad.

There has been another *emeute* on the Erie railroad—a strike by a portion of the engineers in consequence of the stringent rules prescribed by the Superintendent for running the trains. As upon a similar occasion, we are glad to learn that the operations of the company have been only slightly embarrassed, and that no difficulty will be experienced in promptly filling the places of the retiring engine drivers.

The chief matter of complaint was the rule which made it sufficient cause for discharge, for an engine driver to run his train off the track in consequence of the misplacement of the switch. When we consider how fruitful in accidents such misplacements are, we cannot doubt the rule to be a good one. It renders necessary just that degree of speed which should always be observed in running into stations, and imposes that degree of vigilance and watchfulness necessary to make a first rate engineer. The freedom from accidents on the Erie railroad is another proof of the value of the discipline which Mr. McCallum is seeking to enforce.

We have no doubt that the regulations prescribed to the engineers on the Erie railroad are very severe and rigidly enforced. We can see no

other way in which such a vast machine can be safely and successfully conducted. They have secured an almost entire immunity from accident, and have given to the road the reputation of being one of the safest and best managed in the country. We believe the engineers have no sufficient cause for complaint. If they are dissatisfied, they could have retired with an honorable discharge. But to form combinations for the purpose of forcing the company to recede, is a step unwarrantable in itself, and can only result in the end to the injury to the parties concerned—for no party will feel safe in employing men turned off by another for sufficient cause.

Below we give the report of a committee of the Board of Directors in reference to this matter.

OFFICE OF THE NEW YORK & ERIE R. R. Co. }
New York, Thursday Oct. 2, 1856. }

TO LOCOMOTIVE ENGINEERS AND OTHERS.

At a meeting of the Board of Directors, held October 2, 1856, the following report having been read, was unanimously approved, and the whole subject referred back to the Committee, with full power to take such action as the present exigency seems clearly to demand.

NATHANIEL MARSH, Secretary.

The Committee to whom was referred the communication, purporting to be a preamble and resolutions of certain Delegates appointed by the Engineers of the several Divisions of this railroad, passed at a meeting held at Susquehanna, Sept. 19, beg leave to report—

That they have given the subject much thought and investigation, having had a long interview with the following persons:

WILLIAM SCHRIER,	HENRY BELDEN,
JOHN C. MCGINNIS,	JOSEPH YORK,
JOHN HALL,	I. C. YORK,
E. F. WHALEN,	EDWARD TINNEY, and
H. J. BROOKS,	J. F. OLMSTEAD,

who represent themselves as a Committee of the delegates above referred to. And they have also consulted the General Superintendent, and such other authorities, for such facts and explanations as would enable them to arrive at satisfactory conclusions in the matter presented for consideration. With these lights we proceed to discuss the demands of the document referred to, the most emphatic of which seems to be the abrogation of the Rule 6th, supplementary to general instructions of March 6, 1854, said demand being made by the persons upon whom it is intended to operate, which is as follows:

"Every Engineer will be held accountable for

running off at a switch at any station where his train stops, but will not be held responsible for running off at a switch at a station where his train does not stop."

This is a *rule of safety*, which having been submitted to the Board of Railroad Commissioners of this State, and duly affirmed by them, seems to clothe it with some degree of public utility. It was intended to require engineers to approach stations where their trains stop, at such a moderate rate of speed as would insure safety against all contingencies of carelessness, or design of switchmen or others. This rule, while protecting the engineer, really involves him in no hardship, but, if faithfully executed, would render accidents and collisions between trains nearly impossible—a result which the traveling public at least will appreciate, if our engineers do not. The engineers are not held responsible for the acts of the switchmen, as their Committee seems with some degree of plausibility to imply, but they are simply made responsible by their own violation of the rule, which requires them to so regulate their speed when approaching stations where their trains are to stop, as not to run off upon switches. The rule appears to require the switchmen to keep the switch in proper position, and they are dismissed if failing to perform this important duty. But experience having proved that frequent collisions and disasters could not be prevented by the mere responsibility of switchmen, this rule under discussion was adopted as an additional guard of life and property. And we were particularly struck with the wisdom of the rule, for while it has resulted in great security to the lives of passengers and the Engineers themselves by protecting them against a too common and frightful source of disaster, at the same time it has resulted in but few discharges. We find by referring to the company's records that there are about two hundred men employed in that capacity, and the following statement embraces the whole number that have been affected during the last two and a-half years by a violation of this rule:

The whole number discharged was 29
The number of above re-instated 14
The whole number discharged for 2d offence... 2

During this period the number of miles run by the several Engineers is about 8,100,000.

It is difficult to see any practical cause of complaint in the working of this rule, and it does not seem unreasonable that the Engineers should be required to share the responsibility with the switchmen, when the control is entirely in their own hands; nor can it be charged that by this rule "switchmen are encouraged to neglect their duty," because they share the responsibility and are discharged for the same accidents. The argument adduced that switchmen "in a majority of

instances are unfit for the positions they hold," if true, furnishes a most cogent reason for the greater responsibility of the Engineer, and the greater necessity of a strict adherence to the rule and its penalties; and the further argument urged against this rule, that in several instances trains had been run off, notwithstanding the stringency of it, merely goes to further demonstrate the necessity of the rule and the difficulty of guarding against accidents of the kind; and surely discountenances any relaxation of the rules governing the running of a road where the lives of thousands of persons may be made to pay the penalty of such rash importunity. That the conclusion is forced upon us, it is only necessary to suppose an abrogation of the rule referred to, and an accident resulting therefrom. In such a case, would not the public stamp the act not only as imbecile and criminal, unpardonable, and unjustifiable? Indeed, we are constrained to hope that the great body of the Engineers of our road are too intelligent and conscientious to join in a desire of this kind, but regard it as emanating from a few thoughtless, or restless men, against whom this rule becomes one of marked utility.

Experience has proved that there are three prominent causes of railroad accidents.

1st. The neglect to use danger signals when required.

2d. The neglect of the same when used, and
3d. The almost universal habit of running into stations at a high rate of speed.

We learn that in framing a rule to guard against the latter, great difficulty was encountered from the fact that speed could not be measured or estimated with certainty—hence the rule in question was adopted upon the safe presumption that the care necessary to pass switches in compliance therewith would insure such moderate speed as would be absolutely safe. The Engineers were instructed that Switchmen were placed at stopping stations for their convenience only, and were not to be relied upon for the safety of the train, and that Engineers would be expected, in all cases, to see that the switches were right before they passed over them, and were also especially enjoined to take all the time necessary to run safe; in other words, to "RUN SAFE FIRST, AND FAST AFTERWARDS," that they should run into stopping places under the assumption that every switch was out of place, and a train standing on the main track.—

We have enlarged on this rule, its history and necessity, because of its great importance, and because, both in the petition itself and in our personal interview with the Engineers, they emphatically state "that they will not be held responsible for the switches in any manner," and while we should regard it a dangerous practice for the Executive department of this Company to modify its regulations to meet the ill-digested whims of its employees, we can hardly restrain our indignation against an attempt to subvert by threatened insubordination, a set of regulations, which being framed and executed with singular ability and success, have challenged the admiration of the public, and insured the safe transit of life and property, in a manner almost without parallel in this country. In this connection it is proper to state, that in calling the attention of the General Superintendent to the discharge of one of the Engineers referred to, who had backed off the switch at Hornellsville, and on which much stress was laid by the Committee of Engineers who appeared before us, he disavowed any intention of enforcing the penalty of discharge in the case, and explained the dismissal as the act of a Division Superintendent, who, in his absence, had literally construed the rule, not being aware of an exception, which was applicable to this particular case, as explained in the circular of June, 1854. At the same time he informed us that his letter to the Engineers, where he assures them that they shall never be discharged without a hearing, has always been substantially complied with on his part, and on the part of others, so far as he has any knowledge.

To their demand for increased compensation,

we have only to report that one of our body has thoroughly investigated the corresponding rates of wages paid by other leading railroad companies, and by comparison there is, in our estimation, no just cause of complaint; and it is due to the firemen to say, that no member of their occupation appears to represent them, although, according to the communication under discussion, they are made a party. We regard a petition for an increase of wages as in itself legitimate and proper; and while it has always been the aim of this company to secure the services of competent and faithful men, by liberal compensation, and to meet their reasonable requests for an increase, yet, under the circumstances, the demand at this time cannot be entertained.

Their demand for a free pass for firemen and the employees of other roads, is so prodigiously absurd, as to hardly merit discussion. Indeed, we think they must have observed the large number of "dead heads" which our railroads are burdened with, and, therefore, urge their claims as a satire on the looseness of railroad management in this respect.

We are satisfied, after full investigation, that the rules and regulations of the Company are no more stringent than is requisite for the safety of life and property, and that they have been fairly and justly administered by the energy and great capacity of our President and General Superintendent.

Such rules must be arbitrary to be effective, and to enforce discipline among a body of nearly 5,000 men, whose capacities and dispositions are more various than their occupations.

That there should be occasional hardships arising from the necessary administration of discipline is to be expected, and the aggrieved party has the right to leave the Company's service at any time when he encounters a fancied or real grievance, but surely the employees have no right, either singly or collectively, to enforce a change of rules, vital to the interests of the company and the safety of the lives and property committed to its charge.

The Directors must make such rules for the operation of the road as experience indicates to be proper and necessary for its safe and economical operation; the Executive officers must execute these with energy and firmness, duties of great responsibility, and therefore any organized effort of the employees of the road to obstruct them must meet with a decided and energetic defeat.

To this end, full and ample means have been resorted to, for the protection of the faithful and industrious employees of the Company in the performance of their duty, against any organized attempt to obstruct them. A strong police force will be on the alert to guard against any excesses on the part of misguided persons engaged in the proposed strike.

In view of this state of things, we beg leave to advise that you instruct our General Superintendent to immediately discharge from the Company's service the ten engineers representing themselves as a Committee in this act of insubordination, and to fill their places with men who are willing to obey rules, and leave to the proper authority the duty of making them, and also to cause to be discharged all employees who refuse to serve the Company under and in complete obedience to the rules as they are, filling their places in like manner.

We feel that no other course would be consistent with our duties and we submit with confidence to the enlightened judgment of the public, whose safety is of the first consideration, and to the most scrutiny of other Railroad Managers, whose interest are inseparably connected with the issue of this matter.

It is proper to state, for the honor of a large body of our intelligent and industrious Engineers, that this insubordination (we learn) extends to but a small portion in the Company's service, and that they are without the sympathy of the public in any quarter; and we close this communication with the remark that this is the second time in the history of our road where have been called upon to sacrifice large sums of money for its

safety and proper government, an alternative forced upon us by a clear sense of duty to the public, to our employees and ourselves, not doubting for one moment the result. All of which is respectfully submitted.

RICHARD LATHENS.
D. A. CUSHMAN,
WM. E. DODGE,
CORNELIUS SMITH,
E. J. BROWN.

The "Adriatic."

This noble vessel is undoubtedly the grandest achievement of our mechanics in naval art; and as she approaches completion, the general interest felt in her progress is indicated by the great number of persons constantly flocking on board. That this interest is not restricted to citizens of the United States, is shown by the number of Europeans, especially Englishmen, who are included among the visitors. Those concerned in building her have no reason to shrink from the severe scrutiny and criticism to which their work is subjected,—the ship, even in her incomplete state, challenges comparison with anything floating on the ocean, in all those qualities which secure strength, speed, or elegance. Her model, to any other eye than that which designed it, (now, unhappily, closed in its last slumber,) might be considered faultless; but Mr. Steers always saw defects to be remedied; he never built two ships alike; for, he reasoned, "if we stand still there can be no progress, and science has reached her highest attainments," and he who triumphed with the yacht "America," determined, with ambitions yet unsatiated, to excel also in the fleetness of his ocean steamers. But when his star had almost culminated, the dark pall of death shrouded it forever. The model of the Adriatic differs from all former practice, unless the U. S. steam frigate Niagara, (also built by him, and nearly complete,) be made an exception. Both are modeled on substantially the same plan, with a studious adaptation of shape to the course of the water when cleft by the ship's prow, except that the Niagara is much sharper, but with less dead rise or dead flat, preserving her stability amidships; and both vessels have many points of resemblance with the America. The keel, for instance, is curved throughout its entire length,—but with little curvature toward the stern, while at the other extremity, there is a rise of about nine feet to the water line, commencing 100 feet back. Some said to Mr. Steers that in making his ship so sharp she would go under; but he anticipated a result exactly the reverse,—conceiving that the effect would be rather to throw her out of the water, so that the more rapid the speed the more she would rise, diminishing the displacement. Actual experience has confirmed his theory.

In passing through the spacious saloons and deck of this great ship, there is much to impress the spectator with admiration; but when he stands upon the brink of her main deck and peers down thirty-three feet into the iron bowels of this ocean monster, he experiences a sensation of wonder and awe. Her engines, from the Novelty Works, are massive and of prodigious power and form the distinguishing characteristic of the ship. They are justly regarded as a master-piece of mechanism, and while they effect a great saving in space, are expected to accomplish a still greater saving in the reduced consumption of fuel,—objects of paramount importance in the construction of ocean steamers. Some idea of the power of these engines may be formed from the following statement:

Two bed-plates.....	each weigh 42 tons.
Two cylinders.....	" 50 "
Two beam pillow-blocks.....	" 22 "
Eight boilers.....	" 40 "
Two water-wheels, wrought iron.....	" 25 "
Two shafts.....	" 34 "

The shafts and cranks, from Reading, are believed to be the largest forgings ever made in any country. The engines of the Adriatic have two cylinders, each 100 inches in diameter, with 12 ft.

stroke of piston, and are of the kind known as "inclined oscillators," coupled by simple and direct connections known as "drag link," and are altogether the most compact and direct engines yet constructed. The valves are of the sort styled "two motion cone valve," and are the invention of Mr. Horatio Allen. They are drawn from their seats, by which wear is avoided, and being perfectly balanced are handled with great ease. Their object is to economise in the use of steam. The cylinders, which are of the kind known as "surface condensers," are on a plan which is also the invention of Mr. Allen, and which comprises the advantage of a large amount of cooling surface in a small space, with great simplicity and accessibility in all their parts, and are designed to afford a constant and unfailing supply of fresh water to the boilers. They contain 10,000 tubes of brass, each 12 feet in length, (equal to 21 miles) through which is constantly passing a stream of cold water, drawn from the sea, and forced through them back into it again, by two independent steam pumps of great capacity. It is by coming into contact with the exterior surface of these tubes thus cooled, that the exhaust steam is condensed, —an arrangement entirely novel, and one that may effect great results. It avoids all the incrustation, corrosion, and other difficulties attending the use of sea water. The principle is somewhat analogous to that adopted by Ericsson, in his caloric engine. The steam pumps connected with the condensers are so arranged that they can, at a moment's notice, take the water for condensation from the inside of the ship, and thus, if need be, keep her afloat. Besides these are two larger pumping engines.

There are eight principal boilers, Martin's patent, having 18,000 perpendicular iron tubes, and are arranged in sets of four, forward and aft of the engines. The whole number of furnaces is forty-eight; there being six to a boiler. There are two extra boilers, with brass tubes, to be used in an emergency. The water wheels are forty feet in diameter, of wrought iron, and each has thirty-two paddles, twelve feet in length. The shafts are thirty-eight feet in length, twenty-seven and a half inches in diameter, and weigh thirty-four tons. The actual propelling power of this enormous engine is estimated at 2,800 horses. The Adriatic has eight more furnaces and two feet more stroke of piston than the Persia. Respecting the consumption of fuel, the probable rate of speed, &c., the engine builders prefer to make no predictions, being satisfied to await results. As regards speed, though this ship is undoubtedly expected to be second to none, Mr. Allen's views are somewhat peculiar. He is disposed to view this quality as a matter of secondary importance, —considering it rather a misfortune that so much stress has heretofore been placed upon it, —high speed being attended with an expense altogether disproportioned to the advantages gained, besides hazarding life and valuable interests. The opinion is entertained that had different views prevailed on this subject, ocean steam navigation would have attained to a much higher degree of advancement than we now witness. It is true that those steamers which have made the best dividends have been those run at a rate comparatively moderate. The consumption of coal on the ships of the Cunard line is said to be from 1,200 to 1,500 tons each passage, and of course must go far to curtail profits.

The hull is not less important than the engine. A radical defect in either, and the whole enterprise would constitute an ignominious failure. The dimensions are as follows:

Length over all	364 2 3 feet
Breadth of beam	60 "
Depth of hull	33 1 6 "
Carpenter's tonnage	5,400 tons

Beneath the saloons are the freight decks, where 1,000 tons of cargo can be stowed and 1,200 to 1,400 tons of coal, beside water tanks for 10,000 gallons, exclusive of the ample provision made for a supply of water by condensation from the engines. But to speak more particularly of the hull,

it may be stated that in its construction the choicest sticks have been selected that the noble forests of the south and west can afford. In putting them together, bolts of copper or galvanized iron from one inch to 1½ in diameter have been used, wherever they could impart additional strength, and all the bolts clenched on rings, and trenails wedged. Diagonal iron braces four feet apart intersect the frames both ways, and the two sets are riveted together where they cross, binding the whole in an inseparable net work; and outside the frame is an iron band having the effect of a hog-frame.

The frame is all of live and white oak, locust, cedar and chestnut, put together in the strongest possible manner. Each frame has 28 cogs and the same number of bolts. The filling-in timbers are bolted each way to the frames, and the latter are all chocked opposite every but with yellow pine, which, on account of the large amount of resinous matter incorporated with its fibres is preferred for durability to almost any other wood. The keel is of white oak, sided 19 inches; the main keelsons are of yellow pine, sided twenty-one inches and three feet deep, coaged to the frame and to each other. The sister keelsons are 22 inches deep and sided 20 inches. The keelsons under the engines are two feet wide and 6½ feet deep, forming a ponderous mass of timber. The frames side from 10 to 12 inches, placed from 38 to 36 inches apart, except the floors, which are filled in solid five feet above the turn in the bilge, from stem to stern post. The outside plank are from 6½ to 8 inches thick and the ceiling is from 8 to 9 inches. There are five bilge streaks 14 inches square and six streaks of wales, coaged and bolted edgewise every four feet apart. The deck beams for the lower and main decks are yellow pine, sided from 13 to 15 inches, and moulded 12 inches at the ends and 14 in the centre. The spar deck beams are of yellow pine, 9 inches wide, with a hanging knee to each beam. The deck plank are from 3½ to 4 inches thick, and the deck frame is secured by diagonal iron braces. All the lodging, bosom and hanging knees are hackmetac, from 7 to 9 inches. Five streaks of plank on the outer bilge are 8 or 9 inches in thickness. From these brief statements some idea may be formed as to the amazing strength of the ship, and the amount of labor which has been expended in her construction.

The Adriatic is rigged with two masts, as a bark, and will have but a temporary bowsprit, to be run out as occasion may require. Though at present she is the largest vessel afloat in the world, (in tonnage measurement, and sits very lightly on the water, displaying her enormous bulk to good advantage, the appearance of magnitude is lost in the symmetry of her proportions. The smoke pipes, for instance, viewed separately, or in comparison with other standards, are monstrous, being forty-eight feet in height by nine in diameter, but in their proper place harmonize with surrounding objects and are in no wise remarkable.

Every possible precaution has been taken to insure the safety of the ship. An important feature is the introduction of water-tight compartments, similar to those which have been built in all the other ships of this line. The bulkheads are made of a double thickness of yellow pine plank, crossing obliquely, with an intervening layer of thick felling; and the whole secured by horizontal timbers and stanchions. It is difficult to conceive how a vessel thus protected could ever sink from the effects of collision. Indeed, all the frames being filled in solid, up to the water-line, the planking might be entirely removed from her bottom and still she would remain water-tight. Or, should water succeed in entering the vessel, the steam pumps have a capacity sufficient to eject an enormous quantity of water. For security against fire, the measures of protection are equally thorough and complete. In all those portions of the ship adjacent to the engines or boilers, a uniform surface of iron or other incombustible material is presented; and between the iron surface and any wood work is a woolen or hair felt-

ing, three-fourths of an inch in thickness which forms a non-conductor of heat, and therefore an effectual protection. It also deadens any noise arising from the working of the engine. The boiler deck is entirely of iron. Connected with the engine are six large fire-pumps, and on the deck are three more, to be worked by hand. The ship is plentifully furnished with patent metallic boats. The principal anchors each weigh 3½ tons, and the cables each of about 100 fathoms, are 2½ inches thick.

Coal-Burning Locomotives.—The Northern Central Railway.

Mineral coal, as a fuel for locomotives, will doubtless in a short time be universally adopted by all American Railroad Companies, wherever it can be obtained with facility.

We learn with pleasure that the Northern Central Railway Company, in view of the opening of their road to the Trevorton coal fields, are at this time selecting the most improved engines, constructed and arranged to burn either the hard or soft coals, both of which are found adjacent to the line of their road.—The tonnage engines most approved by this company are from the shops of our enterprising townsman, Ross Winans, Esq., a gentleman of the highest order of mechanical talent and ability, who has spent thirty years of his life, and large sums of money, in experimenting on locomotive machinery, in order to construct an engine adapted to the use of raw coal, either Bituminous or Anthracite. The result of his experience and labor in that respect are the engines now generally in use on the Baltimore and Ohio, Reading, and Northern Central railroad, where they have given great satisfaction. We learn that in cost of repairs, economy of fuel, and capacity, they have decided advantages over engines adapted to the use of wood. On the Northern Central road the performance of these machines has been highly creditable to the builder. The average distance run per engine per annum has been 18,630 miles, at only an average cost of repairs per mile of 6¼ cents, consuming only 56 lbs. of Cumberland coal per mile. While the article of wood is comparatively cheap on the line of our roads, costing only about \$2 50 per cord, and on the Eastern roads from \$4 to \$6 per cord, it is somewhat remarkable that it has fallen to the task of our companies and machines first to introduce and successfully use, coal as a generator of steam. The sum it may have cost our companies in experiment will now be regarded as inconsiderable, when we reflect on the advantage already obtained and to be derived, both as a measure of economy in the working of our roads, and as a source of revenue from the transportation of coals, which are found in all the varieties on the lines, or adjacent thereto.

Our readers will be struck with the cost of fuel on our roads, as compared with most of the Northern and New England roads. The cost per mile run on the Baltimore and Ohio railroad does not exceed six cents, while on the roads referred to, the cost is from seventeen to twenty-five cents per mile, and on the Reading fourteen cents. Now, when you take the difference of cost for fuel alone, between the Ohio road, and the average cost of the roads named, and apply it to three millions of miles, the number run by that company last year, the advantage will be most striking.

We understand the Northern Central Company are so arranging their machinery to use coals exclusively, both for tonnage and passengers, and with that view have ordered engines from the Lancaster Locomotive Company for the passenger trains constructed to burn coals.

It is also gratifying to add, in this connection, that at no period in the history of this road, has the traffic in freight been so heavy as during the present season. We speak from personal knowledge when we say, that the business of the road, in this particular, has increased with extraordinary rapidity, and is of that permanent character, which justifies the belief, that when the Pennsylvania coal fields are fairly penetrated by the ex-

tension now in progress, the receipts of the road must necessarily compare with advantage to those of any other road of equal length and capacity.—*Balt. American.*

Where does the Specie go?

The exportation of silver to China is still attracting general attention, which is increased by the vague dread lately excited in the stock market. At the conclusion of the war every one calculated on a rapid recovery in the Bank bullion, and an advance took place in the funds, not only in consequence of the amounts which began to flow in, but of the anticipations of the still greater totals that might be expected. Early in July an adverse turn commenced, which has continued with scarcely an intermission to the present time, and which seems likely to gain force. The specie drain to the East presents itself as the only cause of the disappointment, and a large number of people who know that the movement is in some way connected with the rebellion in China, and that there is no prospect of a termination of the struggle, seem to be seized with apprehension at the discovery and to accept it one from another as something to excite permanent misgiving and to disturb all our future calculations. They notice the daily accounts of the absorption of silver on the Continent, of the gold sent from this side to pay for it, and of the attempts of the various Governments, by ordering the State Banks to put up their rates of discount, or, as in France, by the impotent contrivance of buying gold at a premium on one hand which the bank is immediately obliged to part with at its natural value on the other, to check the growing inconvenience. Nevertheless, every overland mail brings news of an increased demand. The cry is consequently raised that, no matter what may be the extent of gold production, the East will absorb it all, or at least take silver from Europe to an equal or greater extent.

A moment's reflection on the first principles of commerce and finance will dissipate the anxiety. There is no mysterious power on the part of the Chinese to drain specie from us at will. They will get no more from us than they are prepared to purchase by a full equivalent, and, unless it can be shown that we are consuming their goods in waste, and to a degree which our earnings as a people are not sufficient to warrant, we may rely that, however pertinaciously they may insist on having silver, and that however carefully they may hoard it, they cannot occasion to us the slightest permanent disarrangement.

The bearings of the whole question may be concisely demonstrated. The financial position of a country must depend solely on the amount of its productions, as compared with its expenditure. Taking this test, there never was a period when England was so secure as at the present moment. As regards our productions, agricultural and mechanical, we have just completed a harvest which, taking every description of crop into account, may, on the whole, be pronounced unexampled, while it is estimated that the value of our manufactures exported this year will exceed by ten millions sterling the highest total yet attained. In the face of this the only question is, have our people indulged in an extravagant consumption of foreign articles sufficient to counterbalance the prosperity thus indicated, or have they been deluded into sending an unusual amount abroad in the shape of loans or otherwise? The observation of all persons, coupled with the monthly statistics of the Board of Trade, will show there is no ground for the former assumption; and the answer is equally satisfactory on the latter, since, although a large number of schemes for foreign railroads and other works have been brought forward, very few of them have passed as yet beyond the rudimentary stage.

In such a state of affairs an unfavorably financial prospect would be anomalous and incredible. We might, therefore, even if we were unable to trace to their conclusion, the peculiar circumstances at present existing, rest in perfect confidence

that the result will be most satisfactory.

But there is no difficulty in working out the problem. Last year the total shipments of bullion to India and China were £4,817,541, of which only £757,875 went to China. This year they have already amounted to £8,279,116, of which China has taken, principally within the last two or three months, £2,826,375. The demand for India has been consequent on the better market for the produce of that country opened by the Russian war, the effect of which has scarcely yet subsided, and on the India Company in London abstaining from drawing the usual amount of bills while they can avail themselves of the railway calls obtainable here at 6 per cent. The demand for China, which has only lately and suddenly become serious, is chiefly attributable to the failure of the continental silk crop and the consequent prices, at which all the Chinese qualities are now being eagerly purchased. The other influences are of minor importance, but among them are to be reckoned the indisposition of the people while the rebellion is raging to purchase goods, whether consisting of English manufactures or of opium; from India. The exportation of English goods, however, to China during the last three years has averaged only about £1,300,000, and therefore no falling off in this item could be of any moment, and the utmost amount of the diminution in their consumption of opium would probably not exceed £1,000,000. Hence it is upon the silk payments that the gravity of the case depends.

This fact at once throws light upon the assertion that England can sustain no appreciable injury from the movements about to take place.—To France it must be a point of anxiety whether the manufacturers of Lyons obtain their staple from their own growers or are compelled to buy the produce of China, but England does not grow silk, and therefore has always to pay for what she consumes. There is no reason to assume that this year she will take, either in quantity or quality, more than her regular amount. Indeed, according to the laws that commonly regulate such matters, the augmentation in price is likely in a more than equivalent degree to check consumption. The excess that arrives will consequently be shipped to foreign countries, and in its effect on the exchanges will operate as if, instead of silk, we had received so much bullion.

But although every dollar we are now parting with will thus ultimately be repaid with the addition of some considerable profit for our services as carriers, insurers, and agents, there can be no doubt that the withdrawal of specie which must be submitted to in the intervening period is calculated to contract our circulation, and perhaps occasion even an increase of the pressure now regarded with disappointment. The opinion of some of the leading East India houses in London is that in the twelve months from July, 1856, to July, 1857, a total of £8,000,000 will have to be paid to China and India in excess of that which was paid in the preceding twelve months. This circulation may be too high, but it is as well to assume its correctness. They reckon an increase of £5,000,000 in the value and quantity of silk, a reduction of £1,000,000 in the value and quantity of the opium to be supplied from India to China, and a limitation of the drawings of the India House upon the territorial revenues of £2,000,000 below the usual amount. In this way there is £5,000,000 more to pay, and £3,000,000 less to receive, and a consequent alteration of £8,000,000 in our relative position.

Such a sum, added to £10,000,000 or more, which was the amount taken from us in the 12 months to July last, would make a serious aggregate to be provided in the ensuing season. There are, however, a number of counteracting circumstances already coming into play, which will alter the prospect. In the first place, there is no reason to suppose that the imports of produce from India will this year approach their previous totals. It is believed that £4,000,000 or £5,000,000 may be struck off, including \$1,000,000 for rice and £2,000,000 or £3,000,000 for seeds, &c. It is also

to be questioned if the India House will be able to limit their drawings to the amount contemplated. They require between £3,000,000 and £4,000,000 for their disbursements in England, but hesitate to draw it lest they should compel the local Government to resort to a five per cent. loan. To this, however, they must probably come at last, and they will, perhaps, recognize the necessity for it, instead of continuing the palliative of trusting to their railway funds.

In this way the extra amount required may be reduced from £8,000,000 to £2,000,000, without taking into account the possibility of an increased consumption of opium or of European goods being yet witnessed in China, where the silver lately dispatched thither shall have had time to create an effect. It is only recently that the quantities sent to that country have been so enormous, and, notwithstanding the war, and the hoarding propensities of the people, it is reasonable to expect that their newly acquired wealth will not be entirely buried.

Estimating, however, that a total of £12,000,000 will be required during the 12 months ending July next, the limits of the inconvenience we are likely to sustain may easily be comprehended.—In 1855, the worst year of the war, we parted with nearly £5,000,000 to the same region, without much trouble, and in the first eight or nine months of this year we have already sent away more than £8,000,000. Meanwhile the results are manifesting themselves in the increasing arrival of valuable cargoes, which must tend to keep us in an excellent position, not only with the Continent, but America. Suppose our European relations to involve no drain, the Australian gold arrivals alone would enable us to buy silver to meet the whole demand for the East, even apart from the Mexican supplies, while the California receipts via New York or the Isthmus would remain to swell existing stocks. This result, however, even in a partial degree—for there must always, as London is the banking center of the world, be numerous payments to the Continent—may not become apparent for some time, because in addition to the actual demand for specie for exportation, a temporary absorption of gold is taking place all over Europe, from its being withdrawn from the banks and the ordinary purposes of the money market in the hands of dealers, who stock themselves with a quantity to enable them not only in the capitals, but in every petty town, to buy up all the silver coinage that may be available.

It remains to be noticed that one cause of the prevailing disquietude regarding the drain arises from the extraordinary way in which the inconvenience of the movement is aggravated by the effect of the silver standard on the Continent, and the deprivation the people are experiencing from the disappearance of their regular medium of exchange. In consequence of this, the panic is brought home to every shopkeeper and peasant, and the movement assumes all the terrors which popular ignorance can bestow upon it. If the French and other Governments were to take at once the step which it was years ago predicted they would find necessary, of resorting to an exclusively golden currency, and were to offer the present market price for silver, and recoup it at a debasement of 10 per cent., they would at once escape from a great part of their difficulty, and all they would then have to contend with would be the results—which must be still serious—of their deficient crops. Sooner or later the plan must be adopted, and there is nothing to be gained by delay.

It will be seen from what has now been stated that there are no points in the present financial condition of England but such as may be viewed with congratulation. Even the prevailing pressure is in every respect salutary, since, while it fails to exert the slightest effect on the healthful buoyancy of the general trade of the country, it checks the multiplication of those foreign schemes which are waiting to be poured upon the market, and in the indiscriminate reception of which our greatest future peril will be found.—*London Times.*

Chicago, Iowa and Nebraska Railroad.— Chicago to St. Paul.

This railroad, which is making such rapid progress from the young city of Clinton, Iowa, on into the interior of that State, is assuming an importance to the city of Chicago, that few of our citizens are aware of. A branch of that road is already projected from Cedar Rapids, up the Cedar valley to the Minnesota line, in the direction of St. Paul, and we have before us in the *Cedar Valley Times*, an account of a meeting held in Mitchell County, on the Minnesota line, proposing to subscribe \$300,000 to the stock of the Chicago, Iowa and Nebraska railroad, for said branch. An equal amount may be relied on from four other counties lying between Cedar Rapids and Mitchell County—making in all \$1,500,000 of stock for the Cedar Valley Railroad. We have also before us the proclamation of the Mayor of Cedar Rapids, ordering a vote, by unanimous approval of the City Council, for a city subscription of \$60,000 towards that part of the Chicago, Iowa and Nebraska railroad between Clinton and Cedar Rapids.

St. Paul is known to be on a meridian line west of Cedar Rapids, in Iowa, and the rather surprising fact is now developed that the shortest and cheapest railroad between Chicago and St. Paul, will, in all probability, be by the Dixon Air Line road to Fulton City; thence by the Chicago, Iowa and Nebraska railroad from Clinton to Cedar Rapids; and thence up the Cedar Valley, by the Minnesota branch of said road, to St. Paul. It is now believed that this will not only prove the most direct route from Chicago to St. Paul, but a cheaper road by \$2,000,000 than any other yet projected.

The rolling stock for the first division of the Chicago, Iowa and Nebraska railroad, extending from Clinton to De Witt, is now purchased and going forward.—*Chicago Journal*, 17th Sept.

The Great Fraud on the Northern Railroad of France.

The fact of an immense fraud, amounting to millions of francs, having been perpetrated upon the Northern Railroad of France, by two of its employees, and the flight of the embezzlers to parts unknown, has been already made public.

The matter created an excitement among the moneyed circle of Paris almost as great as that occasioned here on the first announcement of the Schuyler fraud.

Chas. Carpentier, cashier, and Louis Grelet, sub-cashier, the parties by whom the fraud was perpetrated, fled from Paris in the early part of the present month, and their whereabouts was unknown. The police were put on the alert, and it being suspected that the guilty parties had fled to the United States, Mr. Henry Goddard, of the London detective police, was sent out in pursuit of them, and on his arrival here, communicated with M. de Montholon, the French Consul, and Mr. Christmas, the agent of the Rothschilds, both of whom had been exerting themselves for the arrest of the fugitives.

Mr. Goddard's next step was to apply at the office of the Chief of Police, and make known his mission, and seek co-operation. This he did on the 15th inst. Sergeant Devos was detailed to take charge of the matter. An employee of the railroad company, named Melin, was also sent on here from France to assist the police by identifying the fugitives.

It was first learned that Carpentier landed here on the steamship "Fulton," from Havre, and that Louis Grelet, with a younger brother, Eugene, landed here on the 15th inst., in the steamship "Atlantic."

Messrs. Devos and Goddard continued their search in this city, while Mr. de Angelis, of the United States Marshall's office, who had also been associated in the case, pursued investigations in New Jersey.

It was learned that Carpentier had stopped a few days at the St. Nicholas Hotel, but had left, and for a time nothing further could be learned of either him or his accomplice.

While the police were busy in their search, a Frenchman called at the office of Mr. Belmont and stated that he was possessed of 30,000 francs and wished to negotiate the same for bullion. He was told by Mr. Christmas to call again next day when he would receive an answer. The stranger left behind a card, with the name "Monsieur Debud" engraved thereon.

This circumstance was at once reported to the police as it was shrewdly suspected that Monsieur Debud was in some way connected with the fraud. The agent was desired to negotiate, and when he called at the office again next day, his movements were closely watched by Messrs. Devos and Goddard. The negotiation was made at thirty days and the papers were placed in possession of the bankers. Mr. Christmas said that it would require nearly a month to send the notes to France for redemption, and told the stranger that if he would call again in thirty days the bullion would be in readiness for him. With this arrangement he seemed perfectly satisfied, and left the office. He was tracked to his lodgings in Beekman street, and the officers continued their search for Carpentier.

Meantime, after the lapse of three or four days, Debud called at Mr. Belmont's office, and informed Mr. Christmas that he had changed his mind; that he did not desire to have his paper changed to bullion, and that he would be obliged if they were returned to him again. He was told to call the next day, (Friday last,) at 2 o'clock, when he would be informed whether the note had not already been sent to France.

The police, who was made acquainted with this proceeding, were in an adjoining room when Debud called, next day, at Belmont's office. He was informed that the notes had already been sent to France. When so informed, he appeared quite agitated, and left the office in a hurry. The police followed close after, rightly suspecting that he had an engagement with some of the fugitives. They followed him to his lodgings, and with Melin, posted themselves in a house opposite. After the lapse of two hours, two persons made their appearance at the door of Debud's lodgings, who were at once recognized by Melin as the brothers Grelet.

It was at once determined to arrest the parties, and Messrs. Devos and Goddard, and Capt. Leonard, of the Second Ward, who was also assisting in the pursuit, sallied from their hiding-place, and quietly arrested the brothers Grelet and Debud. The prisoners were taken to the station house. Among the baggage of the prisoner who had been to the office of Mr. Belmont, were found letters and papers from which it was learned that his name was Parot, and not Debud, and that he was one of the parties for whom the London detective was in search. Sixteen notes, for 1,000 francs each, were found among his effects. Besides this, 24,000 francs were found on his person. He denied that any portion of the money found in his possession was the proceeds of the frauds on the Northern railroad.

Louis Grelet admitted his guilt. He stated the whole number of shares embezzled to be 5,357. He appeared quite penitent, and expressed his willingness to return to France and stand his trial. He said the money gained by the sale of the stolen bonds had been all squandered away in unfortunate speculations, and that he was possessed of only a small amount of money.

The younger Grelet denied all knowledge of the fraud, and it now appears that he had no hand in the matter at all. He was, however, detained.

Carpentier, who, it appears, is the most guilty, is yet at large. The officers are very sanguine of his speedy arrest.

Parot, who, it appears, acted as broker in disposing of the notes stolen by the confederates, Carpentier and Grelet, expressed great sorrow at his connection with the affair.

Carpentier is only 25 years of age. He lived a very fast life in Paris, and squandered large sums of money.

Grelet is about 34 years of age. He, although

not quite so "fast," speculated largely on the Paris Bourse; indeed, it appears that the accused parties were all led to ruin by the temptation for gambling in stocks.

Emmanuel Tisandier, Inspector of the Northern Railroad of France, arrived in Boston on Friday. He had an interview with the prisoners on Saturday.

The French Government will, we understand, ask for the reclamation of the accused. It is thought, however, that they cannot be returned unless the Northern Railroad can be shown to be in possession of the Government, as the Extradition treaty with France provides only for the delivery of embezzlement by public (Government) officers.

The prisoners this morning before the United States Commissioner. Benjamin Galbraith has been engaged for the defence, and Ex-Recorder Tillou for the prosecution, which is to be carried on at the instigation of the Messrs. Rothschild, who are the principal losers by the transaction.

Chesapeake and Ohio Canal.

The Board of Directors of the Chesapeake and Ohio Canal have been two days in session at their office in the City Hall, and concluded their labors yesterday afternoon. Business of much importance to the canal, and by consequence to the country through which it passes, required and obtained attention and adjustment.

The result of the deliberations of the Board consist, in the main, of the following measures and resolutions:

1st. The Board has entered into a contract for the erection of a masonry dam at the site of dam No. 4, to take the place of the present structure.

2d. It has taken preliminary steps, to be matured at the next meeting of the Board, for the construction of a masonry dam at No. 5.

3d. It has contracted for the construction of a weigh-lock at Georgetown at the sum of \$15,000, said lock to be placed at a convenient spot west of the Alexandria aqueduct.

4th. The Board has resolved to notify the contractor for the pump work at the mouth of the south branch, that he will be allowed until the 1st of December to fulfill his contract, but failing which the Board will thereafter take the matter into its own hands, in order to a new disposition of the work to secure its objects at the earliest practicable moment.

5th, and lastly. Orders have been issued to the General Superintendent of the canal to make forthwith a thorough and minute survey thereof, from end to end of the line, to find out and report where repairs may be necessary, where leaks exist or are likely to occur, what levels or spots are shallower than the proper depth, where dredging may be requisite, and in general to indicate every thing which in his judgment may require improvement, extension, correction, or renewal.

It is the purpose of the Board to put every part and point of the work into first rate order for the opening of the navigation in the spring.

We may certainly congratulate the friends of the canal in the appointment of the present Board, who are exerting themselves with equal industry, prudence and courage, to place their great work in a condition to perform its full share of duty as a transporting power from the interior to the seaboard.—*Nat. Intel.*

Railroad from Rockford to Kenosha.

We learn from the *Chicago Press* that preliminary surveys have already been made for a railroad between these two places, and the requisite amount of stock, required under the State law to organize a company, has been subscribed. The route is said to be an exceedingly easy one, and it is expected that the road will be completed in one year. Rockford is one of the most important interior cities of Northern Illinois, and will require all the railroads that can be built to keep pace with its commercial growth and prosperity.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	110,247	none	78	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---
Androscog. & Kennebec	56	588,042	1,622,308	2,210,347	209,476	110,247	none	10	South Western	92	1,007,486	465,500	1,824,920	253,506	141,168	8	---
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600	270,214	112,491	6	52	Tennessee and Alabama	80	248,486	---	679,000	In progr.	---	---	---
Portl., Saco, & Portland	51	1,367,000	119,237	1,486,237	270,214	112,491	6	52	Tennessee and Mississ.	217	170,301	---	370,400	In progr.	---	---	---
Boston, Concord, & Montreal	93	1,808,000	1,063,512	2,771,512	233,234	120,834	---	---	Memphis and Charleston	217	2,170,440	2,127,002	4,028,796	811,631	159,672	12	---
Cheshire	35	2,085,925	899,515	3,175,967	390,221	143,606	2	14	Mobile and Ohio	153	2,563,555	1,802,921	4,336,412	199,932	109,236	---	---
Concord	35	1,600,000	5,242	1,605,242	335,199	136,454	6	74	Miss. Central	188	642,534	---	628,308	In progr.	---	---	---
Northern, N. H.	82	2,768,400	---	3,016,633	370,529	138,299	2 1/2	40	N.O., Opelousas & G.W.	65	2,930,425	671,845	2,657,565	In progr.	---	---	---
Concord & Passumpsic Riv.	61	1,048,145	787,808	1,780,062	162,987	55,178	none	4	Vicksburg, Shreveport, & Te.	65	1,117,500	---	1,007,500	In progr.	---	---	---
Rutland & Burlington	120	2,233,376	2,662,396	5,378,429	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Vermont Central	127	1,830,000	325,835	2,188,594	489,754	140,377	6	53	East Tennessee and Va.	16	625,425	988,592	1,033,781	In progr.	---	---	---
Boston and Lowell	27	1,320,000	150,000	1,470,000	854,426	330,000	6	76 1/2	Nash. and Chattanooga	181	2,819,330	1,497,081	3,843,694	316,090	112,177	none	---
Boston and Maine	74	2,240,300	1,518,671	3,463,18	89,917	8,740	none	7	Covington & Lexington	99	1,802,904	2,236,039	3,738,753	264,973	138,094	18	---
Boston and N.Y. Central	56	3,160,000	359,132	3,477,134	658,671	219,069	none	63 1/2	Lexington and Frankfort	29	430,055	158,099	637,071	93,263	43,685	6	---
Boston and Providence	68	4,500,000	655,428	4,865,4	1,008,004	404,461	6 1/2	82	Lexington and Danville	111	694,444	62,734	747,178	In progr.	---	---	---
Boston and Worcester	47	681,600	280,508	997,252	119,221	65,527	3	40	Louisville and Frankfort	65	698,236	698,236	1,889,568	244,014	96,902	6	---
Cape Cod	52	1,691,110	273,241	1,862,244	286,565	103,787	5 1/2	40 1/2	Atlantic & Gt. Western	254	866,989	77,294	613,281	In progr.	---	---	---
Connecticut River	60	2,683,400	2,947,737	4,621,136	647,281	305,908	---	40 1/2	Belleville and Ind.	118	1,881,638	2,025,292	2,852,062	298,293	140,823	none	30
Eastern, Mass.	67	1,840,000	158,700	1,765,908	681,163	225,071	---	67 1/2	Clev., Col. and Cin.	141	4,647,020	1,268,307	4,613,722	1,290,295	732,056	9	102
Lehigh	30	800,202	225,586	968,521	In progr.	---	---	---	Cleveland and Toledo	200	2,676,425	2,693,301	5,124,629	786,272	396,980	10	77 1/2
Norfolk Eastern	31	500,000	---	533,953	198,491	56,533	6 1/2	---	Clev. and Mahoning	103	---	---	628,633	In progr.	---	---	---
N. Bedford and Taunton	77	3,018,100	202,560	3,362,949	463,409	296,738	6	82 1/2	Clev. and Pittsburg	133	2,780,744	3,043,992	5,637,466	581,877	309,518	---	67 1/2
Old Colony and Fall River	87	2,323,541	1,033,679	3,209,727	315,726	87,313	none	6	Cin. Hamilton & Dayton	60	2,163,900	1,321,213	2,987,577	508,271	278,012	---	65
Vermont and Mass.	154	5,150,000	6,964,420	10,495,005	1,829,673	633,013	7	59 1/2	Cin. Wilm. & Zanesville	181	1,190,450	1,181,265	2,329,459	In progr.	---	---	12
Western, Mass.	48	1,141,000	205,565	1,451,271	294,780	76,700	2	42	Columbus and Xenia	64	1,484,560	149,000	1,481,733	356,38	187,518	10	82
Worcester and Nashua	43	1,610,000	335,461	1,908,696	311,430	138,057	---	10	Dayton, Xen. & Bolope	63	437,838	422,458	899,496	In progr.	---	---	---
Providence and Worcester	72	2,510,000	930,000	3,213,032	730,012	362,709	10	70	Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven	122	2,008,110	2,000,000	4,008,110	258,658	119,611	none	---	Dayton and Western	35	310,000	500,000	788,769	In progr.	---	---	17
Hartford, Prov. and Fishkill	119	2,008,110	2,000,000	4,008,110	258,658	119,611	none	---	Eaton and Hamilton	42	454,690	904,489	1,155,135	171,929	65,000	20	---
Housatonic	119	2,008,110	2,000,000	4,008,110	258,658	119,611	none	---	Little Miami	66	2,908,921	1,171,785	3,648,172	681,562	366,708	---	88
Naugatuck	62	3,000,000	3,376,808	5,376,808	684,306	338,377	none	25	Mad River and L. Erie	205	2,451,650	2,572,932	4,446,661	In progr.	---	---	15
N.Y. York and N. Haven	60	734,258	734,166	1,468,318	88,007	30,318	none	---	Central Ohio	138	1,520,927	3,485,076	4,283,443	Recently opened.	---	---	---
N. Haven and N. London	60	734,258	734,166	1,468,318	88,007	30,318	none	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,636	662,117	9	50
N. London, W. & Palmer	66	509,200	1,073,673	1,584,353	124,044	66,130	none	---	Pittsburg, Mayev & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---
Norwich and Worcester	66	2,122,300	873,489	2,997,158	304,238	88,458	2 1/2	26	Sand. Mans. & Newk.	127	1,350,000	2,206,357	3,552,357	328,968	164,479	none	---
Albany Northern	32	439,005	1,625,098	1,840,605	117,716	9,904	---	---	Soldot & Hocking Valley	135	403,975	609,050	888,588	In progr.	---	---	---
Black River and Utica	35	643,300	317,859	974,323	In progr.	---	---	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
Buffalo, Conn. and N.Y.	100	1,487,871	1,401,183	2,819,096	172,470	66,333	none	---	Tol. Wabash & St. Louis	242	2,500,000	4,630,000	---	In progr.	---	---	---
Buffalo and N.Y. City	92	798,439	2,587,849	3,401,868	288,392	31,896	none	---	Cin., Log. and Chicago	255	4,196,679	1,006,125	2,090,433	In progr.	---	---	---
Buffalo and St. Line	90	1,300,000	1,040,000	2,494,364	670,750	355,763	10	---	Evansville & Crawfordsv.	100	706,945	1,177,596	1,944,541	127,400	64,552	7	60
Canandaigua and Elmira	47	434,111	922,398	1,276,796	174,089	69,506	---	---	Ind. and Cincinnati	88	1,213,723	1,442,859	2,178,491	356,012	193,142	7	40
Canandaigua & Niagara F's	38	1,315,000	2,279,854	3,495,832	136,438	48,616	none	---	Indiana Central	66	611,400	1,261,179	1,907,917	350,176	181,375	45	---
Cayuga & Seneca	55	687,000	508,689	1,195,689	131,793	116,422	none	---	Ind., Clev. & Pittsburg	83	826,825	1,099,400	1,881,225	226,055	93,010	none	---
Hudson River	144	3,758,406	9,250,362	12,737,808	1,812,087	603,946	none	28	Jeffersonville	66	1,014,252	694,000	---	206,544	94,318	none	---
Long Island	524	24,164,860	14,462,742	29,627,602	3,668,581	1,362,126	8	85	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	286,146	112,880	none	---
New York Central	404	10,023,958	25,126,639	35,150,597	5,488,998	2,627,118	none	62 1/2	New Albany and Salem	298	2,535,121	5,281,448	6,643,189	645,827	371,402	none	---
New York and Erie	134	5,717,100	4,069,789	9,786,889	1,635,577	234,126	none	14	Penn. and Indianapolis	73	---	858,314	---	150,000	90,000	none	16 1/2
New York and Harlem	118	3,633,022	4,406,874	6,470,714	520,153	136,754	1	---	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	189,702	10	---
Northern, N.Y.	35	399,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and Rock Isl'd	182	3,141,600	2,387,155	5,214,152	In progr.	---	---	90
Oswego and Syracuse	29	467,200	294,189	749,883	241,149	82,600	7	---	Chicago and St. Louis	220	---	---	1,077,312	In progr.	---	---	---
Potomac and Watertown	25	610,000	140,000	896,423	241,149	82,600	7	---	Chicago, Burl. and Quincy	58	1,639,100	1,684,736	2,884,022	722,580	379,821	20	---
Rensselaer & Saratoga	48	500,000	395,000	719,000	21,089	none	---	---	Central Military Tract	88	1,202,500	2,133,050	2,920,241	471,999	219,588	---	---
Saratoga and Whitehall	50	768,346	1,578,804	2,272,777	159,484	22,503	none	---	Chio. St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Syracuse & Binghamton	27	437,300	737,079	1,109,322	156,393	55,184	---	---	Galena and Chicago	259	5,441,600	3,318,039	7,762,614	2,315,786	1,192,042	22	109
Troy and Boston	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	90	Illinois Central	627	2,271,050	19,416,392	30,374,440	1,532,118	527,952	---	116 1/2
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,534	none	---	Peoria and Quawaka	93	569,839	618,454	1,388,342	In progr.	---	---	---
Belvidere Delaware	94	3,000,000	11,407,200	16,408,523	2,017,127	961,941	12	124	Ohio & Miss. (Wst. Div.)	147	1,780,295	3,292,408	4,870,586	Recently opened.	---	---	---
Camden and Amboy	60	369,320	1,522,131	1,729,642	122,417	60,080	none	120	Terre Haute and Alton	173	2,281,420	1,256,000	5,537,424	In progr.	---	---	---
Camden and Atlantic	60	369,320	1,522,131	1,729,642	122,417	60,080	none	---	Detroit and Milwaukee	185	838,000	1,129,964	1,966,969	In progr.	---	---	---
New Jersey	30	845,850	690,000	1,535,850	299,738	171,603	---	---	Mich. Central	282	6,032,444	5,996,012	10,668,155	2,215,283	879,666	10	92 1/2
New Jersey Central	63	2,000,000	2,296,176	4,683,149	329,728	117,603	---	---	Mich. South'n & N. Ind.	175	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	89 1/2
Morris and Essex	44	1,687,867	342,564	1,988,317	219,263	52,450	---	---	Green Bay, M.L. & Ch.	155	764,075	442,726	1,198,765	In progr.	---	---	---
Albany Valley	63	1,700,000	1,940,000	3,640,000	146,381	69,994	---	---	Milwaukee and Miss.	106	1,826,428	2,467,989	3,578,757	691,943	417,443	17	76 1/2
Oswego, W.L. & Erie	50	1,099,500	12,211	1,191,833	146,381	69,994	---	---	Milwaukee & Water'n	72	354,961	132,000	514,238	In progr.	---	---	---
Sumnerland Valley	109	3,061,822	3,884,702	6,022,667	529,911	259,263	6	80	Milwaukee and Horicon	16	554,200	---	354,109	In progr.	---	---	---

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	600,000	Do. inconvertible	7	April, October	"	1866	97 1/2	97 1/2
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	78	81
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	72 1/2	72 1/2
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	88	90
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	65	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	65	80
Covington and Lexington	400,000	Do. do.	8	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	63	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Gaiana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	82
Indianapolis & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	84 1/2	85 1/2
Lake Erie, Wabash, and St. Louis	\$4,000,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat	1860	100	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101 1/2	102 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	96	96
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	95 1/2	95 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	87	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	---	---
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75	---	---
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	8	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	96	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77	79
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96 1/2	97 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	78	85
Seloto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	---	---
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98 1/2	98 1/2
Terre Haute and Alton	1,000,000	Do. do.	8	Feb'y, August	"	1862-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82 1/2	83
Do. do.	1,123,500	Do. do.	6	Jan'y, July	Balt.	1875	85 1/2	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	10	Jan. 10, July 10	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	105	106
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95	97
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	94 1/2	95
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	95 1/2	94
Do. do.	4,361,000	Convertible, Inscription	7	Feb'y, August	"	1871	86	86 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	97	97 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	85	85 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	65 1/2	66 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90	90 1/2
Do. (Free Land)	3,000,000	Mfgs 345,000 acres-priv. 7 shares	7	March, Sept.	"	1860	103	107
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1861-72	80	82
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1865-70	80	82
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1873	82	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1863	83	84
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	83	84
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	88 1/2	88 1/2
Do. do.	3,000,000	No mortgage conv. from June 57-58	7	15 June, 15 Dec.	"	1864	100 1/2	101
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	89	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	89	100
Reading, issued 1849	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	---	---
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89	---
Do. do. 1849	3,409,000	Do. inconvertible	6	April, October	"	1870	83 1/2	84

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES.	Int't payable.	Off'd	Asked
New York, 7 per ct. 1857	Feb'y, May, August, and November.	100	102	Milwaukee, 7 per ct. coup.	X	Divers	80
Do. 5 do. 1855-60		92	96	New Orleans, 6 per ct. op. R.R. X		Do.	80
Do. 5 do. 1870-75		82	84	New Orleans, 6 per ct. op. municip. X		Jan'y, July	80
Do. 5 do. 1890		83 1/2	84 1/2	Philadelphia, 6 per ct. 1878-98	X	Jan'y, July	80 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	97	100	Pittsburgh, 6 per ct. coup.	X	Divers	73
Albany, 6 per ct. coup. 1871-81 X	Jan'y, July	97	100	Quincy, 8 per ct. coup.	1883 X	Jan'y, July	---
Baltimore, 6 per ct. 1879-90	Quarterly	97	98 1/2	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 6 per ct. coup.	X	97	99	Rochester, 6 per cent. coup.	X	Divers	95
Brocklyn, 6 per ct. coup. Long X	Jan'y, July	99 1/2	100	St. Louis, 6 per ct. coup. Long X		Do.	79
Clev'nd, 7 per ct. op. W.W. 1879 X	Do. do.	101	101 1/2	Do. do. Municipal	X	Do.	80
Cincinnati, 6 per ct. coup.	X	85 1/2	90	Sacramento, 10 p.ct. op. 1862-74 X		Do.	73
Chicago, 6 per ct. coup. 1872-77 X	Jan'y, July	89	90	S.F. & O. 10 p.ct. op. 1865 pay. N.Y. X		May, Novemb.	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p.ct. op. 1871 X		Do.	80
Detroit, 7 per ct. op. W.W. 1873 X	Feb'y, August	100	102 1/2	Do. 10 do. pay. N.Y. X		Jan'y, July	52 1/2
Idubque, 8 per ct. op. W.W. 1873 X	March, Sept.	101 1/2	101 1/2	Do. 6 per ct. pay. N.Y. 1876 X		Do. do.	55
Jersey City, 6 p.ct. op. W.W. 1877 X	Jan'y, July	94	96	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. op. 1880-83 X	Divers	80	80	Do. 6 p.ct. op. Mun. 1874 X		March, Sept.	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68	68	Zanesville, 7 do.	X	April, October	97 1/2

Marie & Kanz' Money Circular for the European Steamer of the 8th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Oct. 6, 1856.

Our last advices were dated 30th ultimo. The money market has since then become more stringent, and stocks have generally experienced a slight decline. The bonds of the State of Missouri have gone up 2 1/2 per cent., in consequence of a forced demand from parties who had previously oversold. The general business has been inactive, but there have been large transactions in Erie, Reading, Cleveland and Toledo and Michigan Southern railroads. We quote some large purchases of Erie on foreign account. The sale of city securities and Western railway bonds are scarcely more than nominal. State stocks have been dull. Virginia a little more active, at 1 1/8 per cent. decline; Missouri have advanced 2 1/2; Californias have declined 3 per cent; North Carolinas, 3/4; and Tennessee and Indiana 5s, each 3/4. Railroad bonds continue inactive, the chief transactions being in Illinois Central and Erie 1875 bonds. Erie 1883 have declined 1 per cent., and Erie 1875 3/8; Illinois Central bonds 5/8, coupon off; Freedland bonds, ex-privilege, 1 1/8; N. York Central 6 and 7 per cents, have advanced 1/2 per cent. Railroad Shares.—The dealings in Erie, Reading, Cleveland and Toledo, and Michigan Southern have been large. Erie touched 63 1/2, but closed at 62 3/8. Reading has fluctuated between 81 1/2 and 83 3/8; Michigan Central has advanced 3/4; Michigan Southern, 3/4; Cleveland and Toledo, 1 1/8; Chicago and Rock Island. (dividend off) has declined 1/2; Milwaukee and Mississippi, 1; New Jersey 1; Salem and Milwaukee 1/2 per cent.; Hudson River has advanced 1/2 per cent. Money is in good demand, at 7 per cent. on call, and at 8 1/2 per cent. for first class paper, and 10 1/2 for names less current. Exchanges inactive and weak. Sterling, 109 1/2 at 109 3/4; francs, 5.15 a 5.16 1/4.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 8th Inst.

[TRANSLATED.]

NEW YORK, Monday, Oct. 6, 1856.

The condition of our money market has but little altered since our advices of the 30th Sept. A rather animated demand has existed through the week for money, without there being any apparent difficulty on the part of borrowers to supply the wants, and the rates of interest have not noticeably changed. The payments of the week, which were unusually large, have generally been met with punctuality and ease. The action on our Stock Exchange has extended to some of the State Stocks, as also more particularly to railroad shares. Prices have exhibited much irregularity, and after being firm, and even on the rise for a couple of days, towards the end of the week there is heaviness. Fluctuations have in some cases been wide, and they result variously at an advance and a decline upon our last week's quotations, as will be shown by the annexed table of daily prices. The European news brought by the Liverpool steamer of the 20th September, has remained without perceptible effect upon our market; orders for American Securities continue upon a very limited scale. State Stocks.—There were considerable transactions in Virginia 6s and in Tennessee 6s at a fraction decline, and in Missouri 6s at an advance of 1 1/4; California 7s, 1870 and 1875, are offered lower. Since the awards of the new loan of Ohio 6s, 1887, re-sales to a considerable amount have been effected at 3 to 4 per cent. advance. The demand for City and County Bonds continues very limited, and we know of only retail transactions. Railroad Bonds.—There was fair activity in Illinois Construction, which closed at 3/4 decline; they are quoted, ex-interest, 1st October. Erie 7s, 1875, at previous rates, and 7s, 1883, at 1 decline, have given rise to moderate transactions. New York Central 6s and 7s have advanced 1/4 per cent. At private sale we hear of no transac-

tions deserving public notice. In Railroad Shares there was general activity. Those that were most largely dealt in were Erie, which, after touching 63½ and 61½ closed at 62½; Reading, which fell to 81½, and closed at 83. Cleveland and Toledo, which have risen to 13½; Michigan Central and Michigan Southern, which advanced ¾; and Illinois Central which declined 1¼. Chicago and Rock Island is quoted ex-dividend. Since the closing of the transfer books of the Erie Railroad, which are to remain closed for ten days, transactions in the stock have much fallen off. Money in active demand at 7 per cent. for loans on call. Paper rather more offered at 8½, according to names and maturity. DE COPPET & CO.

American Railroad Journal.

Saturday, October 11, 1856.

Railroads in the South.

Railroads throughout the cotton growing States would not only be the means of saving vast sums to the planters, but would prove of very great advantage in the commercial transactions of the country. The navigation of the rivers of the South is yearly becoming more and more difficult and uncertain, so that it is by no means uncommon to find in many of the best planting districts, a good portion of the crop of the previous year still on hand. The clearing of the forests allows the water to run out more rapidly, and increases at the same time the amount of evaporation. With the destruction of the forests the rain fall is less. All these causes combining have dried up rivers which only a few years ago were navigable for a considerable portion of the year.

The inconvenience resulting from the loss of navigable rivers is being gradually supplied by the construction of railroads. These works already furnish pretty good facilities to most of the cotton growing districts of South Carolina and Georgia. Alabama and Mississippi, the great cotton growing States, are yet but poorly accommodated. The completion in these of the New Orleans, Jackson and Great Northern, the Mississippi Central, the Mobile and Ohio, and the Alabama and Tennessee railroads would open convenient outlets for nearly every portion of these two States. The former of these roads will now be pushed forward to Jackson, as we learn that Mr. Ross has negotiated a sufficient amount of bonds of the company in London, to carry it to that point. At Jackson it will connect with the Mississippi Central railroad, nearly one-half of the line of which will be completed in a few months. The construction of this road has proceeded thus far entirely by means of the people of the State, and who in this way will build the whole line, if they find themselves unable to borrow. The rails are laid on the Mobile and Ohio railroad over two hundred miles from Mobile, and now have reached the cotton growing districts of Mississippi and Alabama, and the road is now doing a heavy local business. Its completion to the mouth of the Ohio is loudly called for, and should be effected without delay. To do so immediately, the company will have to sell a portion of the first mortgage bonds. The Alabama and Tennessee railroad is also slowly progressing and will soon have one hundred miles of its road in operation, which will add largely to its traffic. The completion of the above roads with those of the States named will enable the cotton crop of the whole territory

east of the Mississippi river to be sent to market at a cheap rate and at all times of the year without any reference to the condition of the rivers. The staple can then be moved to meet the demand, which will enable the planter, or factor, to realize upon it according to his necessities.

The State of Arkansas is in great need of several roads, particularly the Memphis and Little Rock and the Missouri, Ouachita and Red River railroads, both of which are making favorable progress. The great river from which this State is named, is useless for navigable purposes. Nearly all the products of the State have now to be waggoned, at heavy expense, to the Mississippi river.

The State of Texas is equally destitute of railroads, though in greater need of them than any other Southern State. She has no navigable rivers, while her best planting lands lie at considerable distance from the coast. In this State several lines are undertaken, which, with the aid just granted by the Legislature, will undoubtedly be pushed vigorously forward.

With railroads through all the States growing cotton, the production of this staple might be easily doubled, and trebled, with a sufficient demand. The present high prices will do much to secure their construction, as it will provide the necessary means, and will induce the planters to embark in them for the incidental advantages they promise. The times are not favorable for new projects, but the roads most loudly called for will proceed slowly, but steadily, from contributions of those most interested in their construction.

Railroad Earnings.

The following statement will show the earnings of the Chicago and Burlington railroad line for the month of September, 1855 and 1856:

	Freight.	Passeng.	Miscell.
Sept. 1856..	\$214,812 82	\$70,788 16	\$1,573 40
Sept. 1855..	121,305 18	45,206 05	1,389 23
Gain, 1856..	\$93,507 64	\$25,582 11	\$184 12
Total.			
September, 1856.....	\$287,174 88		
September, 1855.....	167,900 51		
Gain, 1856.....	\$119,273 87		

The proportions of the earnings for September by each road comprising the line, are as follows:

	Freight.	Passeng.
Galena and Chicago Union.....	\$27,360 70	\$6,286 44
Chicago, Burlington & Quincy.....	176,394 65	55,101 50
Peoria and Oquawka..	11,057 47	9,450 22

Total.....	\$214,812 82	\$70,788 16
Miscellaneous.		Total.

Galena and Chicago Union.....	\$16 03	\$33,618 17
Chicago, Burlington & Quincy.....	1,227 28	232,723 43
Peoria and Oquawka..	300 09	20,837 78

Total.....	\$1,573 40	\$287,174 88
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Length of line, 210 miles.

Earnings per mile in September, 1856..	\$1,867 49
Do. do. do. 1855..	799 52

Gain per mile in September, 1856.....\$567 97

Length of Chicago, Burlington and Quincy railroad line, 138 miles.	
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Earnings per mile in September, 1856..	\$1,686 40
Do. do. do. 1855..	924 74

Gain per mile in September, 1856.....\$702 66

The annual meeting of the New York, Providence and Boston Railroad Company (better known here as the Stonington railroad) was held at the company's office on the 25th of September. From the annual report it appears that the receipts and expenditures of the road for the year ending August 31, 1856, were as follows:

Passengers.....	\$144,389 76
Freight.....	96,878 24
Mail Service.....	4,990 02
Interest.....	3,953 16
Real Estate sold by the Company...	100 00
Balance Aug. 31, in cash.....	8,125 77

Total.....\$257,881 95

The expenditures were:

General expenses, salaries, wages, fuel, oil, &c.....	\$86,784 96
Repairs of road, bridges, depots, engines, cars, wharfs, &c.....	84,964 81
New cars.....	5,832 00
Dredging.....	3,187 99
Paid unclaimed interest on Bonds....	748 50
Interest on 6 per cent. Bonds..	\$25,303
Unclaimed.....	1,494

23,808 00

Interest on Extension Bonds.....1,750 00

Extension Road Bonds paid and cancelled.....10,000 00

Dividend, November, 1855.....97,292 30

Paid unclaimed dividends.....368 50

Balance in cash.....2,149 86

Total.....\$257,881 95

The debt of the Company has been reduced during the year, as follows:

Extension road bonds paid at maturity..\$10,000

Six per cent. bonds held for Trustees of Sinking Fund and cancelled by them...25,000

Total.....\$35,000

The entire indebtedness of the Company on the 31st of August, 1856, was as follows:

Six per cent. mortgage bonds.....\$396,700

Seven per cent. extension bonds.....15,000

Total.....\$411,700

Less amount held by the company.....48,000

Leaving the total indebtedness outstanding.....\$363,700

The following gentlemen were elected Directors of the road: Thomas Tileston, Mathew Morgan, Samuel D. Babcock, William F. Cary, William H. Macy, Hamilton Blydenburg of New York city; Giles F. Ward, Saybrook, Conn.; Nathan F. Dixon, Westerly, R. I.; Elbert I. Anderson, Newport, R. I.

The receipts of the Northern Indiana and Southern Michigan road were in—

September, 1856.....\$280,900

Do. 1855.....236,000

Increase.....\$44,900

The earnings of the Illinois Central road for September show the large gain of \$121,000 in September, 1855, working the same number of miles. The comparative earnings for the year thus far have been:

1855. 1856.

January.....\$57,088 \$135,440

February.....59,324 107,182

March.....92,622 127,167

April.....118,444 190,320

May.....121,484 214,648

June.....123,421 194,727

July.....130,630 196,899

August.....153,877 246,237

September.....160,918 281,940

Total.....\$1,012,768 \$1,694,555

Increase in nine months, \$681,797, or about 68 per cent. Receipts of \$300,000 in October and November and \$250,000 in December will bring

The work on the Hickman division is nearly completed; \$63,000 had been expended before the consolidation was effected, leaving about \$20,000 worth of work to prepare it for track-laying. It was expected the grading would be completed, and the cross ties delivered in a few weeks. A continuous distance of 21 miles, on the Western division, extending to Dresden, can be completed early next spring, when the company will be entitled to State aid; and a further continuous portion of 27 miles extending to Huntingdon can be completed next fall. On the Eastern division, the work from Nashville to Kingston Springs, 23½ miles can also be completed next summer.

The following is an estimate of the entire cost of the road from Nashville to Hickman—

<i>Eastern Division.</i> —Earth and rock work, clearing and grubbing, bridge masonry, cross-ties, &c.....	\$832,683
Right of way	35,000
Depots and water stations	42,000
Tennessee River bridge	150,000

\$1,059,682

<i>Western Division.</i> —Local work as above	\$499,137
Right of way	10,000
Depot and water stations.....	32,000

541,137

<i>Hickman Division.</i> —Cost.....	\$63,000
Required to complete.....	20,000
Right of way and contingencies.....	5,000

88,000

<i>Superstructure</i> —including rails.....	\$1,688,820
<i>Equipment</i> —locomotives and cars.....	236,318

Total cost of road.....\$3,274,309

The means of the company are—

Subscription by Davidson county	\$300,000
" " individuals, Eastern div.	612,050
" " " Western "	687,300
" " City of Hickman.....	50,000
" " individuals, Hickman div.	67,850

\$1,717,200

To which should be added the proceeds of the sale of certain real estate subscribed by Dr. D. J. McGavock, amounting to.....	8,649
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\$1,725,849

State aid on bridge	200,000
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Total applicable on local work

State aid, \$10,000 per mile, for 164 $\frac{3}{4}$ miles.....	1,647,500
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\$3,573,349

leaving a balance of \$299,040 for office expenses, engineering, &c.

Of stock subscribed, amounting to \$1,717,200, only \$534,039.24 has been paid in, leaving a balance due of \$1,183,160.76.

The following is a statement of the receipts and disbursements, as per report of the treasurer:

CASH RECEIPTS.

Davidson County Bonds.....	\$34,000 00
On stock, Eastern Division.....	\$52,781 57
" " Western "	64,407 67
" " Hickman "	66,850 00

184,039 24

Bills payable.....	\$18,772 33
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Interest Davidson County Bonds	16,950 00
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Interest City of Hickman..	1,500 00
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37,222 33

\$255,261 57

CASH DISBURSEMENTS.

Construction, Eastern Division.....	\$68,209 72
" " Western "	50,814 04
" " Hickman "	73,140 47

\$192,164 23

On account depot grounds and right of way	7,886 17
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" " Engineering.....	\$27,996 78
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" " Exp'ts's since Sept., 1853.	17,146 36
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" " Interest.....	538 35
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45,681 49

Bills receivable as cash.....	6,130 35
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Balance in hand.....	3,399 33
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\$255,261 57

The Treasurer states in his report that the work has been delayed by the non-payment of the calls made on the stockholders; "a much larger number of hands might have been profitably employed and the work consequently much further advanced, but for want of the means to pay the estimates—to meet which, small as they have necessarily been, the individual credit of the President and myself has been used, to an extent justified neither by our interest, great as it is, in the road, nor by the conduct of the stockholders, interested pecuniarily to a much greater extent than myself, and as largely so as the President." He indulges a hope, however, "that the friends of the road will now pay up, and enable the company to redeem, as far as they can, the valuable time that has been lost by their indifference. Had they been prompt in the payment of the small calls as they were severally made, they would have been paid so easily, as to have been scarcely felt; but as calls accumulate, they will, of course, feel the pressure more sensibly—while they have for a longer time deprived themselves of the benefits an earlier completion of the work would have secured to them."

The following are the assets and liabilities of the company:

ASSETS.

Cash.....	\$3,899 33
Davidson County Bonds	266,000 00
City of Hickman Bonds	50,000 00
Bills receivable.....	6,130 35
Subscriptions.....	1,183,160 76

\$1,508,690 44

Depot grounds at Nashville	\$22,698 82
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Right of way.....	2,011 10
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24,709 92

<i>Construction</i> —	
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Western Division.....	\$50,814 04
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Eastern "	68,209 72
-----------------	-----------

Hickman "	73,140 47
-----------------	-----------

192,164 23

Expense account	\$19,807 29
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Interest "	538 35
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Engineering.....	28,001 78
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47,847 42

\$1,773,412 01

LIABILITIES.

Stock.....	\$1,717,200 00
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Interest Davidson County Bonds.....	\$16,950 00
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Interest City of Hickman Bonds.....	1,500 00
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Due to individuals	2,165 93
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Bills payable.....	35,696 08
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56,212 01

\$1,773,412 01

St. Andrews and Quebec Railway.

At the late meeting the old Company was agreed to be transferred to the new, which will no doubt be a means of carrying out this important railway undertaking. The class A or English Company has agreed on terms with the new Company, and Mr. Byrne, the secretary, will proceed to New Brunswick by the next packet to carry out the negotiation. When this shall be accomplished, the works will proceed rapidly to completion by the new Company, which will open up a passage to Canada independent of a foreign territory, and upwards of 500 miles nearer home.

24 $\frac{1}{2}$ miles of the line have been completed at the very low cost of \$3,000 per mile.

The Company have obtained highly advantageous terms for constructing the line, as the following extract from an official document will show:

"The original Company succeeded in obtaining the following important advantages from the colonial government, which will now be transferred to this company, viz:

"1st. The free grant of the unallotted land, ten miles in width, or five miles on each side of the railway for the whole extent of the crown territory, through which the line will pass to Woodstock, being, it is estimated, upwards of 200,000 acres.

"2nd. All the timber and materials, the property of the crown requisite for the construction of the railway.

"3d. A guarantee of a minimum dividend of £6 per cent. on £80,000 for 25 years, to commence on the completion of the line to Woodstock.

"4th. The right of making branch lines through any portion of the province of New Brunswick, with the requisite quantity of land, timber and materials for constructing such branches."

The first section of the line runs from St. Andrews to Woodstock; the second carries it on from Woodstock to Trois Pistoles.

Journal of Railroad Law.

PRIVATE RIGHTS OF CORPORATIONS.

In some respects railroad corporations are held to a responsibility beyond that of private individuals. They stand under public responsibilities. But their rights are in general entitled to the same protection as those of private individuals. Most of our State constitutions contain a provision that "private property shall not be taken for public uses without just compensation." This was evidently framed for the protection of the individual citizen. The statutes incorporating railroad companies authorize them to take private property for their public uses; but always upon this constitutional condition that just compensation be made to the owners.

The question has arisen whether after a railroad company has taken private property for their public use the property in their hands remains private property in such a sense that it is entitled to the same protection.

This question is further complicated by the consideration that, while the individual is a constituent of the Government, the corporation is a creature of the Government. This distinction has lent force to the argument that since corporations are molded by the Legislature, and have no power and no rights save such as the Legislature infuse into them, they are not entitled to the same exemption in this respect from legislative claim as is the private citizen.

This point has recently been tested in the Supreme Court of the State of New York; and although its adjudication is not binding in other States, it is so manifestly a just one that it is entitled everywhere to respect if not authority.

Miller and others against The New York & Erie Railroad Company. XXI Barbour, p. 513.

The plaintiffs in this action were Commissioners of Highways for the town of Walkill, Orange county. The Erie railroad passes through this town, and the plaintiffs in the discharge of their duties proceeded to lay out a public highway across the track and unimproved lands belonging to the railroad company.

They then served a notice on the company enjoining them to cause said road or highway to be taken across the said track as shall be most convenient and useful for public travel; and to cause

all necessary embankments, excavations and other works to be done on said road for that purpose, within thirty days after the service thereof, pursuant to a statute passed by the Legislature of 1853. This the railroad company refused to do.

The statute of 1853 authorizes the proper authorities to lay out a street or highway across the track of any railroad without compensation to the owners thereof. It also required the railroad corporation to construct such road and to be at the expense of all necessary embankments, excavations, &c. To secure the performance of this it also imposes a penalty of \$20 for the neglect or refusal of the company to comply with this statute within thirty days after having been notified by the proper authorities, which penalty shall be recovered by the officers laying out the road.

The railroad company contended that the statute is in direct violation of that section of the Constitution of the State of New York which provides that "private property shall not be taken for public use without just compensation," and that they were therefore not bound by the statute nor liable to the penalty prescribed therein.

The case was tried in the Dutchess General Term, April 8, 1856.

For the plaintiffs it was contended—

I. The defendants have no natural right of property and can only acquire and hold it as pointed out and permitted by the Legislature.

II. That the running a highway across the defendants' road is not a taking of private property requiring compensation within the meaning of the Constitution or not contemplated by the original charter which must be construed by its spirit and meaning.

III. That the defendants took their charter subject to the provisions of the Revised Statutes.

IV. That the Act requiring the defendants to construct highways across their road is the legitimate exercise by the Legislature of a reserved power to alter and modify the defendants' charter.

For the defendants—

I. That the charter of the corporation authorized them to purchase, receive and hold real estate and that they took a fee simple in their lands.

II. That this is not an alteration of their charter consistent with the nature and objects of the grant and with the rights of property secured by the Constitution. That when highways are laid out over lands of a railroad company have a right to be heard as to its necessity. And finally that the act if constitutional would give commissioners a right to compel the defendants to cut down banks, remove buildings, &c., for the purpose of local convenience and private speculation.

Strong, J.—The Constitution protects all private property without any further discrimination. It has been held and no doubt correctly that the property of public corporations is so far private as to be entitled to the constitutional protection.

The plaintiffs contend that the reservation in the Act incorporating the defendants justified this subsequent legislative assumption of their property. The Legislature had probably a right to establish what characteristics they pleased in what should be created or acquired by their authority, and had the Act incorporating the defendants originally contained a clause requiring them to construct new roads over their railroad at their

own expense, they would have taken their charter with this burthen. Their property would have been subject to the qualification. But the provision was not in the original charter, nor did it at all qualify their property when it was acquired. The power reserved to the Legislature to alter, modify or repeal the defendants' charter, did not purport to authorize the assumption of their property without compensation. *No power to do that could have been reserved, for none such could have existed.* It would be preposterous to say that the Legislature has the power to make any and every requisition upon the defendants a condition of their retaining their corporate existence.

It is not material to inquire whether the Legislature has a right to repeal the defendants' charter unless it has been forfeited by the misconduct or neglect of its managers. It has not been repealed, and until it shall be, the company is and will be protected by the Constitution in its rights of property.

There should be judgment for the defendants.

Chicago, Alton and St. Louis Railroad.

The following gentlemen have been elected Directors of the Chicago, Alton and St. Louis Railroad Co., (Dwight's,) under the new arrangements for working that road in connection with the Michigan Southern: John Wilkinson, Syracuse; Elisha C. Litchfield, New York; John Stryker, Rome; Ezekiel Morrison, Laporte (who are directors in the Michigan Southern and Northern Indiana Railroad Company); Joel A. Matteson, Springfield; Ham. Spencer, Bloomington; Goodale, Joliet; L. P. Sanger, St. Louis.

The following is a copy of the arrangement referred to.

"To fund the interest due and to mature on the bonds prior to the 2d of October, 1859, on receiving additional bonds for the amounts so funded, such additional bonds to be dated July 1, 1856, to be part of an issue of bonds not exceeding in the aggregate \$2,500,000, to have ten years to run; to draw interest at the rate of seven per cent. per annum, payable semi-annually in the city of New York; to contain a provision that the whole principal thereof shall come due in case of any failure in the payment of interest for thirty days, and to be secured by a mortgage to Trustees, which shall be a lien on the road and its rolling stock, next after the liens of the three mortgages by which the present bonds are secured, and which shall ratify and confirm those mortgages, and provide for such legislation as may be required to make them in all respects valid.

The warrants for the interest so to be funded are not, however, to be canceled, but are to be cut off by us on receiving said additional bonds and deposited with the Trustees, to be held by them for our protection, and as collateral to such additional bonds."

The reasons set forth in the pamphlet addressed to the bondholders are as follows:

"1. The avoidance of expensive and protracted litigation, in a remote district, involving the validity of the bonds, and if you fail, the entire loss of your debt, and during the continuance of which you remain out of any income.

2. The liability even in case of success, of having to make large advances of money to procure rolling stock.

3. The necessity of arranging the local debt.

4. The necessity of operating the road through non-resident Trustees, until it can be finally sold and paid for—a sort of operation all experience in railroads teaches as wretchedly unprofitable.

5. The necessity of finding a purchaser for the road when brought to sale. For it is not to be ex-

pected that any such sum as the aggregate of the moneys due you can be paid down for the road in cash, whatever its real value.

6. Your inability to command favorable arrangements with the connecting roads, which are controlled by creditors cut off by your proceedings."

It is urged that the acceptance of the proposition will secure—

"A complete ratification and legalization of your securities.

2. Interest immediately on the aggregate of three years interest on your debt. So that by deferring the interest on your claims for three years, you ultimately get it all and interest on that amount from this time, as if it were due at once, being nearly equal to an additional one per cent. a year on your principal debt.

3. A better assurance of the payment of your whole debt, principal and interest than you would have even if successful in bringing the road to a sale."

The road has cost about \$9,000,000 as follows:

First Mortgage Bonds 7 per cents.	\$2,000,000
Second Mortgage Bonds 7 per cents.	1,535,000
Third or Income 10 per cents.	1,000,000
Capital Stock.	3,300,000
Floating Debt.	1,560,000

Total \$9,035,000

We understand that there is a probability that the proposed arrangement will be carried out.

Land Grants in Wisconsin.

Both the City Council and the Board of Trade of Milwaukee have petitioned the Legislature of Wisconsin to grant the lands donated by Congress for the construction of a railroad from Columbus to St. Croix river, and Lake Superior to the La Crosse and Milwaukee Railroad Company. The City Council say:

"Your memorialists express their opinion, with confidence, that an appropriation of this land to the La Crosse and Milwaukee Railroad Company, upon suitable conditions, would be the surest mode of securing the early completion of the road. This company has, within a very short period of time, constructed and put in operation a railroad which is now nearly completed to Portage City, and by its recent consolidation with the Milwaukee & Watertown Railroad Company, has another line of road nearly completed to Columbus, and there is no railroad company whose credit and standing in financial circles is higher than that of this company, or whose stock commands a more ready sale. The advantages which such a company would possess over one to be formed anew, which has a name and credit to establish, are too obvious to require comment."

The Board of Trade which represents the commercial interest of the whole State, says:

"Inasmuch as the proposed roads do not interfere with the existing and well-digested railroad system of the southern portion of the State, now going forward by the united energy and capital of the State, and as they do propose to run parallel and within competing distances with roads now constructed and planned by the City of Milwaukee, we ask and most respectfully urge that our heavy investments in those directions be consulted by the adoption of the lines of the consolidated La Crosse and Milwaukee and Milwaukee and Watertown Railroad Company, by satisfactory arrangement with said Company; or, by conferring the grant upon the said Companies under proper bonds, restrictions and supervision. We would urge, finally, that such disposition of the grant would be beneficial and expedient in the highest degree, from the fact that these consolidated Companies have lines of road already built in the direction of the proposed Western Grant road; that they have a large capital invested as a basis for the completion of the proposed line, and can afford facilities for the transportation of construc-

to a material from the lake shore cities to the proposed line, so necessary and essential in the economical and expeditious construction of all inland and disconnected lines of railroading, thereby insuring a much more speedy completion of the road than by the formation of a new company."

U. S. MAIL AND EXPRESS ROUTE DIRECT FOR Iowa, Kansas and Nebraska.

CHICAGO, BURLINGTON & QUINCY RAILROAD.

THE ONLY DIRECT ROUTE FROM
CHICAGO TO AURORA, MENDOTA, PRINCETON,
GALESBURG, QUINCY, BURLINGTON, ANY PART
OF SOUTHERN OR CENTRAL IOWA, KANSAS
OR NEBRASKA.

PASSENGER TRAINS leave the Central Depot, foot of South Water street, Chicago, daily as follows:—
9.00 A.M.—**MORNING EXPRESS**—Connecting at Mendota with Illinois Central Railroad, north for Amboy, Dixon, Galena and Dunleith, south for La Salle, Bloomington, Decatur, Springfield, Jacksonville, St. Louis, Cairo, &c.; at Galesburg with Northern Cross R.R. for Quincy, &c.; and at Burlington with Burlington and Missouri River R.R., and with Packets for points up and down the Mississippi river.
8.45 P.M.—**EVENING EXPRESS**—Making same connections as above.

NO TRAIN SATURDAY EVENING.

ONE TRAIN SUNDAY, 8.45 P.M.
BAGGAGE CHECKED THROUGH TO BURLINGTON and QUINCY.

THROUGH TICKETS can be procured at all the principal eastern railroad offices and in Chicago at the Depot and at the Michigan Central R. R. office, corner of Lake and Dearborn streets, opposite the Tremont House.

SAM'L POWELL, Gen. Ticket Agent.

O. G. HAMMOND, Gen. Supt.

HUDSON RIVER BRIDGE. Notice to Contractors.

OFFICE OF THE HUDSON RIVER BRIDGE CO., AT ALBANY, September 25th, 1856.

PLANS and Specifications for the Superstructure of the Bridge to be erected by this Company across the Hudson river, at Albany, will be received by the Directors at any time within sixty days from the date hereof, at their office in the Exchange, in the city of Albany. The plans may be for a Superstructure of either Wood or Iron.

By the terms of the charter, the Bridge is to be constructed with a draw of sufficient width to admit the free passage of the largest vessels navigating the river, and at least two hundred feet in width; or two draws of at least one hundred and fifty feet each.

Information may be obtained at the office of the Company, as to the location of the Bridge; and all the particulars necessary to be understood by those who may wish to submit plans and specifications.

The Plans must be in detail, accompanied with an estimate of the cost of all the items.

The Company reserve the right to reject all the plans, or to adopt portions of any of those which may be submitted.

A Premium of Five Hundred Dollars will be paid for the plan which may be accepted by the Directors, or if portions of different plans be adopted, the premium will be divided in such manner as the Directors may deem proper.

By order of the Board,

6140

G. L. WILSON, Secretary.

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 55 lbs. per yard, of Messrs. Guss & Co. and BAILEY BRUS & Co.'s make, shipping from England during the present month for New York. For sale by J. BOORMAN, JOHNSTON & CO.,

Sept. 25th, 1856.

2m

90 Broadway,
New York.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL, New York, July 25th, 1856.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 31x45 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address

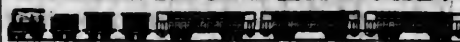
JAMES W. HILTON,

Jersey City, N. J.

July 24th, 1856.

3m.

SOUTHERN RAILROAD.



State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, treating and bridging, necessary to the complete preparation for the super-structure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perch.

The cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the **FIRST DAY OF NOVEMBER NEXT**, and will be, at the option of bidders, either for—
I. The entire work of construction, completing the road ready for the iron;
II. The work of construction, exclusive of cross-ties and track-laying;
III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon; extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions; the first of 21 miles, the second of 23 miles, the third of 38½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one-third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a-half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport, and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark literally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over-estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

WM. C. SMEDES,

President of the Southern R. R.

TO BRIDGE BUILDERS.

THE La Crosse and Milwaukee Railroad Company invites PROPOSALS with plans and specifications, until Wednesday noon, October 15th next, for building a bridge over the Wisconsin river on the line of their road. This road extends in a north-westerly direction, across the State, from Milwaukee on Lake Michigan to La Crosse on the Mississippi river crossing the Wisconsin river at Kiltbourn City in Columbia county. The river at this point runs in a rocky bed, the banks of which are vertical rock bluffs to the height of 80 feet above the water, at which point they are at the grade line of the road, and about 300 feet apart. The water is about 20 feet deep, having in the middle of the stream a few feet of sand overlying the rock bottom. It is proposed to erect two piers about 50 feet deep from either bank, at which points the water is about 5 feet deep at low water, with a clean rock bottom, giving a span in the middle of 200 feet, and two short spans at the ends, resting upon the natural rocks as abutments. It is desirable so to construct the bridge as to give a wagon way below the railroad track, passing the latter over the higher section of the bridge. The company reserve the right to award the contract to any parties on any plan furnished; but in case of their giving the contract to any builder on a plan furnished by any other person, they will pay to the person furnishing such plan, the sum of FIVE HUNDRED DOLLARS, in full consideration of the plan and specifications so adopted.

BYRON KILBOURN,

Pres't La C. and Mil. R. R. Co.

MILWAUKEE, August 1st, 1856.

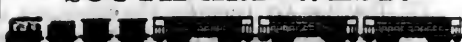
10:32

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the OGDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILADELPHIA, Penna. 321

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.



Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	5 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER Supt.

New York and Erie R. R.

On and after Thursday, August 7, 1856, and until further notice,

PASSENGER TRAINS will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 a.m., for Dunkirk.
MAIL, at 8½ a.m., for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Oswego, and proceed the next morning.
CHICAGO EXPRESS, at 1 p.m., for Dunkirk.
ROCKLAND PASSENGERS, at 3½ p.m., (from foot of Chambers st.) via Plomont, for Suffern and intermediate stations.
WAY PASSENGERS, at 4 p.m., for Newburgh and Middle town and intermediate stations.
NIGHT EXPRESS, at 5 p.m., for Dunkirk and Buffalo.
EMIGRANT, at 6 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c.,

D. C. McCALLUM, General Supt.

NOTICE TO RAILROAD COMPANIES. FIRE INSURANCE.



THE LIVERPOOL AND LONDON FIRE AND LIFE INSURANCE COMPANY.

37 CASTLE STREET,
LIVERPOOL.

Office, 56 Wall Street, New York.

20 and 21 POULTRY,
LONDON.

AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

PAID-UP CAPITAL AND SURPLUS AND RESERVED FUNDS.

THREE MILLIONS OF DOLLARS.—OVER HALF A MILLION INVESTED IN THIS COUNTRY.

THE LIABILITY OF THE SHAREHOLDERS UNLIMITED.

DIRECTORS IN NEW YORK.

JAMES BROWN, Esq., *Chairman.*

GEORGE BARCLAY, Esq.

JOSEPH GAILLARD, Jr., Esq.

MORTIMER LIVINGSTON, Esq.

ALFRED PELL, Esq., *Resident Secretary.*

ALEXANDER HAMILTON, Jr., Esq.

ED. V. SANDERSON, Esq.

WILLIAM S. WETMORE, Esq.

FRANCIS COTTENET, Esq., *Deputy Chairman.*

JOSEPH FOWLER, Esq.

JOHN H. HICKS, Esq.

EUGENE DUTILH, Esq.

ALEX. HAMILTON, Jr., Esq., *Counsel of the Board.*

BANKERS—MERCHANTS' BANK—CAMMANN & CO.

DIRECTORS IN NEW ORLEANS.

AMBROSE LANFEAR, Esq., *Chairman.*

JOHN C. B. YUILLE, Esq.

HENRY V. OGDEN, Esq., *Resident Secretary.*

THOMAS BYRNE, Esq.

FREDERICK RODEWALD, Esq.

DIRECTORS IN LIVERPOOL.—THOS. BROCKLEBANK, Esq., *Chairman.* J. C. EWART & F. HAYWOOD, Esqs., *Deputy Chairmen.* THOS. BOOTE, Esq. FRANCIS C. BRAUN, Esq. WILLIAM EARLE, Esq. GEORGE GRANT, Esq. THOMAS H. HUGH, Esq. FRANCIS A. HAMILTON, Esq. ROBERT HIGGIN, Esq. GEORGE HOLT, Esq. HUGH HORNBY, Esq. GEORGE H. LAWRENCE, Esq. HAROLD LITTLEDALE, Esq. WILLIAM LOWE, Esq. ALEX. MACGREGOR, Esq. JOHN MARRIOTT, Esq. THOS. SELLAR, Esq. CHAS. SAUNDERS, Esq. JOHN SWAINSON, Esq. JAMES ASPINALL TOBIN, Esq. SWINTON BOULT, Esq., *Sec'y.*

DIRECTORS IN LONDON.—MATHEW FORSTER, Esq., *Chairman.* GEORGE FRED. YOUNG, Esq., *Deputy Chairman.* EDWARD BARNARD, Esq. WILLIAM BROWN, Esq. M. P. SIR WILLIAM P. DE BATHE BART. WILLIAM EWART, Esq. M. P. FREDERICK HARRISON, Esq. DONALD LAFRANCO, Esq. ROSS DE MANGLES, Esq. M. P. HON. FREDERICK PONSOMBY. JOHN BANKING, Esq. EDWARD THOMPSON, Esq. SWINTON BOULT, Esq., *Secretary to the Company.* BENY. HENDERSON, Esq., *Resident Secretary.*

In addition to their usual business, this Company is prepared to take Fire Risks upon
Railroad Property of all Descriptions,

AS FOLLOWS:

1 They will name a premium at a low rate upon a policy to cover all the perishable property of any Railroad Corporation.

The Railroad Companies desiring insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2 This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

New York, August 27th, 1866.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

Notice to Contractors.**Chicago, Iowa and Nebraska Railroad.**

SEALED proposals will be received at the Office of the Company in the City of Clinton, Iowa, until Wednesday, October 15th, inclusive, for the Graduation, Masonry and Bridging at De Witt, and extending to Cedar Rapids in Linn County.

The line will be divided into sections of about one mile in length. The sections may be proposed for separately, or connected as may suit parties proposing. Plans, profiles and specifications of the work will be ready for examination at the Office of said Company in Clinton, on and after the 25th day of September next. The Company reserve the right of accepting such proposals only as they may deem for their interest.

MILO SMITH,
Chief Engineer.

CLINTON, August 18, 1856.

Times and Journal please copy and send bill to this office for collection.
4138

BUSINESS CARDS.**DRAKE & CARTER,**

49 Merchants' Exchange, Wall Street.

THE subscribers have formed a Co-Partnership under the name of **DRAKE & CARTER**, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Lending Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be **JAMES M. DRAKE** and **GALEN A. CARTER**. **EDWARD B. LITTLE** Esq. has contributed Fifty Thousand Dollars as special partner.

D & C. will occupy the Offices No 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)
JAMES M. DRAKE. **GALEN A. CARTER.**

WILLIAMS & PAGE,

No. 44 Water Street,
BOSTON, MASS.

RAILROAD SUPPLYING AGENTS
and Commission Merchants, for the Sale of
Iron Rails, Chairs, & Spikes,
ENGINES, CARS, AND MACHINERY.

BUSH & LOBDELL's and other kinds of WHEELS,
BEST HAMMERED FAGOTED AXLES,
LOWMOOR, BOWLING, AMES', AND NASHUA TIRES,
Iron and Steel of all kinds for Railroad Shops,

CAR TRIMMINGS OF EVERY KIND,
and all articles used in Equipment and Repairs of Railroads,
Engines, and Cars, at manufacturer's prices.

THOS. S. WILLIAMS, **PHILIP S. PAGE,**
Late Sup't Boston & Me R. R. Late Page, ALDEN & Co.

REFERENCES.

JAMES HAYWARD, President
Boston and Maine R. R.
Capt. WM. H. SWIFT.
J. M. BARNES, **RICHARDSON & Co.**
GEO. H. KUHN Esq.
LAWRENCE, STORR & Co.
DANA, PARKER & HYDE.

SEYMOUR, MORTON & CO.

General Railroad Agency,

OFFICE—METROPOLITAN BANK BUILDING
110 Broadway, New York.

ARE prepared to contract for the construction and equipment of railroads in any part of the country; also to furnish corps of Engineers and Contractors; Locomotive Engines and Cars; Railroad Iron, Chairs, Spikes, Switch-irons, &c., &c.

They will also sell or negotiate loans on all kinds of Railroad securities.

SEYMOUR, MORTON & Co. have to dispose of at private sale, in amounts to suit persons desirous of investing a large amount of valuable Railroad and other securities. The members of the firm having had a large experience as Civil Engineers, on some of the most important public works in this country, also tender their services as Consulting Engineers to those engaged in the construction of Railroads.

CINCINNATI STOCK EXCHANGE.

KIRK & CHEEVER,
Stock Brokers and Railroad Agents,
NO. 83 WEST THIRD STREET,
CINCINNATI, OHIO.

Railroad Stocks, Bonds, &c., bought and sold on commission. Regular sales at public auction at the MERCHANTS' EXCHANGE.

THIRD STREET
STOCK EXCHANGE,
CINCINNATI.

J. L. Hickman and Company,
STOCK AND REAL ESTATE BROKERS,

Auctioneers;

(No. 36 West Third Street, Masonic Building.)

Public Stock Sales daily

AT 11 O'CLOCK A. M.,

AT THE THIRD ST. STOCK EXCHANGE AS ABOVE.

A PRIVATE SALE—J. L. H. & Co. always have for sale a choice variety of State, County, City and Railroad Bonds and Stocks; also, Bank and Insurance Works, and other Securities. **NEGOTIATE LOANS** on Stock, Notes, Bills of Exchange, Mortgages, &c. **REAL ESTATE SALES,** whenever required, at the STOCK EXCHANGE or on the premises.

CINCINNATI.

HEWSON & HOLMES,

AUCTIONEERS AND STOCK BROKERS,

Have regular sales of Stocks, Bonds, and other Securities,

EVERY

WEDNESDAY AND SATURDAY,

At 1 o'clock at the Merchant's Exchange,

AND IF REQUIRED,

SPECIAL SALES

ON MONDAY, TUESDAY, THURSDAY, AND FRIDAY.

Offices—Nos. 83 and 85 Walnut street,

Where they offer at private sale

A GREAT VARIETY OF

State, County, City and Railroad BONDS and STOCKS,

NEGOTIATE

LOANS, NOTES, BILLS OF EXCHANGE,

AND COLLECT

DIVIDENDS, LEGACIES, DEBTS, &c.

REFERENCES—Ohio Life Insurance & Trust Company Bank

H. M. SMYTH

COMMISSION MERCHANT

AND

MANUFACTURERS' AGENT,

No. 13 Doane St., BOSTON.

American and Foreign bar, boiler, and pig iron, Tyres, Axles, wrought iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

H. H. GOODMAN & CO.,

No. 7 WALL ST., NEW YORK,

Dealers in Railway, City, County, and State

BONDS,

RAILS, LOCOMOTIVES, &c.

We have on hand and for sale, of County Bonds—

Hardin County (Ky), 6 per cts. Davidson City (Tenn.), 6 p. cts.
Carter, Bath, and Montgomery (Ky), 6 per cents. Iowa County (Wis.), 8 per cts.
Mineral Point do. do.

Also a variety of CITY, COUNTY, and RAILWAY SECURITIES in smaller lots.

April 30th, 1856.

ELLERY & GIBBONS,

No. 10 WALL ST.,

BANKERS, DEALERS IN DOMESTIC and FOREIGN
EXCHANGE, &c., are prepared to negotiate Stocks, Bonds and Financial Securities in general.

REFERENCES.

DREXEL & Co., Bank's, Philad. **CORNELIUS W. LAWRENCE,** Esq., N. Y.
SILAS K. EVERETT, of Everett & Brown, N. Y. **SAMUEL WILLETS,** Pres't of Am. Exchange Bank, N. Y.
WELLS, FARGO & Co. 1st

Meigs & Greenleaf,

Office No. 23 William st.,

WILL give prompt attention to the purchase and sale of STOCKS, BONDS, &c., strictly on commission. Orders respectfully solicited.

CHAS. A. MEIGS, late Cashier Am. Ex. Bank.
A. W. GREENLEAF, late of No. 2 Wall st.

REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank.

1718

KASSON'S

LOCOMOTIVE EXPRESS

FOR THE RECEIPT AND TRANSPORTATION OF

LOCOMOTIVES,
PASSENGER AND BOX CARS
OF ANY GAUGE

To the Western and South-Western States.

PROPRIETORS—KASSON, SON & CO.

WM. M. KASSON, } 90 Exchange st., BUFFALO.
W. MARSH KASSON, }
JAMES G. DUDLEY. } 24 Broadway, NEW YORK.

ARMORY

ROLLING MILLS,
RICHMOND, VA.

R. ARCHER & CO., Proprietors.

R. ARCHER.

R. S. ARCHER.

A. D. TOWNES.

F. T. GLASGOW.

Bar Iron, all sizes, Manufactured from the best Charcoal Pig Metal. Flats, up to 7 inches. Rounds and Squares, up to 6 inches.

Angle and T Iron Car Axles. Railroad Spikes. Do. Chairs. Bridge Bolts, Screwed and Tapped.

Strict attention paid to the quality and finish of our IRON, and all orders promptly filled.

A sample of our machine-made chair may be seen at the Bank of the Republic in New York.
August, 2, 1856. 3m

ENGINEERS.**Consulting Engineer.**

THE undersigned may be consulted upon the location, construction, equipment, and management of railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron.

Also upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches, and in its most difficult application.

A long and intimate connection with the construction and management of our most important American railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable railroad companies to avoid errors of location, construction and management which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainment, and competent Superintendents can be recommended or supplied to railroad companies for immediate service on surveys and construction and on management.

ISAAC R. TRIMBLE,
Consulting Engineer,
118 Park Place, BALTIMORE.

22ct

LITHOGRAPHIC AND DRAUGHTING.

Office 131 Fulton st., NEW YORK.

G. WEISSEN BORN,

CIVIL and MECHANICAL ENGINEER,

employs Draughtsmen, and is at all times prepared to execute his work with promptness. He will furnish Architectural and Mechanical Drawings, Linear and Perspective, and if desired they will be lithographed in the HIGHEST STYLE OF THE ART.

W. G. ATKINSON,

CIVIL ENGINEER, SURVEYOR AND DRAFTSMAN
CUMBERLAND, Maryland.

RAILROAD routes located, planned and estimated. Maps and Reports furnished. Researches made for Coal, Iron, Copper, Lead and other Minerals, Metals, &c. Contract work in Tunnels and heavy Graduation measured and reported in detail. Topographical Drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological Plans prepared.

ENGINEERING.

THE undersigned is prepared to furnish Specifications, Estimates and Plans, in general or detail, of Steamships, Steamboats, Propellers, High and Low Pressure Engines, Boilers, Mill Work, &c., &c. Particular attention given to the procuring and superintending of Locomotives, Tenders, Cars, and Railway Machinery of every description.

General Agent Ashcroft's Steam Gauge, Allen & Noyes' Metallic Self-adjusting Conical Packing, Dodgeon's Hydraulic Jack, Sewall's Salinometer, &c., &c., &c.

Acts as Agent for the purchase or sale of, and has always on hand, Steamers, Locomotives, Engines, Boilers, Machinery, &c.

CHAS. W. OPELAND,
Consulting Engineer,
64 Broadway, N. Y.

1717

Augustus Schwaab,

CIVIL ENGINEER, MACON, GEORGIA.

IS prepared to execute work in all the branches of his profession; all kinds of surveys, railroad surveys and locations, plans, estimates, topographical maps and reports for same, surveys of plantations and swamp lands, and designs and estimates for drainage of lands, water works and river improvements. All kinds of contract work measured and reported in detail; plans and specifications furnished for bridges, private and public buildings. He has held responsible situations on the construction of Georgia railroads for the last seven years, and has given his attention to all the details of railroad construction, from the surveys to the erection of the largest depots and workshops, which gives him great facility to furnish railroad companies with reliable and practical designs of any kind they may want, and if required to superintend the execution of them. The best references and recommendations can be produced.

PROFESSIONAL CARDS.**Atkinson, T. C.,**

Mining and Civil Engineer, Alexandria, Va.

Barnes, Oliver W.,

Chief Eng. Pittsburg and Connellsville R.R. Co., Pittsburg, Pa.

Edward Boyle,

Chief Engineer, 2d, 3d, and 6th Avenue Railroads New York Office 123 Chambers st.

Clement, Wm. H.,

Little Miami Railroad, Cincinnati, Ohio.

James Conyers,

Chief Engineer Galveston, Houston & Henderson Railroad, Galveston, Texas.

Alfred W. Craven,

Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,

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6.	" 15 " 1 1/2 to 1 1/2.	18.	" 28 " 1 1/2 to 1	25	" 1 1/2 to 1
7.	" 15 " 1 1/2 to 1 1/2.	19.	" 30 " 1 1/2 to 1	26	" 1 1/2 to 1
8.	" 16 " 1 1/2 to 1 1/2.	20.	" 30 " 1 1/2 to 1	27	" 1 1/2 to 1
9.	" 16 " 1 1/2 to 1 1/2.	21.	" 30 " 1 1/2 to 1	28	" 1 1/2 to 1
10.	" 18 " 1 1/2 to 1 1/2.	22.	" 30 " 1 1/2 to 1	29	" 1 1/2 to 1
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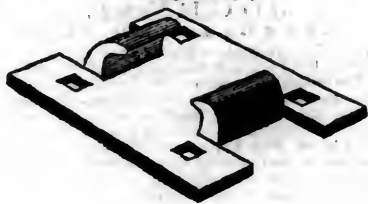
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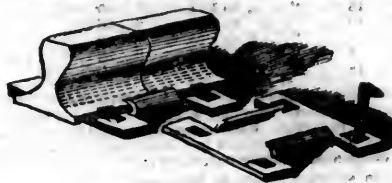
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XII., No. 42.]

SATURDAY, OCTOBER 18, 1856.

[WHOLE No. 1,070, VOL. XXIX.

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, October 18, 1856.

Trans-Atlantic Steam Navigation.

It is our purpose in this article to take some notice of the growth and development of trans-Atlantic steam navigation, and to show what has been accomplished by citizens of the United States in this department of naval art since they took the field in 1847, in competition with their rivals of the British isles, who for nine years previous, dating with the pioneer voyages of the *Sirius* and *Great Western*, in April, 1838, had retained the monopoly of the trade by steamships between the two continents. Allusion will be made to our progress in naval architecture, the difficulties that have been encountered from inexperience and disaster, and to the measure of pecuniary success which has thus far attended our efforts. The prospective completion of the leviathan steamship "Great Eastern" on one side of the Atlantic, and the "Adriatic" on the other—both of which will far out-distance anything of the kind before attempted, and inaugurate a new era in ocean navigation—seem to point out the present as a suitable time for a glance at the past. The powerful incentive arising from the urgent prosecution of rival interests, backed by the skill, wealth, and scientific knowledge of two enlightened nations, has doubtless contributed to the mutual advancement of England and the United States in this matter. An interval of eighteen years has elapsed since the first vessel wholly propelled by steam crossed the Atlantic, (though we claim the honor of despatching, in 1819, the steamer "Savannah," the arrival of which was duly chronicled at Lloyd's)

and now there are fourteen lines of steamers, comprising forty-eight vessels, plying between Europe and the United States. Recently, not less than fifteen arrivals of foreign steamships have taken place in a single month, narrowing the Atlantic to a ferry. The following is a complete list:

Lines.	No. of Steamers.
New York and Liverpool United States Mail Steamship Company—Atlantic, Baltic, Adriatic.....	3
N. Y. and Havre—Fulton, Arago.....	2
British and North American R. M. Steamship Co.—Persia, Arabia, Asia, Africa, Canada, America, Niagara, Europa.....	8
British and North American R. M. Steam Packet Co.—Etna, Jura, Emeu, Lebanon, Cambria.....	5
Glasgow and New York Steamship Co.—New York, Glasgow, Edinburgh.....	3
Ocean Steam Navigation Co.—Washington, Hermann.....	2
Liverpool and Portland.—Khersonese.....	1
Montreal Ocean Steamship Co.—Anglo-Saxon, N. American, Indian, Canadian.....	4
Liverpool and Philadelphia Steamship Co.—City of Manchester, City of Baltimore, City of Washington, Kangaroo.....	4
New York and Hamburg.—Borussia, Hammonia.....	2
London, Cork and New York.—Minna, Brenda. Vanderbilt's line, (laid up), North Star, Ariel, Vanderbilt.....	3
Franco-American Co.—Barcelone, Alma, Jacquart, Francois Arago.....	4
Belgian Trans. Steamship Co., (N. Y. and Antwerp,) Belgique, Constitution, Leopold I, Duc de Brabant, Congress.....	6
Total.....	48

The first steamer of the line last mentioned will leave Antwerp, Oct. 3d. Three of the vessels are now in readiness and two are building. Besides the above, comprising fourteen lines, are several transient steamers, or "extras," such as the *St. Louis* and *Ericsson* (Am.), the *Sarah Sands* and *Alps*, (Br.) The American steamer *Union*, formerly running on the Havre line, has recently been sold to the Austrian Lloyd's, to run between Gibraltar and ports in the Mediterranean.

Under these circumstances, it is difficult to realize that the *London Times* of March 31st, 1838, published the following paragraph:

"There is really no mistake in this long talked of project of navigating the Atlantic ocean by steam. There is no doubt of the intention to make the attempt, and to give the experiment, as such, a fair trial. The *Sirius* is actually getting under weigh for America."

The preponderance of foreign enterprise as shown by the above list, is not remarkably flattering to Americans, considering the achievements of our own *Fulton*, just fifty years ago, and the liberal encouragement to steamship building which the government has at various times afforded, by its contracts for carrying the mail. Out of forty-eight steamers named in the above list but twelve are of American construction. It is, however, to be considered that but nine years have elapsed since our operations have commenced, while foreign companies have been eighteen years engaged in ocean steam navigation, or exactly twice as long as ourselves, and that the period of their monopoly gave them advantages against which it was difficult for us to contend. A series of untoward events have no doubt contributed to this result.—Not only have our steamers been run at an enormous expense, in several instances absorbing the entire profits, but disaster has swept off a number of our best ships, following close on the heels of Enterprise with palsyng hand. Four of our most valuable steamers have been entirely lost; two have been driven ignominiously ashore and broken up; a third was sunk by a collision with nearly all on board, and a fourth, the noblest of the fleet, has never been heard from, but is supposed to have struck an iceberg. Foreign companies, especially when the greater extent of their operations is considered, appear to have been more fortunate. They have lost in all four ships from their American lines. The President was lost in the year 1841; no one knows how or where. The *Columbia*, in nautical phrase, "broke her back" on some rocks on the American shore of the Atlantic. The *City of Philadelphia* went to pieces on the rocks near Cape Race. The *City of Glasgow* sailed from Liverpool, March 1st, 1854, and has not since been heard of. The *Great Britain* had a narrow escape in Dundrum Bay, coast of Ireland, but has since been restored to service. The disasters to steamships may be summed up as follows:

Name.	Fate.	Valuation.
President.....	Never heard of.....	\$850,000
Columbia.....	All hands saved.....	300,000
Humboldt.....	All hands saved.....	507,000
City of Glasgow.....	Never heard of.....	200,000
City of Philadel'a.....	All hands saved.....	800,000
Franklin.....	All hands saved.....	480,000
Arctic.....	A few saved.....	720,000
Pacific.....	Never heard of.....	580,000

Total, exclusive of cargo \$3,537,000

If cargo was included, these figures would be nearly trebled.

Considering the entire number of steamers afloat, disasters have not been remarkably frequent; but fortune's smiles have been bestowed most freely

on our competitors, notwithstanding the acknowledged superiority of many of our ships and the excellence of their personal equipment. Even in our domestic lines this fact holds true, as we have lost seven fine steamers, mostly on the Pacific coast, viz., the Independence, which sunk in the Pacific, with 120 lives; and the Tennessee and St. Louis—total wrecks. The San Francisco, valued at \$300,000, was lost in the Atlantic in the same year, with many valuable lives; the Yankee Blade, in the year following; beside the ill-fated Rhode Island, and the North Carolina in the year 1855. It is estimated that 1,420 lives, and \$7,930,000 in property have been lost in steamships since the year 1853.

Steamships, as a whole, have not been a dividend paying property to such as have invested in them. The Ocean Steam Navigation Company, which was the pioneer American line, has been running nine years without any serious accident, and though at one time threatened with extinction under a heavy load of debt, has been paying regular semi-annual dividends of five per cent. for the last three years. Their boats are not calculated for great speed, but are good twelve day steamers. The Havre line, next established, paid a dividend of seven per cent. about two years ago, but disaster early checked its promised career of prosperity. These comprise all the pecuniary successes we have as yet to chronicle, out of the domestic trade. Some of the Chagres and California lines have paid very handsomely. The Collins line, established in 1850, has not paid even simple interest to the stockholders. The original estimated cost of this line was \$2,500,000, but a renewed effort on the part of their English antagonists made it necessary to enlarge the size of their proposed steamers from 2,000 tons, as stipulated in the contract, to 3,000 tons. The sum of \$1,180,000 was subscribed for their construction, and after the increased pay allowed by Congress, an effort was made to fill up the stock to the required amount, but without success, and the line has since been maintained by private enterprise aided by government patronage.

When Mr. Collins and his associates proposed to build a line of steamships, the Cunard line was regarded as the first in the world, having ran eleven years and reduced the passage between Liverpool and Boston to about twelve and a half day—equal to say, thirteen and a half to New York. In undertaking the new enterprise, in competition with the resources of established British capitalists, there were great obstacles to be surmounted, the chief of which was inadequate financial ability; but a naturalized citizen of more than fifty years' residence volunteered to alone furnish more than two million dollars, and thus assured the success of an enterprise in which the character and commercial power of the country were largely involved. It was then said to Mr. Collins—"You may sink the whole of the capital invested, but must not make a failure." What has since been achieved is a matter of history.—The first year the Collins line was started, the passage to New York was made in less than ten days. The Cunarders have since made eight ships, all designed to beat that time, and one ship (the "Persia") has succeeded, on the eastern passage only. On western passages the performance of the Collins is still unequalled.

Of the Philadelphia and Liverpool line it is stated that a loss of \$15,000 was incurred on the first voyage of the City of Baltimore, on the second about \$10,000, and that the last voyage barely paid expenses; so that the enterprise has thus far not proved remunerative.

Passing now from a financial view of the subject to observe what progress has been made in this department of naval architecture, we have strongly marked results. Fulton's steamer "Clermont" left New York for Albany on the 7th day of August, 1806, dispelling all rational doubt as to the successful application of steam navigation. It is instructive to notice subsequent conquests of science and art in this direction, giving fleet wings to commerce, contracting the space of

oceans, and accelerating the strides of communication between distant continents. The following table, giving the relative sizes of the largest steamships that have been built, affords some idea of what has been accomplished:

	Length.	Corp.	Meas.
Atlantic, (Collins).....	280		3,000
Great Britain.....	322		3,500
Vanderbilt.....	325		5,100
Niagara, U. S. steam frigate....	345		5,200
Himalaya.....	350		3,600
Adriatic, (Collins).....	354		5,888
Persia.....	390		5,600
Great Eastern.....	700		25,000

The completion of the Adriatic and Great Eastern will be looked to as events of great interest.—A gentleman just returned from Europe, and who visited the great steamer building near London, says the hull is as yet not more than half built and none of the machinery is yet put into her. The number of men at work on her is now reduced to 300, so that the work is not proceeding as fast as formerly. April is spoken of as the time when the launch will probably take place. The gentleman above referred to, who is a president of one of our steamship companies, and a connoisseur in naval architecture, says the ship is of a beautiful model, and there appears to be little doubt of her success, particularly as regards speed: but how she will pay her enormous running expenses, is a problem which yet remains to be solved. The hull is 700 feet in length by 60 feet in breadth, made of a double thickness of iron plates, which are laid on either side of a longitudinal framework, combining the strongest method of construction with the least weight of material. The vessel is divided into ten water-tight compartments, with sub-compartments, so that each portion would be self-sustaining in case of wreck. Both screw and side wheels will be used. The latter will have six boilers, and the former four engines and the same number of boilers. The shaft of the screw is 160 feet long, and weighs 60 tons. The diameter of the screw is 24 feet; of the wheels 56 feet. The speed of the ship is expected to average sixteen knots an hour under steam. The masts will be seven in number, spreading 6,500 square yards. A semaphore, colored lights, and the electric telegraph will be employed in conveying orders between the officers according as their use may be found necessary. Her first voyage will probably be to Portland, Me.

The "Adriatic," from our own work-shops, is very near completed, and from the improved machinery with which she is fitted and the excellence of her model, many are disposed to entertain almost incredible calculations as to the speed of which she will be susceptible. She will no doubt be a triumph for our mechanics, and will, in all probability, excel, not only in workmanship but in all the qualities which constitute a first-class steamship. She is, without exception, the largest ship in the world yet launched, whether of timber or iron. The Persia (iron) is longer, but she has five feet less beam, and fourteen inches less depth of hold; so that her actual size is not equal to that of the Adriatic by something like three hundred tons. Compared with the Great Eastern she is a pigmy, but she is as large as will be required to meet the demands of trade for many years to come, and (according to predictions made here, with reference to the Great Eastern,) quite as large as can be run with any advantage to her owners. The principal dimensions of the Adriatic are as follows: Length, 354 feet; breadth of beam, 60 feet; depth of hold, 53 feet; diameter of wheel, 45. She will have oscillating engines of 2,000 horse-power, with cylinders 100 inches in diameter and 12 feet stroke. Her boilers will be eight in number. The whole ship will be divided by eight water-tight compartments of oak, six inches thick, fastened in the strongest manner. Her estimated cost is \$3,850,000. In all the mechanical details of the construction of this remarkable ship, human skill seems to have done its utmost.

At the present time, the construction of steam

propellers for ordinary mercantile service seems to be attracting more attention. The Novelty Iron Works have a very fine working model of a propeller engine, and it is anticipated that ultimately this class of vessels will occupy an important place in our mercantile marine. For naval purposes, its superiority is undoubted.

Mining Statistics of the United Kingdom—Iron.

The estimated total quantity of Iron Ore raised in the United Kingdom during 1855, was 9,553,741 tons. This supplied the following blast furnaces: England, 311; Wales, 156; Scotland, 122.

The produce of iron for the year ending Dec. 31, 1855, was—Pig iron, 3,181,154 tons.

The mean average of pig iron during the year—embracing the varying prices of pig iron on the Clyde, the more uniform price of the Welsh iron and the variations of price in Yorkshire and Staffordshire—has been 41. 4s. the ton; consequently the market value of the pig iron produced has been 13,516,266l.

County.	IRON ORE.		Quantity.
	District or Mine.	Character of Iron Ore.	
Cornwall....	Restormel.....	Hematite..	20,807
	St. Austell distr. Do. ..		2,890
	Helstone distr. Spathose ..		250
Devonshire....	North Coast ...	Hematite..	110
	Coombe Martin.Spathose ..		1,190
Somerset....	South Devon ..	Do., &c.	810
	Brend'n Hills		
	shire Ralgh's Cross	Spathose ..	4,940
Gloucester- shire	Exmoor.....		
	Forest of Dean. Hematite..		92,608
North'mpton-Northampton shire	Weedon	Hydrated oxide...	74,084
	Blisworth ...		
St'ff'dsh. & W'cest'rs.	Coal measure's generally...	Argillaceous carbon'te.	2,600,000
Shropshire ..	Donnington Wood, &c....	Do.	865,000
Derbyshire....	Sundry Iron beds.....	Do., &c.	409,500
Yorkshire, W. Riding.	Do.	Do.	255,000
	N. Riding. Vall'y of the Esk & Pickering..	Carbonate & oxide...	55,000
Coast N. of Whitby	Do.	Carbonate	50,000
	Cleveland distr. Do.		865,300
N'rth'mb'r-land and Durham.	Weardale	Argillaceous carbon,	185,000
	Alston.....		
Cumberland.	Haydn Bridge Tyne district. &c.		
	Whitehaven....	Hematite..	200,788
Lancashire....	Ulverstone....	Do.	836,828
North Wales. Carn'rv'nshire } Flats'hiro ... }		Do.	1,820
	Denbighshire....	Argillaceous carbonate.	64,500
South Wales. Anthracite distr. Do.			160,500
	Bitumin's do. Do.		1,505,000
Scotland.... Coal measure districts gener- ally.		Argillaceous carbon-ates and black band.	2,400,000
Ireland.....	Wicklow	Hematite..	576
Isle of Man..	Douglas, &c....	Do.	2,240
Total.....			Tons 9,553,741

IRON IN SCOTLAND.

The principal supply of ore for the production of pig iron in Scotland is from blackband or carbonaceous iron ores, and the clay iron stones or argillaceous iron ores of the coal measures.

In the upper coal measures of Lanarkshire occur the Palais Craig, Mushet's, Bell Side, Kiltongue Mussel Band, and Slaty blackband.

In the lower coal measures—1. Skaterigg, Bishdprigg, or Leshmagow blackband, (worked under these different names.)—2. Skaterigg.

Of clay iron-stones, the upper series of coal

measures contain very small quantities, accompanying the Glasgow splint coal, the lower series—Crossbasket, from which the largest quantity of clay iron stones are obtained. In Ayrshire are the Lugar and the Dalry blackbands, and the Macdonald Band and Logan's band of clay iron-stones.

Iron ore produced, 2,400,000 tons.—*London Mining Journal.*

St. Louis and Iron Mountain Railroad.

We are glad to notice that the Directors of this road are making arrangements to run regular passenger trains from their depot ground in this city to Jefferson Barracks. Although the distance to the Barracks is but ten miles, yet the fact of opening the road to the use of the public for even this distance is encouraging, as the dawning of a new era in the prosperity of St. Louis.

The road-bed, we learn, over the whole distance to the Pilot Knob and Iron Mountain—a distance of eighty-four and a-half miles from St. Louis—is in a state of great forwardness, and is expected to be ready for the rails as soon as the first of March next; meanwhile, the track-laying will progress constantly, without interruption by unfinished work, until completed to the Pilot Knob. The track is now laid to the bluff, just below the Barracks, and is steadily progressing southward, having now eight miles of finely ballasted road-bed before it completed. The bridge over the Maramec river, of which there has been so much doubt as to the practicability of building it, will, we are informed, be ready for the track on the first of January. The Company have, however, a large lot of iron rails and other materials delivered at their landing, below the Maramec, so that the track-laying will suffer no delay on account of this bridge. The tunnel is nearly completed; daylight shone through it upwards of two months ago.

The Company has one locomotive, the "Carondelet," in daily use, and two others in the shop, one of which, the "Potosi," will be put in service the coming week. They have also twenty-two cars ready for use. The locomotives and cars were all built in St. Louis by our own mechanics, of which we should feel justly proud. The only article which we go abroad for is the iron, and we hope that this is the last road in Missouri, and in fact west of the Mississippi river, that will be compelled to go east of the Mississippi for iron rails; for, when completed to the Iron Mountain, the road will induce capitalists to roll rails in St. Louis, for our roads, as well as for those of our neighbouring States, and to furnish them with a better article, and on more favorable terms, than can be found abroad.

We have long looked for the successful completion of a railroad to the Iron Mountain. The project was brought before our Legislature in the year 1839, and in 1840 a survey was made by the State, being the first survey for a railroad in our borders, and it is believed the first west of the Mississippi river; but, the road proving very expensive, no provision was made to build it, and it was delayed until the year 1863, when the present company organized, commenced their surveys; and soon had the whole line to Pilot Knob under contract.

The President of this road, Madison Miller, and Chief Engineer, Jas. A. Morley, are using their utmost exertions to bring the road to a successful completion, which they hope to be able to accomplish as soon as April next. Then St. Louis will begin to reap a rich harvest for the means she has invested to build it. The inexhaustible mountains of iron ore, the rich lead diggings of Jefferson, Washington and Madison counties, the extensive pineries of Washington, Reynolds and Wayne counties, the copper mines, the quarries of Egyptian granite, marble and sand stone, and the kaolin banks, will all pour their riches into our midst, infusing new life into a city which has already grown to become the metropolis of the valley of the Mississippi.

Besides the wealth the Iron Mountain road will

pour into our city, the country for the entire length of the road offers great inducements to those wishing residences away from the bustle and dust of the city, where pure air and health can be found at all seasons. Along the cliffs of the Mississippi, for a distance of twenty-five miles, are a succession of the loveliest spots for country residences in the West. Many of these command a fine view of the river for miles, and the cliffs and caves will be favorite places of resort for pleasure parties. The region about the Iron Mountain, too, possesses attractions that will invite many to spend the summer there who have an inclination to leave the city during the hot weather. The cool breezes of the Ozark range will be sought after with as much eagerness as are now those of the New England mountains, with the advantage of only three hours', instead of three days' ride, to enjoy them. Summer houses will spring up at many points, offering attractions sufficient to make them places of fashionable resort.

With the marble, the sand-stone, and the granite, we shall be able to give a more elegant and substantial appearance to our future public buildings; and owing to the cheapness with which iron can be furnished, we will be able to adopt the approved iron pavement on our principal streets, and macadamize the others with a crust of iron ore—thus ridding ourselves forever of the disagreeable lime-dust in which we now live.

All speed, then, to the completion of the St. Louis and Iron Mountain railroad; and we look for a ride on its cars to the Pilot Knob next Monday.—*St. Louis Republican.*

Pittsburg, Steubenville and Middle Ohio.

By the steamboat route, the distance from Pittsburg to Steubenville is 76 miles. By direct (unfinished) railroad route, the distance is forty-two miles, but very little over one-half the distance by the river route. From Steubenville west to Newark, 116 miles, the Steubenville and Indiana railroad is completed and in use; at Newark it connects with the Ohio Central railroad which extends west to Columbus, and there connects with other roads diverging into Central and Southern Ohio, Indiana and Illinois.

By the completion of the so-called circumbendibus road from Rochester, 25 miles from Pittsburg, on the Pittsburg and Chicago railroad, near the extreme north angle of the Ohio river, to Steubenville, 46 miles from Rochester, and 71 miles from Pittsburg, there has been opened a direct and unbroken communication from Pittsburg to Steubenville, Columbus, Indianapolis and various important places between Cincinnati and St. Louis.

Over the Steubenville route, by co-operation among companies owning lines converging at Cincinnati, passengers and freight may be passed east to Pittsburg; whereas, heretofore, passengers and freight once in the trains north of Columbus upon the road to Cleveland, were generally attracted past Crestline and so carried on to the east over the Lake Shore route.

And if the Steubenville and Indiana railroad shall pass to the Pennsylvania railroad at Pittsburg as many persons and tons as the Ohio Central railroad carries to the Baltimore and Ohio railroad at Wheeling, its importance as a "connection," to the Pennsylvania railroad will be at once established.

The change of programme into which the Steubenville and Indiana railroad company was forced by the temporary prostration of the Pittsburg and Steubenville railroad company, by their own financial difficulties, and by the change of gauge in a road west from Columbus, makes it expedient for them to change the gauge of their own track from 4 feet 8½ inches to 4 feet 10 inches, to conform with the track of the Central Ohio road at Newark, and with the circumbendibus track at Steubenville. This change of gauge and matters incident to it will occupy some time, so that the effect of the opening of the circumbendibus link from Rochester to Steubenville may not be immediately perceptible in very positive extent.

That the Steubenville and Indiana road will soon demonstrate its advantage and its ultimate very great advantage to the Pennsylvania railroad, can hardly be questioned. And as the Pittsburg and Steubenville direct road is now again in vigorous progress of construction, it may not be long before passengers arriving at Steubenville from points west, will be borne across the Ohio river, by bridge or ferry, and passed on east direct to Pittsburg.

When this shall be accomplished, the distance from Pittsburg to Columbus via Steubenville, will be 191 miles, against 247 miles via Crestline, showing a difference in favor of the Steubenville route to Columbus and points south and south-west thereof, of 56 miles, as compared with the Crestline route. This advantage in distance, with the combinations which may be formed with other roads to mutual benefit and profit, at and beyond Columbus, will make the Steubenville route the preferred route to Pittsburg, from a number of important trade points.—*Pennsylvania Railroad and Mining Register.*

A Commercial Experiment—Direct Trade Between Great Britain and the Far West of America.

From the European Times, Sept. 27.

A great and original experiment has been successfully realized during the last few days, which cannot fail to have a considerable influence in the expansion of the trade between Great Britain and the Far West of America—an experiment we do not hesitate to say, only inferior to the introduction of steam as a connecting link between Europe and the New World. The experiment will save, hereafter, the transshipment of grain sown in the immense districts abutting on the great American Lakes; by which there will be not only a large saving of expense, but, what is hardly of less importance, the article will be brought to the British market in a much higher state of perfection than it has hitherto been.

The Dean Richmond, a rakish schooner, of 280 tons register, is now in the Liverpool docks; her length is 145 feet, beam 26 feet, depth of hold 12 feet. She draws 9½ feet of water. This clipper schooner has just completed a most successful voyage across the Atlantic, bringing direct from the port of Chicago, on Lake Michigan, in the State of Illinois, without breaking bulk, 400 tons of grain, which she has delivered from the ship's side exactly as she received it. A direct voyage like this, which saves transshipment at Buffalo or New York, must, it is clear, pour into England the produce of the Northwestern States of the Union, by way of the St. Lawrence, at a price which cannot fail to add to the trade and wealth of both countries.

The rapid rise of Chicago, the port of departure of the Dean Richmond, is a significant proof of the teeming agricultural resources of that portion of the United States. In 1832 it contained only 250 inhabitants; it now contains 104,000. The shipments of grain from this place last year alone amounted to two million and a fourth of quarters—the largest which has ever been despatched from a single port in any part of the world; while the exports of pork were 77,000 barrels, and of beef 56,000 barrels. The canals will not at present admit of the passage of larger vessels, but even as regards this feature the future is hopeful; for a moderate expenditure of capital would admit vessels of three times the tonnage of the Dean Richmond, and with the inducements thus offered there cannot be a doubt that the improvement will be made.

In point of time and cheapness this new route thus brought into play, will compete very successfully with the New York or the Black Sea routes, by both of which large quantities of grain and flour reach this country. The Dean Richmond, we are informed by her owner, has made the entire passage in sixty days, which includes 2,500 miles of inland waters; but she had a detention of twelve days in the St. Lawrence, which is not likely to occur again. The canal and ship dues are most moderate; while there are no port, light

or pilotage dues on the inland seas of America.—

The number of hands through which the goods pass in the interior transit to New York, for transshipment across the Atlantic, adds largely to the cost of freight and commission, and to the manifest deterioration of the goods—items of expenditure which will be avoided by the direct course which the Dean Richmond has traversed. The great commercial results which cannot fail to flow from this novel experiment have made the Dean Richmond an object of considerable interest in the port of Liverpool; but the time is not distant when this novelty will cease; for the class of vessels which will rush into the trade are exactly those which can be cheaply and readily supplied.

Albemarle and Chesapeake Canal.

This important improvement, which, as its name indicates, is intended to unite the waters of Chesapeake Bay with those of North Carolina, embracing Albemarle, Currituck and Pamlico Sounds and their tributary streams, is now in process of construction by the "Albemarle and Chesapeake Canal Company," under the charters recently granted by the States of Virginia and North Carolina.

Few of our citizens are aware of the importance of this improvement to the commerce of Baltimore. It opens up to us the most valuable portion of the old North State—brings us in close and regular connection with her principal towns—Newbern, Washington, Kinston, Elizabeth City, Hertford, Edenton, Columbia, Plymouth, Jamestown, Williamston, Hamilton, Halifax, Winton, Windsor, Murfreesboro', Gatesville, &c., &c., and will enable us to compete successfully with New York and Philadelphia for the trade of that portion of Tennessee and North Carolina, which will find its way to market by the Central and Atlantic Railroads, now nearly completed to Newbern.

The region which may be reached by our shipping, embraces about 12,500 square miles of territory; being larger than either the States of Maryland, New Jersey, Massachusetts, Connecticut, New Hampshire or Vermont, and larger than the combined area of Connecticut and Massachusetts, or of New Jersey and Delaware. Its waters afford 1,800 miles of navigation.

By reference to the map, it will be seen that the waters of Eastern North Carolina are shut in from the ocean by a long, narrow strip of land. For nearly 200 miles on the coast, Ocracoke Inlet is the only opening to the ocean, and as it has but six feet of water on the bar, at high tide, its navigation is very uncertain, dangerous and expensive, and also—with reference to the Albemarle trade, very indirect.

Ocracoke being situated to the Southward of Cape Hatteras, all vessels bound North, from this Inlet, are subjected to the perils of the most dangerous promontory on the coast of America. Those from the Albemarle have to perform a voyage of 180 miles to get on the same parallel. There is no place for refuge of vessels between Ocracoke and the Capes of Virginia, a distance of 200 miles—they have to pass through a difficult and narrow channel, and to encounter the dangers of Cape Hatteras, where, probably, there are more shipwrecks than upon any other point of the American coast.

For this dangerous, expensive and indirect route, the Albemarle and Chesapeake Canal will offer a safe, cheap and direct substitute.

The number of vessels passing over Ocracoke Bar in 1855, was 4,383; having a capacity of 657,875 tons, carrying products valued at \$3,650,000.

The only other outlet for the trade of this region is the Dismal Swamp Canal, which was not originally intended as a channel for the trade of North Carolina, but merely for the purpose of obtaining lumber out of the Dismal Swamp. It is entirely insufficient for the wants of the trade, with many locks, and vessels of more than seventeen feet beam cannot pass through them. Notwithstanding these difficulties, the value of the exports through the canal in 1854 was \$3,674,000. The navigation of the canal and rivers connected there-

with are so difficult that vessels are from three to ten days from Elizabeth City to Norfolk, a distance of fifty miles.

The Albemarle and Chesapeake Canal, now in progress of construction, commences near Great Bridge, on the southern branch of the Elizabeth river, ten miles above Norfolk, a cut of eight and a half miles unites the North Landing river, which empties into Currituck Sound. This canal which will be known as the "Chesapeake" has the only lock on the work, it will be built of granite, forty feet wide and two hundred and twenty feet long, and the foundation placed so as to afford eight feet navigation at low rates.

The "Albemarle Canal" unites Currituck Sound with North river, which empties into Albemarle Sound. It is only five and a half miles in length, and is without locks.

The entire work is now under contract to responsible parties, and is expected to be completed in less than eighteen months.

Seven steam dredges, like those employed on the Patapsco, are now at work, and three others of greater power and capacity are in course of construction, about three miles of the canal has been made, and it is confidently believed the whole work will be so far completed by the spring of 1858, as to be navigated by vessels of three hundred tons capacity.

Marshall Parks, Esq., the President of the Company, to whom we are indebted for most of the above particulars, is now sojourning in our city, at the Gilmer House.

Those of our citizens who feel an interest in the navigation, and desire further information are requested to call on him.—*Balt. Patriot.*

Measurement of the Speed of a Railway Train, by Means of Electro-Magnetism.

By Wm. C. McRea, Tel. Eng.

The wheels of a car rotate a certain number of times in going over a given space of road; for example, suppose a car-wheel to be eight feet in circumference, it will rotate 660 times in going the distance of a mile. Now, if the car were so constructed that the body would always remain at an equal distance from the axle, which is prevented by the motion given it by the springs, it would not be difficult to bring the wheel at each revolution to bear upon a lever, as to rotate a wheel inside the car, which might have as many cogs as the car-wheel rotates times, in going a mile. Or, by a series of clock-work wheels, the indicating wheel might contain a fractional number of cogs in proportion to the number of times which the car-wheel would rotate in a given distance.

The difficulty occasioned by the unsteady motion of the car, owing to the springs, may be overcome by the use of a magnet, battery, and galvanic circuit. The latter to be so arranged as to be broken at each revolution of the car-wheel or axle. So by this means the operation of the magnetic contrivance would be to move the speed-indicator the distance of one cog.

A contrivance of this kind may be so constructed as not to require winding, in order to have it in readiness for use.

The indicator may be so constructed as to have an index placed over it in such a position that the hand on the indicator should move it a sufficient distance to show at each successive rotation, the number of miles already traveled.

The kind of battery most suitable for such a contrivance, would be that of the "sand battery," which, if properly constructed, may be made to act, with as much certainty as any other, and at far less expense. This battery should be constructed with sand of such quality as is used by the manufacturers of glass, that is, free from dirt of any kind. The battery cup may be that of the ordinary kind, as used in Grover's battery, or it larger glass or porcelain jars can be obtained, they would doubtless be better, affording an opportunity for the use of larger plates of zinc and copper; these should be placed about an inch apart, and the sand packed tightly around them. The zinc should be amalgamated, and the copper rubbed

with a piece of emery paper, before placing in the cup; the sand should then be well moistened with sulphuric acid, diluted in the usual proportion for battery purposes. Intensity may of course be increased by increase of acid. A battery of this kind would stand for some weeks, only requiring the addition of a little acid each day, according as the strength of that first put in, became exhausted. A series of cups of this kind could be carried on board of a train, without the difficulties which would arise from that of almost any other battery.

Railroads in the East.

Among the numerous schemes, good, bad, and indifferent, which have sprung into existence since the European peace, is one called the "Euphrates Valley Route to India." The traveller is to proceed from London to Trieste, and there embark on board the steamship which will land him at Selencia on the Mediterranean. From that point he will be taken by railway, yet to be constructed, through the Euphrates Valley to Bussorah, which is at the head of the Persian Gulf. He again takes the steamer, sails through the Persian Gulf, coasts the shore of Beloochistan, and puts his foot on East Indian soil at Kurrachee. From Kurrachee a railroad is to run up to Hyderabad on the Indus; having reached that city, the traveller may steam along the Indus to Mooltar, and then his railway carriage for Lahore and Peshawar; and as a net work of railways is now being spread over Hindostan, all other points will be accessible from the port of Kurrachee. By the route described, India would be reached from London in less than fifteen days, or in about half the time now occupied, according to the following time table

	Days	Hours.
London to Trieste by rail, and from		
thence by steamer to Selencia	8	6
Selencia to Ja'ber Castle by railway	0	3
Ja'ber Castle to Bussorah by steamer	3	8
Bussorah to Kurrachee by steamer	3	0
	14	12

So much for the Euphrates Valley Route to India. We must now offer some remarks on the extension of British trade in these regions, for the passenger traffic alone would not pay. The railway being carried from the right bank of the Euphrates opposite Ja'ber Castle to Phumal, the ancient Thapsacus, will cross into Mesopotamia, and be carried by Anah and Hit to the environs of Bagdad; and thence by Babylon and Hillah to the confluence of the Euphrates and Tigris at Kurnah, where there is sufficient depth of water for the largest steamers. The first link in this chain is Selencia, the last being Bussorah, easily traced on the map. Selencia is capable of being made a perfectly safe and commodious harbor; from Selencia the distance to Antioch is eighteen miles in the valley of the Orontes, while Aleppo is forty-two miles from Antioch with a population of 90,000 souls. The Euphrates gives a water communication with Syria, Asia Minor, and Asia Major (their central parts) and with the south of Persia and Kurdistan. Our trade would be readily carried to Bagdad, which was the centre of a considerable caravan commerce, easily to be recovered. It has been commuted at 2,000 mule loads, annually, of pearls, silk, cotton, stuffs, shawls, coffee, gall-nuts, indigo, &c. Within this area or industrial group, are included the busy towns of Mosul, Diarbekir, Orfa, &c. Now, it is only fair to conclude that when the activity of the European element is brought into contact with these districts, it will impart its energy to Oriental torpor quickly roused, as it is known to be, by the allurements of avarice and gain.

The next point relates to the navigability of the Euphrates. King William the Fourth fitted out the well known expedition under General Chesney to solve this problem, and it is now ascertained that below Ja'ber Castle, which will join Selencia by railroad, the navigation of the river is perfectly open for steamers of light draught and the boats of the country, for 715 miles to Bussorah, at the

head of the Persian Gulf. Mr. Laird, of Birkenhead, has undertaken to furnish steamers to navigate the Euphrates, capable of carrying a large number of passengers and a heavy weight of merchandise, at a speed of twelve knots an hour when loaded, and with a draft of two feet. The Euphrates Valley route and other great thoroughfares now contemplated, will bring the East and the West more approximately into contact, and so far as commercial geography is concerned, make India, China, and the regions of Central Asia, almost a portion of the European Continent. This is an age of international competition. France and Austria have both submitted to the Sublime Porte projects for opening a communication between Europe and Central Asia, by Turkey in Europe and Turkey in Asia, and we are bound in self defence, to strain every nerve in the protection of our own interests. The overland route to India across Egypt is not sufficient in our days.—The importance of the Euphrates, as a second and more expeditious route to our Indian possessions, is daily forcing itself upon the public mind; and as the whole of Northern India and Central Asia, from the banks of the Orus to the gates of the Delhi, will shortly have an outlet to the sea by the Scinde Railway from Kurrachee to Hyderabad, and along the valley of the Indus, such a route would seem to be imperative.

Milwaukee and Horicon Railroad.

The Milwaukee and Horicon Railroad Company offer for sale, in New York City, four hundred and twenty thousand dollars of their First Mortgage Bonds, being ten thousand dollars per mile upon the forty-two miles of their road lying between Horicon and Berlin. These bonds ought to command a ready sale at fair prices, as they are secured upon one of the most promising roads in Wisconsin. A glance at the map will show that the route of the Milwaukee and Horicon Railroad to Berlin and Stevens' Point, traverses a very fertile and inviting region of our State, which is rapidly growing in wealth and population; that it is remote from competition, and that at Berlin it taps the business of the upper Fox, and at Stevens' Point that of Wisconsin River. Fifteen miles of the road, from Horicon to Waupun, have been open for business since February last, and the result has exceeded all expectation. The next fifteen miles from Waupun to Ripon, is nearly graded, and the Company will commence laying down the track within the next ten days. The iron for the whole distance has been purchased, and nearly all of it is now on the Company's wharf, in the city, the rest being on its way hither from New York. The company confidently expect to have their cars running to Ripon early in October. They have purchased and will shortly receive another first-class locomotive, and are making arrangements for such additions to their already large equipments, as the demands of the Fall business may require. The grain fields in the vicinity of Ripon, are thought to be, in extent and productiveness, unrivalled in the United States, and all the surplus produce of these teeming farms must seek the Lake by the Milwaukee and Horicon Railroad. The portion of the road from Ripon to Berlin, twelve miles, is expected to be put in operation early next year.

The prospect of the extension of the road from Berlin to Stevens' Point, a distance of about fifty miles, is a very favorable one. There has already been subscribed on that division of the road about \$200,000 to the capital stock of the company, and this amount, it is not doubted, will be increased to \$500,000; making a stock basin of one half the cost of that portion of the road. These subscriptions are from farmers and business men residing along the line of the road, who take the liveliest interest in its success and will spare no efforts to push the work along. Nearly the entire capital stock of the Company is owned by the same class of men, giving it a strong upon hold the patronage and good will of the home public and enlisting State pride, as well as self-interest, in its support. When completed to Stevens' Point on the Wisconsin River, it must become one of the most im-

portant tributaries to the business of this city, as well as one of the principal thoroughfares and most productive enterprises in our State. It is for these reasons that we think the bonds of the Company offered for sale in New York, a safe and tempting investment for Eastern capitalists.—*Milwaukee Sentinel*.

Lebanon Valley Railroad.

The line of this road between Reading and Lebanon is almost entirely graded for the laying of the track. The iron necessary for laying the whole track, 6,000 tons, having been contracted for, 1,000 tons of which has already been delivered, ready for laying down. It is the intention of the Board of Directors to commence the laying of the track at Reading and Lebanon at the same time. This plan has been adopted, so that the iron necessary for the laying of the track between Lebanon and Womelsdorf, may be delivered at Lebanon by the western Division of the Union Canal before the close of navigation, by which a large saving may be effected in freight, and for to insure the earliest completion of the road from Reading to Lebanon. The whole amount of expenditures upon the road up to the first of the present month, including payments for land damages, purchase of real estate, &c., is \$1,828,338.71.

The whole amount of stock subscribed to the first of the present month is—

From individual subscription.....	\$340,025
" Philadelphia & R. R. Co.....	300,000
" City of Reading.....	200,000
" Borough of Lebanon.....	50,000

Total\$890,025

The whole of which has been paid into the Treasury, except a very small amount, not exceeding \$4,000, distributed among a number of individual subscribers. The bonds issued by the Lebanon Valley company, have been disposed of by the agent, and part thereof drawn for the use of the Board. The proceeds of this loan and the subscription list will amount in the aggregate to about \$2,238,000; deduct from this \$195,000, Reading city and Lebanon borough bonds, not yet disposed of, makes the aggregate means \$2,043,000; these figures will show a deficiency of about \$489,500, when compared with the estimated cost of the road. The Board, however, anticipate an additional subscription, with the proceeds of the Reading and Lebanon bonds, would supply the greater part of the deficiency.

Direct Route Between the Canadas and England.

The Hon. John Young has been writing in the London Times in reference to the direct communication between the Canadas and England, by way of the St. Lawrence, from which we make the following extract:

I shall now show that, with vessels of equal speed to those running to New York and Boston, the mails between Britain and any part of the United States can be delivered in less time by the St. Lawrence during navigation, and in winter by the way of Portland.

A careful examination of the matter will demonstrate that in order to secure the most rapid delivery of the mails between any part of America and Great Britain, the voyage of the Atlantic steamer should terminate at that point the least distant from Great Britain, and which also shall be in connection by railroad and other parts of the interior.

The distance from Liverpool to New York—I obtained my figures from Mr. Wyld of Charing-cross—is computed to be 2,980 geographical miles; from Liverpool to Quebec, 2,502 miles, via the Straits of Belle Isle. If, therefore, the Persia or any other vessel makes the voyage to New York in ten, it follows that the same vessel would have run to Quebec in eight days and ten hours; and, as the distance from Quebec to New York by railroad is 570 miles, or nineteen hours at the rate

of thirty miles an hour, it is evident that the mails by the steamer to Quebec would be in New York nineteen hours earlier than if the Persia or other steamer had gone direct from Liverpool to New York.

Boston, the nearest eastern American port to Great Britain, under the present mail contract, is 2,770 miles from Liverpool. Suppose such a vessel as the Persia, able to make the voyage in 9½ days, Quebec could by the same vessel be reached in eight days and fourteen hours, and with 14½ hours to pass over 430 miles of railway from Quebec, it is clear that the mails, even to this point, could be delivered in 8½ hours less time than by steamer direct from Liverpool to Boston.

New Orleans is 2,280 English miles distant by rail from New York, via Charleston, or three days and four hours, or thirteen days and four hours from Liverpool. Quebec, via Toledo and Cairo, is distant 2,222 miles by rail from New Orleans, or three days and two hours, which, added to the time of the ocean voyage to Quebec, make eleven days and twelve hours, or a saving in time of transport of mails from Liverpool to New Orleans of forty hours. Take one more instance to the West; New York is distant by rail to Detroit (across the Niagara) 785 miles. Quebec is distant from Detroit 752 miles. The ocean voyage to Quebec being eight days and ten hours, and to New York, ten days, the saving in time would be thirty-seven hours via Quebec. This difference will be greater when the railroad which is now in course of construction to Trois Pistoles will be finished—a distance below Quebec of 150 miles.

Milwaukee and Horicon Railroad Extension—A Well Managed Railway.

The Milwaukee and Horicon railroad is opened to Brandon, eight miles beyond Waupun, on its way toward Berlin and Stevens' Point. This makes twenty-three miles now in operation, and brings the road within eight miles of Ripon, to which important point it will be opened the 1st of November. The amount of business pressing toward this market by the Horicon railroad is already large.

This road traverses the very garden of Wisconsin, for we do not believe that there is a better country in the United States than between Horicon and Berlin, on the Fox river. Its productive capacity is marvelous, while it is remarkably healthy, and already well settled with an excellent population. A road traversing such a garden must be liberally sustained. Its present business is large and increasing. In the course of a single day the road sends to Milwaukee 10,000 bushels of wheat, beside other freight. The up freights are also large, because the country embraces many thriving villages, and a population uncommonly independent in their circumstances.

The Horicon railroad has also cost less per mile than any road in Wisconsin. This is a great consideration in its favor. Its projectors have made no noise, but have steadily carried forward a most important enterprise, alike useful to city and country. They speak only by their acts.

The President, John B. Smith, is well known as one of our most thorough and honorable business men, and the directors and officers are men of the right stamp to cordially co-operate with him in the fair management of the road.—*Milwaukee Daily Wisconsin*, Oct. 7.

Lewisburg, Centre and Spruce Creek Railroad.

The friends of this railroad met at Centre Hall on the 2d inst., for the purpose of organizing the company. Hon. Eli Slifer was chosen President, and Joseph Paxton, Geo. F. Miller, John Walls, Jas. Young and M. Halpenny, of Union county, Dr. S. Strohecker, Wm. Burchfield, Wm. C. Duncan, Peter Wilson and John Hoffer, of Centre county, Geo. W. Johnston and John McWilliams, of Huntingdon county, Directors.

A meeting of the Directors will be held at Hazleton, Union county, on Friday next, 12th inst.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,588,100	2,078,700	6,019,929	470,647	110,247	6	78	Brunswick and Florida, Ga.	30	800,000	800,000	550,000	In progr.	.....	.....	.....	.....
Androscoog & Kennebec.....	56	589,042	1,022,906	2,210,947	209,475	110,247	10	10	South Western.....	92	1,097,496	465,500	1,824,920	253,306	141,168	8	.....	.....
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,600	.....	.....	.....	.....	Tennessee and Alabama.....	30	246,486	.....	679,906	In progr.	.....	.....	.....	.....
Portland, Saco & Portland.....	61	1,367,000	110,237	1,486,327	270,214	112,491	6	82	Tennessee and Mississippi.....	170,981	.....	.....	176,940	In progr.	.....	.....	.....	.....
Portland, Saco & Montreal.....	92	1,808,098	1,069,612	2,777,810	233,234	120,884	.....	.....	Memphis and Charleston.....	217	2,179,440	1,127,002	4,028,796	311,631	169,572	.....	.....	.....
Quebec.....	93	2,085,926	890,818	3,170,687	880,221	143,555	2	14	Mobile and Ohio.....	163	2,568,565	1,802,921	4,536,412	189,932	109,286	.....	.....	.....
Quebec.....	35	1,500,000	8,242	1,412,576	335,919	136,454	6	74	Miss. Central.....	188	642,584	.....	628,308	In progr.	.....	.....	.....	.....
Quebec.....	82	2,768,400	none	3,016,638	370,529	138,299	2 1/2	59 1/2	N.O., Opelousas & G.W.....	55	2,930,425	671,645	2,657,565	In progr.	.....	.....	.....	.....
Quebec & Passumpsic Riv.....	61	1,048,145	787,608	1,780,062	162,647	55,173	none	4	Vicksburg, Shreveport & Tex.....	111	1,117,760	.....	107,895	In progr.	.....	.....	.....	.....
Quebec & Burlington.....	120	2,238,376	2,602,396	5,378,428	394,971	.....	.....	.....	East Tennessee and Ga.....	111	1,000,000	1,600,000	2,500,000	In progr.	.....	.....	.....	.....
Vermont Central.....	117	6,000,000	3,550,236	4,683,366	820,119	214,793	none	1 1/2	East Tennessee and Va.....	16	625,425	988,939	1,033,781	In progr.	.....	.....	.....	.....
Boston and Lowell.....	27	1,830,000	326,636	2,188,696	496,764	140,377	6	53	Nash. and Chattanooga.....	161	2,319,330	1,497,081	3,843,694	316,090	112,177	none	.....	.....
Boston and Maine.....	74	4,076,974	150,000	4,170,535	854,426	330,000	6	78 1/2	Covington & Lexington.....	98	1,302,804	2,235,939	3,738,753	264,978	138,894	.....	.....	.....
Boston and N.Y. Central.....	83	2,240,800	1,618,671	3,483,118	69,917	8,740	none	7	Lexington and Frankfort.....	29	430,056	188,099	637,071	93,263	43,685	6	.....	.....
Boston and Providence.....	68	3,160,000	359,132	3,677,154	568,671	219,889	none	63 1/2	Lexington and Danville.....	.....	694,444	62,734	747,178	In progr.	.....	.....	.....	.....
Boston and Worcester.....	68	4,500,000	656,428	4,865,499	1,008,004	404,461	6	83 1/2	Louisville and Frankfort.....	65	698,236	669,061	1,689,696	244,014	96,902	6	.....	.....
Cape Cod.....	47	681,690	280,593	907,252	119,221	65,527	3	40 1/2	Atlantic & Gt. Western.....	254	860,939	77,294	613,231	In progr.	.....	.....	.....	.....
Connecticut River.....	52	1,591,110	728,241	1,802,244	286,563	103,787	5	49 1/2	Bellevue and Ind.....	118	1,881,636	2,025,926	2,852,652	298,298	140,328	none	30	.....
Eastern, Mass.....	60	2,583,400	2,047,737	4,621,016	647,281	305,998	40	78 1/2	Clev. Col. and Cincln.....	141	4,547,020	122,857	4,613,722	1,290,295	732,066	9	100 1/2	.....
Fitchburg.....	80	3,540,000	153,709	3,765,998	681,163	223,071	67 1/2	.....	Cleveland and Toledo.....	200	2,676,426	2,069,301	5,124,629	736,272	396,986	10	75	.....
North Eastern.....	80	800,242	225,585	988,621	In progr.	.....	.....	.....	Clev. and Mahoning.....	103	.....	628,633	In progr.	.....	.....	.....	.....	.....
N. Bedford and Taunton.....	21	500,000	none	533,953	198,491	56,533	6 1/2	.....	Clev. and Pittsburg.....	133	2,780,744	3,043,992	5,637,466	581,877	309,518	56 1/2	.....	.....
N. Bedford and Fall River.....	87	8,015,100	292,650	3,362,949	653,499	296,738	6	63	Cin. Hamilton & Dayton.....	60	2,163,900	1,321,213	2,987,757	608,271	278,012	65	.....	.....
Old Colony and Fall River.....	77	2,232,541	1,033,670	3,209,727	289,726	87,813	none	8 1/2	Cin. Wilm. & Zanesville.....	131	1,120,450	1,181,266	2,826,459	In progr.	.....	.....	.....	.....
Vermont and Mass.....	155	5,150,000	6,968,420	10,495,905	1,869,673	633,013	7	59 1/2	Columbus and Xenia.....	65	1,484,550	149,000	1,481,733	856,365	187,518	10	82	.....
Western, Mass.....	46	1,141,000	206,565	1,351,271	240,780	76,760	2	40 1/2	Dayton, Xen. & Belpre.....	63	437,838	422,658	860,496	In progr.	.....	.....	.....	.....
Worcester and Nashua.....	43	1,610,020	338,461	1,860,666	311,430	138,057	70	.....	Dayton and Michigan.....	140	1,078,602	393,011	1,185,826	In progr.	.....	.....	.....	.....
Providence and Worcester.....	72	2,350,000	938,000	3,318,932	700,012	362,799	10	119	Dayton and Western.....	35	310,000	500,000	733,769	In progr.	.....	.....	.....	.....
Hartford and Providence.....	123	2,008,110	2,030,665	4,060,869	268,685	119,611	none	.....	Eaton and Hamilton.....	42	454,690	904,489	1,156,135	171,929	65,000	20	.....	.....
Hartford, Prov. and Fitchburg.....	110	2,008,000	414,240	2,431,773	339,196	171,427	none	.....	Little Miami.....	65	2,963,921	1,171,786	3,648,172	681,562	336,708	88	.....	.....
Housatonic.....	62	3,031,800	524,244	1,680,728	200,469	93,708	25	.....	Mad River and L. Erie.....	205	2,451,560	2,572,932	4,446,661	In progr.	.....	.....	.....	.....
Housatonic.....	62	3,031,800	524,244	1,680,728	200,469	93,708	25	.....	Central Ohio.....	138	1,520,927	3,485,076	4,283,443	Recently opened.	.....	.....	.....	.....
N. York and N. Haven.....	60	733,258	735,165	1,450,318	88,007	30,318	none	.....	Ohio and Penn.....	187	2,451,700	3,219,000	5,670,700	1,111,626	602,117	9	50	.....
N. Haven and N. London.....	66	609,200	1,073,673	1,684,383	124,044	66,430	none	.....	Pittsburg, Mayfield & Cin.....	50	371,850	81,000	390,933	In progr.	.....	.....	.....	.....
N. London, W. & Palmer.....	66	2,122,300	873,489	2,997,118	804,236	88,465	2 1/2	25	Sandys, Mans. & Newk.....	127	1,350,000	2,204,357	3,552,357	328,958	164,479	none	.....	.....
Norwich and Worcester.....	32	439,005	1,025,098	1,464,095	117,716	9,904	.....	.....	Scioto & Hocking Valley.....	135	403,975	600,000	888,868	In progr.	.....	.....	.....	.....
Albany Northern.....	35	643,330	371,859	974,323	In progr.	.....	.....	.....	Spring Mt. Vernon & P.....	118	1,000,000	950,000	.....	In progr.	.....	.....	.....	.....
Black River and Ulster.....	100	1,487,871	1,501,183	2,819,066	172,476	66,333	none	.....	Tol. Wabash & St. Louis.....	242	2,500,000	4,530,000	.....	In progr.	.....	.....	.....	.....
Buffalo, Conn. and N. Y.....	92	798,439	2,657,849	4,041,868	288,292	31,596	none	.....	Cin. Log. and Chicago.....	255	4,196,679	1,006,125	2,080,433	In progr.	.....	.....	.....	.....
Buffalo and N. Y. City.....	90	1,040,000	1,040,000	2,494,364	679,760	355,763	10	.....	Evansville & Crawfordsv.....	109	706,945	1,177,598	1,844,541	127,400	61,552	.....	.....	.....
Buffalo and St. Line.....	97	434,111	922,393	1,275,796	174,089	69,506	.....	.....	Ind. and Cincinnati.....	88	1,218,723	1,442,859	2,178,461	356,012	193,142	7	60	.....
Canandaigua and Elmira.....	48	1,315,000	2,279,854	3,495,832	135,483	48,649	none	.....	Indiana Central.....	66	611,400	1,261,179	1,907,911	350,170	134,376	45	.....	.....
Canandaigua & Niagara F.R.....	35	687,000	506,680	1,187,562	135,483	48,649	none	.....	Ind. Clev. & Pittsburg.....	83	826,825	1,090,400	1,831,225	228,058	93,010	none	.....	.....
Cayuga & Susquehanna.....	144	3,758,406	9,230,362	12,737,808	1,812,087	603,940	none	28 1/2	Jeffersonville.....	60	1,014,252	604,000	206,544	94,318	none	.....	.....	.....
Hudson River.....	95	1,875,148	668,949	2,555,956	301,793	116,462	none	26	Madison and Indianapolis.....	87	1,647,700	1,336,816	1,205,000	286,146	112,880	.....	.....	.....
Long Island.....	534	24,154,860	14,462,742	25,523,913	6,563,581	3,162,126	8 1/2	.....	New Albany and Salem.....	288	2,635,121	5,281,848	6,643,180	645,827	371,402	none	.....	.....
New York Central.....	464	10,323,958	25,128,660	33,439,431	6,488,993	2,627,115	none	60	Peru and Indianapolis.....	73	.....	558,314	150,000	90,000	none	16 1/2	.....	.....
New York and Erie.....	138	6,717,100	4,069,769	7,588,203	1,035,577	234,126	none	14	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,512	189,702	10	.....	.....
New York and Harlem.....	118	3,933,022	4,406,874	5,470,714	520,153	135,754	none	1	Chicago and Rock Is'd.....	182	3,141,600	2,387,155	5,214,162	In progr.	.....	.....	.....	.....
Northern, N. Y.....	35	399,000	1,216,681	723,683	126,540	50,982	3 1/2	.....	Chicago and St. Louis.....	220	.....	.....	1,077,312	In progr.	.....	.....	.....	.....
Oswego and Syracuse.....	20	407,200	294,189	749,683	241,149	82,600	7	.....	Chicago, Burl. and Quincy.....	58	1,639,100	1,684,736	2,884,622	722,580	379,821	20	.....	.....
Potomac and Watertown.....	25	610,000	140,000	890,423	241,149	82,600	7	.....	Central Military Tract.....	88	1,202,500	2,133,050	2,920,241	471,399	219,688	.....	.....	.....
Rensselaer & Saratoga.....	48	500,000	395,600	719,009	21,089	none	.....	.....	Chic. St. Paul & F'd du Lac.....	178	2,300,000	1,325,000	3,625,000	In progr.	.....	.....	.....	.....
Saratoga and Whitehall.....	80	768,369	1,578,804	2,272,777	159,454	22,503	none	.....	Galena and Chicago.....	269	5,441,500	3,318,039	7,742,614	2,315,786	1,192,402	22	109	.....
Syracuse & Binghamton.....	27	437,330	737,079	1,109,322	156,383	55,184	.....	.....	Illinois Central.....	627	2,271,050	19,416,392	20,374,446	1,632,118	527,952	116 1/2	.....	.....
Troy and Boston.....	97	1,370,375	700,979	2,068,063	404,374	172,474	3 1/2	90	Peoria and Quawwa.....	93	569,889	818,454	1,388,342	In progr.	.....	.....	.....	.....
Watertown and Rome.....	64	1,000,000	1,019,000	2,019,000	161,856	76,534	none	.....	Ohio & Miss. (Wat. Div.).....	147	1,780,295	3,292,403	4,077,584	Recently opened.	.....	.....	.....	.....
Belvidere Delaware.....	94	3,000,000	11,407,200	6,836,523	2,017,127	961,941	12	124	Terre Haute and Alton.....	173	2,281,420	1,256,000	3,537,424	In progr.	.....	.....	.....	.....
Camden and Amboy.....	60	369,320	1,622,131	1,729,642	122,417	50,080	none	.....	Detroit and Milwaukee.....	185	838,000	1,128,964	1,969,999	In progr.	.....	.....	.....	.....
Camden and Atlantic.....	30	8,482,850	690,000	4,310,011	881,514	500,747	10	119	Mich. Central.....	282	6,032,444	6,996,013	10,688,155	2,215,283	879,560	10	91 1/2	.....
New Jersey.....	63	2,000,000	2,206,178	3,683,149	898,728	171,608	.....	.....	Mich. South'n & N. Ind.....	475	9,298,900	6,319,224	11,645,208	2,410,000	816,000	10	86 1/2	.....
New Jersey Central.....	53	1,167,805	375,000	1,636,560	229,341	96,267</												

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1886	97 1/2	97 1/2
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1886	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1888	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1889	85	85
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	78	81
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1885	72 1/2	72 1/2
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1887	87	90
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	82	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July	"	1888	75	75
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1882	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1878	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1887	7	April, October	"	1862-72	65	80
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	65	80
Covington and Lexington	400,000	Do. do.	6	April, October	"	1887	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	63	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1883	7	Jan'y, July	"	1873	80	80
Gaines and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	84	86 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	95
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	80	82
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1887	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1884	8	May, Novemb.	"	1874	85	87
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1889	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconvertible	6	2 May, 2 Nov.	"	1883	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1880	100	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	102
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1887	6	Jan'y, July	N.Y.	1862	95	96
Do. do.	650,000	Do. 2d do. 1888	8	April, October	"	1863	95 1/2	95 1/2
Do. do.	1,250,000	Do. 3d do. 1890	8	June, Decemb.	"	1877	53	59
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-82	100	100
Do. do.	2,325,000	Do. oth. sec. con. till 1888	8	May, Novemb.	"	1864-75	100	100
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	96	96
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	70	70
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1880	6	Jan'y, July	Phila.	1880	96 1/2	97 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	78	82 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Stouvenville and Indiana	1,600,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	79
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	83 1/2
Do. do.	1,123,500	Do. do.	6	Jan'y, July	"	1875	86 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1888	7	10 Jan. 10 July	N.Y.	1870	91 1/2	91 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	105	106
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95	97
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94	95
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	85 1/2	85 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86 1/2	86 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	91	93 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	97	97 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	83	84 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	66	66 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	88 1/2	88 1/2
Do. (Free Land)	3,000,000	Mortgage, 345,000 acres—priv. 7 shar's	7	March, Sept.	"	1860	107	107
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	94	96
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	79	80
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	79	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	87	87 1/2
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	91
Do. Goshen Branch	1,600,000	Do. do.	7	Feb'y, August	"	1868	83	83
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	87 1/2	87 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-60	7	15 June, 15 Dec.	"	1864	100 1/2	100 1/2
Panama, 1st issue	900,000	Convertible till 1886	7	Jan'y, July	"	1866	90	90
Do. 2d do.	1,478,000	Do. till 1885	7	Jan'y, July	"	1866	90	90
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	89	89
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89	89
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	81	82

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 7 per ct. 1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	Divers	80
Do. 5 do. 1858-60	May,	84	85	New Orleans, 6 per ct. ep. R. R. X	Do.	Do.	77
Do. 5 do. 1870-75	August, and	90	92 1/2	N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	Do.	85 1/2
Do. 5 do. 1880	November,	90	91 1/2	Philadelphia, 6 per ct. 1876-93	Jan'y, July	88 1/2	88
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	98	100	Pittsburgh, 6 per ct. coup.	X	Divers	73 1/2
Allegany, 6 per ct. coup.	Jan'y, July	97	98	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	85
Baltimore, 6 per ct. 1879-90	Quarterly	97	98 1/2	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 5 per ct. coup.	X	97	99	Rochester, 6 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99 1/2	100 1/2	St. Louis, 6 per ct. coup.	Long X	Do.	73
Clief Pd, 7 per ct. ep. W. W. 1879 X	Do. do.	100	101 1/2	Do. do. Municipal	X	Do.	80
Cincinnati, 6 per ct. coup.	X	88 1/2	90	Sacramento, 10 p. ep. 1862-74 X	Do.	Do.	74 1/2
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	88 1/2	89 1/2	S. P. de Calco, 7 p. ep. 1865, pay. N. Y. X	May, Novemb.	Do.	80
Do. 7 per ct. coup. 1880 X	Jan'y, July	100	100 1/2	Do. 10 p. ct. ep. 1873 X	Do. do.	Do.	96
Detroit, 7 per ct. ep. W. W. 1873-78 X	Feb'y, August,	100	102 1/2	Do. 10 do. pay. N. Y. X	Jan'y, July	Do.	52 1/2
Elkhart, 6 per ct. ep. Long X	March, Sept.	101 1/2	101 1/2	Do. 8 per ct. pay. N. Y. 1875 X	Do. do.	Do.	54
Jersey City, 6 p. ct. ep. W. W. 1877 X	Jan'y, July	81	85	Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. ep. 1880-88 X	Divers	78	80	Do. 6 p. ct. Mun. 1874 X	March, Sept.	Do.	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68	68	Zanesville, 7 do.	X	April, October	97 1/2

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending October 7, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2nd Mort. 7 per ct.	85
Ohio & Mississippi, 2nd Mort. 7 per ct. (Eastern Division)	80
Indianapolis & Cin., 2nd Mort. 7 per ct.	80
Cin. Ham. and Dayton, 2nd Mort. 7 per ct.	83
Hillaboro' and Cin., 7 per cent. 1st Mortg.	47 1/2
Covington & Lexington, 10 per cent. 1st Income	84
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Do. do. due July 1, 1861	85
Little Miami, Dividend Scrip, issued June, 1886	80

STOCKS.

Bellefontaine and Indiana, 30.—Cin., Ham. and Dayton, 70.
—Col. and Xenia, 55.—Cincinnati and Ohio, 4.—Covington & Lexington, 15.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 50.—Indianapolis and Cincinnati, 64.—Little Miami, 80.—Mad River & Lake Erie, 17.—Marietta and Cincinnati, 14.—Ohio and Mississippi, 6.—Hillaboro' and Cincinnati, 14.—Peru and Indianapolis, 12.—Cincinnati, Wilmington and Zanesville, 12.

By HEWSON & HOLMES.

For the week ending October 8, 1886.

BONDS.	Per ct.
\$500 Cov. & Lex., 6 per cent. Income	40
10,000 Cov. & Lex., 7 per cent. 2d Mortg.	66
2,000 Little Miami, 6 per cent. 1st Mortg.	80
1,000 Indianapolis & Cin., 7 per ct. 2d Mortg.	80
5,000 Hillaboro' & Cin., 7 per cent. 1st Mortg.	45
600 Columb. & Xenia, 7 per cent. Div. 5 year	90
6,000 Ohio and Miss. 7 per cent. 2d Mortgage	50
2,000 Cincinnati 6 per cent. coupon on	88
1,000 Marietta & Cincinnati, 7 per ct. 1st Mortg.	75
285 Coupons Columbus, Piqua and Indiana	6
420 Coupons Ohio & Mississippi	60

STOCKS.

200 Shares Indianapolis & Cincinnati	66
100 " Indianapolis & Cincinnati	68
82 " Indianapolis & Cincinnati	70
500 " Cincinnati and Chicago	8 1/2
100 " " "	8 1/2
630 " Ohio and Mississippi	8
40 " Little Miami	80
20 " Do. do.	80
50 " Marietta & Cincinnati	14
100 " Peru and Indianapolis	11
20 " Covington and Lexington	13
80 " Junction (Ind.)	7 1/2

Marie & Kanz' Money Circular for the European Steamer of the 15th inst.

[TRANSLATED EXTRACT.]

NEW YORK, Tuesday, Oct. 14, 1886.

Our last advices were dated the 6th inst. For the two following days money was in active demand, and this fact, followed by the advices per Niagara, announcing a rise of interest in Paris and in different cities of Germany, caused quite a decided downward movement in the stock market. Business has been chiefly confined to New York Central, Erie, Reading, Michigan Southern, Michigan Central, and Cleveland and Toledo stocks. The different securities of La Crosse and Milwaukee Railroad have been in especial demand, accompanied by a marked advance in consequence of the grant by the State of Wisconsin of 1,200,000 acres of lands as mentioned before. The advices received this morning per Persia from Liverpool, reporting an advance in the rate of Bank of England, have caused a further general decline.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 15th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Oct. 14, 1886.

During the two or three days which succeeded our advices of the 6th inst., a very active demand for money manifested itself in our market, the effect of which was a marked decline upon the majority of our stocks, as is shown by the subjoined table of daily quotations.

Since then, although the demand for money has very much slackened, the market has not recovered. The news brought by the arrivals to the 4th inst. of a contraction of money, and of a rise in the rates of interest in the principal cities of Europe, has had its share of influence in the decline above noticed. This influence is scarcely tempered by the general healthy appearance of the commercial affairs of the country, for it is worthy of remark that outside of the City of New York there is no scarcity of money; and

that in the interior, as well as in the various seaboard cities, as also at New Orleans, money remains easy. Money, after having been in very active demand for two or three days, is less so at the end of the week. Loans on call at 7 per cent. Paper at 8a10 for first class, and 10a12 for less known signatures. Some counterfeits discovered amongst the paper in circulation have produced, for a moment, some caution in transactions.

DE COPPET & CO.

Extract from Foreign Circulars received per the last Steamer.

MESSRS. ROBT. BENSON & CO.

Our Money Market has exhibited great stringency during the past week. The Bank of England resorted to the unusual course of raising, a day prior to the weekly Court Meeting, their minimum rate of discount from 4 to 5 per cent. and a further advance may be looked for, if the drain of specie be not checked. Anticipations are entertained that the Bank of France may have to suspend specie payments. No panic has been created in this market, although there have been considerable fluctuations in our funds, increased by the approach of a very heavy "settling day" happening concurrently with other causes calculated to produce a great demand for money. The sudden advance in the rates of interest in all the money markets of Europe, has given rise to extreme caution on the part of the public, tending further to establish the confidence which is felt in the stability of monetary affairs in this country.

During the week there has been a fall of about $1\frac{1}{2}$ per cent. on Consols; the lowest point being $91\frac{3}{4}$ for money. They have since rallied, and we now quote them at $92\frac{1}{2}$ for money, and $93\frac{3}{4}$ for the November account.

There has been a great disposition manifested to realize American Securities, but very few transactions have resulted. Illinois Central Railroad 7 per cent. Construction Bonds have been sold at 81a81 $\frac{1}{2}$. Freedland Bonds at 92a92 $\frac{1}{2}$; the shares at 12 and 11 premium. A sale of Erie Sinking Fund Bonds is reported at 88, of Pennsylvania 1st Mort. at 89, and 2d Mort. Sterling Bonds at 95.

The following is from the circular of Mr. Sathertwaite:

The various Share markets have been unfavorably influenced by this movement, and the new banking projects are very dull. There has been very little inquiry for American Securities, and although the current quotations for established Bonds, such as Illinois Construction, Erie Third Mortgage and Sinking Fund, are fully 8 per cent. below the last rates from New York, there seems much more disposition to effect sales, and the market is extremely heavy and well supplied. The rapid rise in Illinois Central Shares from 110 to 119 in New York is gratifying to holders, and has caused some disposition to buy them. Sales have been effected at 9 $\frac{1}{2}$, and to some extent at 10, 11 and 12 premium.

The Grosse Tete and Opelousas Railroad.

The work on this road, as far as the Bayou Grosse Tete will soon be completed. Whilst in West Baton Rouge the other day, the hands belonging to the company were unloading several boats of cedar lumber for the cross-ties, for which the road is ready. A large shipment of iron is daily looked for, and the road will be ready to bring to the river the next crop of sugar. Is it not plainly foreshadowed in coming events, that when the lower section of the Great Northern road shall give way; that a branch will be built over the forty or fifty miles intervening between this place and that? The travel will be across the river at this place, thence to Opelousas, and from that to New Orleans. Everything favors it. The lower portion of the Great Northern Railroad is through a swamp, and a quagmire of the lakes, which will require the profits of the whole road to keep in repair; whilst a lateral road, from Amite City or Osyka, running through the rich parishes of West Feliciana and East Baton Rouge, will lead directly to New Orleans, by the Grosse Tete

and Opelousas road; the heavy freight taking the river here, and the passengers and light freight taking the railroad opposite to us, all arriving at the great commercial emporium at the same time. Then, and we look forward to see the day, the great commercial emporium of the "Sugar-bowl State" will be connected as it should, with her Capital.—*Baton Rouge Comet, 2d inst.*

American Railroad Journal.

Saturday, October 18, 1856.

Sale of Railroads.

Notwithstanding the common complaint of "the law's delay," we think it has proceeded with satisfactory despatch in proceedings for the foreclosure of the mortgages on railroads. In all cases where proceedings have been had, there have been several classes of creditors. Now, although any objections placed by the stockholders in way of the rights of the bondholders may be properly complained of, the same cannot be said against the objections of subsequent creditors. Between these, the question to be decided is one of legal rights alone, as second mortgage bondholders cannot like a stockholder be blamed for attempting to save something for themselves. But with all the obstacles interposed, decrees for the sale of a number of roads have been had, and most of them without long and vexatious and expensive law suits. Of these we may name the Maysville and Lexington, the Buffalo and New York City, the Northern New York, and the Syracuse and Binghamton. In fact, in all actions in reference to railroads, the proceedings of our Courts of Justice have been such as to elicit general and deserved approbation. The rights of creditors have been scrupulously and strictly enforced.

New York and Erie Railroad.

At the election of New York and Erie Directors, held on the 15th inst., the following gentlemen were chosen—being, with the exception of Mr. Gelpcke, who takes the place of Mr. C. Moran, now in Europe, the old board: Homer Ramsdell, William E. Dodge, Marshall O. Roberts, John Arnot, D. A. Cushman, Louis Van Hoffman, Richard Lathers, Edwin Brown, Hermann Gelpcke, Samuel Marsh, Cornelius Smith, Daniel Graw, Ambrose S. Murray, William B. Skidmore, Ralph Mead, Dudley S. Gregory, Theodore T. Moran.

The earnings of the road for September were \$630,473.15, against \$547,119.46 last year, and \$527,451 in August. This completes the railroad year and makes an aggregate of \$6,814,364. The details are as follows:—

	1854.	1855.
October	\$539,018	\$598,340
November	486,792	557,587
December	454,971	582,062
	1855.	1856.
January	\$427,829	\$402,988
February	340,751	367,915
March	507,090	460,850
April	506,597	628,070
May	475,127	587,793
June	396,837	479,776
July	372,077	481,551
August	434,779	527,451
September	547,119	630,473

Total.....\$5,488,987 \$6,814,364
Increase for the year.....\$825,377

The running expenses will not exceed \$3,800,000. This will leave \$3,000,000 for interest and

dividends. The interest is \$1,750,000, leaving for sinking fund and dividends, \$1,250,000. The sinking fund is \$420,000, leaving a dividend fund of \$830,000, or over $8\frac{1}{4}$ per cent. on the stock, making, with the Sinking Fund, net earnings of $12\frac{1}{2}$ per cent.

The above presents a very favorable result. We believe the company are steadily improving in the management of the road. Its track and equipment are well kept up. The regular monthly increase of earnings show that at least \$7,000,000 may be expected for 1856-7.

Knoxville and Kentucky Railroad.

We learn from the Knoxville Register, that the citizens of Knoxville have decided, by a vote of nearly six to one, to authorize the issuance of of \$50,000 of the bonds previously voted for the erection of water-works, to aid the speedy construction of the Knoxville and Kentucky railroad. This places the construction of the road entirely beyond contingency. The necessary amount of bona fide stock is secured. The County Court of Knox, have also released the county bonds, by recinding the order of the April term of the Court. The Register says:

"Too much praise cannot be awarded to Mr. Mosse, the untiring Secretary and Treasurer of the company, for the zeal and energy with which he has labored for the success of this enterprise. Upon him devolved almost entirely the duty of raising the requisite amount of stock, and although the prospect was rather forbidding at the outset, he has pressed forward undiscouraged, until success is now within view."

By an advertisement in another part of the JOURNAL, it will be seen that this company have already issued a call for proposals for the grading and masonry of the first division of their road, extending from Knoxville to the base of the Cumberland mountains, a distance of 30 miles. The time for receiving proposals is limited to the 15th of November. There is a large amount of heavy work upon this division, including 1,500 cubic yards of masonry, and nearly 1,500,000 cubic yards of earth and rock excavation, together with a tunnel 1,050 feet in length.

The stock subscriptions, and loans from the State, applicable to the construction of this division, amount to nearly \$800,000. The road passes through a rich and productive country, capable of furnishing contractors with all necessary supplies.

Thirty-three miles more will be let as soon as \$500,000 additional stock is subscribed. This will carry the road to the Kentucky line, and through the richest iron and coal region in the country.

Further information may be obtained by addressing the Chief Engineer, M. B. PRITCHARD, Esq., Knoxville, Tenn.

Syracuse and Binghamton Railroad.

This road has been sold under the foreclosure of the first mortgage, for \$1,330,570.50, the full amount due on the same. The purchasers were Messrs. Uriel A. Murdock, Guillaume Merle, of this city, and Jacob B. Schermerhorn, of Homer. These gentlemen with their associates have organized themselves into a new company, under the laws of the State. We understand that measures are in progress for extending the gauge of the road to Oswego, which will bring it into immediate use for the transportation of coal.

Railroad in Iowa.

Keokuk, Iowa, Oct. 7, 1856.

H. V. Poor, Esq., Editor.

Dear Sir,—Last week two fine locomotives from the Boston Locomotive Works, were placed on the track of the Keokuk, Fort Des Moines and Minnesota Railroad, at the Company's depot ground, fronting the Mississippi river, at the lower end of this city. To-day the President, Chief Engineer, and other gentlemen connected with the road, and a few invited guests, including the editors of our three daily papers, took the first steam-ride up the Des Moines Valley—passing out over a beautiful track for three miles, where the workmen are now busily engaged in laying down the iron lines which are to bind the commercial emporium with the capital of the State. Within two or three years, we hope to see Keokuk connected by railroad with Des Moines City, the new seat of Government of Iowa; distant 152 miles by railroad. The Des Moines Valley is one of the most lovely and fertile valleys in the world—already densely populated, and abounding in all the elements to make a railroad through it profitable. The people are alive to the importance of railway communication with the Mississippi river, and with the great Eastern cities; and you may expect ere long to see a new time-table added to the already long list in the guide books. The growth of the city of Keokuk, is truly remarkable; and Des Moines City is progressing as rapidly as all the workmen it can command can make it grow. This whole country is a wonder to Eastern men, on their first visit; and, like the Falls of Niagara, it grows larger the more it is gazed upon and studied. If the ball of empire is not rolling, the bars of empire are stretching to the West. The West is a myth; it eludes our grasp. But the men of Iowa are pursuing it with energy.

One of these days, you may look out for an invitation to be ridden on a rail all the way to the centre of Iowa. Yours truly, R.

Baltimore and Ohio Railroad.

The Board of Directors of the Baltimore and Ohio railroad held their regular monthly meeting this morning. The first business in order was the reading of the report of the business of the road during the month of September.

The revenue for the month has been as follows:

	Main Stem.	Wash'n Branch.	Total for both roads.
For Passengers..	\$72,140.71	31,539.72	107,680.43
For Freight....	344,050.38	9,788.02	353,838.40
	\$420,191.09	41,327.74	461,518.83

Comparing the earnings of the road during the month of September with those of the corresponding month last year, we have the following results:—

	MAIN STEM.	
	Passengers.	Freight.
September, 1856.....	\$76,140.71	\$344,050.38
Do. 1855.....	61,566.88	279,058.79
Increase.....	\$14,573.83	\$64,991.59
	WASHINGTON BRANCH.	
	Passengers.	Freight.
September, 1856.....	\$31,539.72	\$9,788.02
Do. 1855.....	23,690.19	9,844.75
Increase.....	\$2,849.53	\$443.27

It will be seen by the above comparison that there has been an increase of \$82,858.22 in the gross receipts of the company over the corresponding month of last year. As has been the case for months past, there has been an increase in the re-

ceipts in every department of the road; on freight on the main stem the increase is \$64,991.59, and on passengers \$14,573.83, on freight on the Washington Branch the increase is \$443.27, and \$2,849.53 on passengers. As actions speak louder than words, so do figures speak louder than mere idle calculations. No road in this country is managed with more signal ability than the Baltimore and Ohio, and the steady but rapid ratio in which its earnings are increasing is a sure index that it has already earned for itself the reputation of being the favorite route by which the products of the fertile valleys of the mighty West are to find their way to the Atlantic seaboard.

The month of September ends the fiscal year of the company, and we are enabled to lay before our readers the following comparative table of the earnings of the road during the past two years:

	1855.	1854.
October.....	\$423,436.84	\$369,610.52
November.....	399,119.40	347,677.96
December.....	441,815.61	298,014.16
	1856.	1855.
January.....	\$191,809.81	\$370,211.93
February.....	211,513.76	216,299.49
March.....	405,820.89	370,455.02
April.....	551,811.28	368,202.84
May.....	479,818.25	385,358.14
June.....	438,788.26	371,783.84
July.....	417,971.97	301,909.21
August.....	437,933.92	351,824.20
September.....	461,518.74	378,660.61
	\$4,860,858.23	4,102,838.02
Increase.....	\$768,020.21	

From the above it will be seen that the increase of receipts during the past year over those of the preceding were \$768,020.20. The enthusiast, who, at the commencement of this great pioneer road had foretold such a result, would have been set down as the veriest madmen, and yet we have the figures before us, and know them to be correct.

As the immense trade of the West is only beginning to open itself to Baltimore, what, we would ask, will be the annual result of the operations ten years hence? When the Parkersburg branch shall have been finished, and a complete second track laid on the main stem, with the advantages of the road fully before the people of the West, the trade and travel over it cannot avoid being vastly extended.—*Balt. Patriot.*

Memphis and Charleston Railroad.

The Huntsville Independent of the 6th says, the passenger train on the Memphis and Charleston railroad made its first run west of Tusculumbia.—The train now runs regularly between eight and nine miles towards Memphis, where it meets the stages from Pocahontas. The cars will extend their trips as the track laying progresses at both ends of the gap between Pocahontas and Tusculumbia. We are informed that the cars will be running through from Stevenson to Memphis by the 1st February next.

Ontonagon Railroad.

The Ontonagon Miner states that a company has been formed to construct a railroad from Ontonagon to the State line. Five per cent. has been paid in, and L. B. Nichols, of New York, appointed Chief Engineer. This proposed road is intended to form a part of the line of the great Southern and Northern extension of railways which is to connect Lake Superior with the Gulf of Mexico.

Burlington and Missouri Railroad.

This road is now completed and in operation to Mt. Pleasant, Iowa.

Railroad Earnings.

Annexed is a comparative statement of the tolls collected on the Philadelphia and Columbia Railroad for the month of September, 1855 and 1856, and for the first ten months of the fiscal year of 1855 and 1856:

September, 1856.....	\$84,674.20
September, 1855.....	72,789.44
Increase.....	\$11,884.76
From December 1, 1855, to September 30, 1856.....	\$786,905.05
Same time last year.....	683,698.04

Increase.....\$103,207.01
The receipts of the Milwaukee and Mississippi Railroad are:

For the 1st and 2d days of Oct., 1856..	\$9,785.30
Same days last year.....	5,603.12

Increase.....\$4,182.18
The earnings of the Milwaukee and Mississippi Railroad Company for the first four days of October inst., are.....\$18,952.94
Corresponding days of October last year.....7,141.15

Increase.....\$11,811.79
The receipts of the Norwich and Worcester Railroad Company have not yet been fully made up for September, but will show about \$3,000 increase on last year.

The receipts of the Cincinnati and Indianapolis Railroad Company for September are \$5,000, in advance of the estimate and considering the length of the line and the amount of expenditure, place it in the front rank of Western roads. The figures are:

Passengers.....	\$31,589.06
Freight.....	82,257.69
Mails, &c.....	1,272.08
	\$65,068.83
September, 1855.....	40,259.65

Increase 60 per cent.....\$24,809.18
The following is a statement of receipts on the Pennsylvania railroad, compared with corresponding month last year:

For the month ending Sept. 30.....	\$415,949.98
Same month last year.....	440,182.86

Decrease.....\$24,232.88
From Jan'y 1, 1856, to October 1, 1856.....\$3,631,928.81
Same period last year.....2,995,789.66

Increase.....\$636,139.15
The decrease in the month of September is to be attributed to the continued low stage of water in the Ohio river, and the want of South-western railroad connections. This deficiency will be supplied by the completion of a railroad along the river, from Pittsburgh to Steubenville, in November.

The receipts of the Williamsport and Elmira Railroad for the two weeks ending Oct. 4, 1856, were \$13,602.

A much larger business would have been done, if the quantity of rolling stock possessed by the road had been equal to the amount of business offering.

The Hudson River Railroad receipts were:
September, 1856.....\$146,698.94
Do. 1855.....135,172.47

Increase.....\$11,521.47

The receipts of the Terre Haute and Alton Railroad Company in August were \$73,867 73, and those of September were about \$90,000.

The receipts of the Cleveland and Toledo Railroad Co. in the first week of October amounted to \$26,645
Against September, 1855..... 19,841

Increase.....\$6,804

The earnings of the Macon and Western Railroad for September, 1856, were—

Through.....	\$349 70
Local.....	6,873 27
Mail.....	844 20
Freight.....	24,805 99

Total.....	\$32,873 16
1855.....	36,163 53

Decrease.....\$3,290 37

The earnings of the Michigan Central Railroad for September, 1856, were very large:

Passeng.	Freight.	Mail.	Total.
1856. \$197,471.18	166,448.34	7,992.72	371,912.22
1855. 169,126.16	97,185.57	7,227.03	263,538.76

Incr...\$38,345.00 69,262.77 765.69 108,378.46

The aggregate for the five months of the railroad year is\$1,131,661 40
October, estimated..... 409,000 00

For six months.....	\$1,531,661 40
Working expenses.....	765,830 70

Net earnings.....	\$765,830 70
Interest for six months.....	240,000 00

Profits.....\$525,830 70

The dividend is not yet settled, but it will probably be something over 5 per cent. in cash. There is no prospect of a stock dividend.

The Earnings of the Central Railroad Company of New Jersey for the month of September, 1856, were\$52,738 98
For the same month last year..... 31,595 99

Equal to 67 per cent. increase..\$21,142 94

The receipts of the Madison and Indianapolis Railroad for September were\$25,198 14
September, 1855..... 22,803.44

Increase 14 per cent.....\$2,894 70

The earnings of the Pittsburgh, Fort Wayne & Chicago Railroad for the month of September were as follows:

Freight.....	\$83,360 58
Passengers.....	84,434 40
Mail.....	3,883 54

Total.....	\$171,678 47
Earnings same amount road, September, 1855.....	96,844 41

Increase 78 per cent.....\$74,834 06

Evansville and Crawfordsville.

The annual election of the E. & C. Railroad came off on Monday. The following Directors and officers were elected for the coming year. Two new Directors only were elected, Messrs. Jno. Hopkins and J. H. Garrett.

Directors—W. D. Griswold, Terre Haute; Channcy Rose, do.; G. W. Rathbone, Evansville; M. W. Foster, do.; Jno. Ingle, Jr., do.; Jno. S. Hopkins, do.; S. T. Jeranid, Patoka; W. S. Burtch, Vincennes; Joshua Alsop, Carlisle; J. H. Garrett, do.; G. K. Steel, Rockville; P. E. Hamis, Rockville.

Officers Re-Elected—W. D. Griswold, President; J. E. Marton, Sec'y and Treas., and J. J. Daniels, Superintendent.

Journal of Railroad Law.

SUBSCRIPTIONS TO RAILROAD STOCK.

Many interesting and important questions have arisen under the General Railroad Law as to the rights and duties of subscribers to the capital stock of railroad companies. Some of these have been settled by a number of recent decisions, and by them the following points have been well ascertained.

I. By the provisions of the Law each subscriber to the articles of association is required to affix thereto "his name, place of residence and amount by him subscribed." It has been disputed whether the subscription of a partnership name by one of the partners is a compliance with this act. But now it is fully settled that the subscription of a partnership by one of the firm is sufficient and particularly when the other partners ratify and confirm it and the individual personal subscription of all the members of the firm is unnecessary and superfluous.

II. The remedy of a railroad company against a subscriber in case of non-payment of calls by the forfeiture of his stock does not prevent an action for the instalments due.

III. The payment of ten per cent. upon a subscription is not a condition precedent to the company's right of action for the instalments; but if \$1,000 stock for every mile of the proposed railroad is subscribed and ten per cent. of such subscriptions actually paid in, it is sufficient.

IV. The fourth section of the General Railroad Act forbidding the reception of any subscription unless ten per cent. thereon is paid in money, relates exclusively to new subscriptions after the articles have been filed and the company has assumed an authorized corporate existence.

Among a mass of judicial decisions sustaining these and kindred views we may allude to an exceedingly comprehensive opinion by Mr. Justice Bacon delivered in the following action.

"The Ogdensburgh, Rome & Clayton Railroad against Frost & Spriggs." XXI. Barbour, p. 521.

The subscription of Frost & Spriggs being in their partnership name and made by one of the partners it is insisted was unauthorized by the Railroad Act and is therefore void. It is claimed that the requisition of the statute can only be met by individual personal subscription. If the language is to receive this strict and literal interpretation it is obvious that a subscription can never be made by a female nor by any corporate body however fully authorized in other respects. It is well settled that the word person used in an act includes a corporation.

It is claimed that no action can be sustained to recover instalments of stock for which calls had been duly issued. The only remedy, it is insisted, is that provided by the seventh section of the General Railroad Act consisting of a forfeiture of the stock. Whatever doubt may have existed heretofore on this point I think it is now well settled, that the remedy by forfeiture is only cumulative and does not prevent an action for the instalments when power is given to the company to make calls, and there is a valid subscription to the stock. It is true that both remedies cannot be pursued conveniently, and when the remedy by forfeiture is resorted to, the right of action to recover the instalments is barred but until this remedy is resorted to and the forfeiture enforced, the

right to prosecute for calls is in no respect impaired.

There is no requirement of a specific payment of ten per cent. by each subscriber. If the ten per cent. is paid in, it matters not from whom it was received for the protection of the public and good faith to future subscribers to the stock if those are the objects to be secured, are equally effected by either mode.

The fourth section of the General Railroad Act evidently contemplates and provides for a state of things after the articles have been filed and the company has assumed an authorized corporate existence. They are then allowed, if it be necessary, to fill up their stock to open books of subscription and to receive subscribers thereto, until the whole capital has been secured. It is in connection with this proceeding and at this subsequent stage in the progress of the enterprise that the requirement is made, that every subscriber shall pay the ten per cent. in money and forbidding the reception of any subscription without such payment. No rule either of construction or of supposed public policy requires, that the provision should be extended to the original subscribers to the articles. And the wording of the clause not less than the position of the section compel this interpretation.

The doctrine laid down in the second section of the foregoing opinion is in accordance with a similar ruling in the case of "The Northern Railroad Company against Miller. X. Barbour, p. 260.

The sections of the charter of the Northern Railroad Company authorizing the directors to exact a forfeiture of the stock and previous payments as a penalty for non-payment of instalments does not, before any forfeiture has been declared, impair the remedy of the directors to enforce payment by action. At the Common Law the statute remedy of forfeiture is affirmative and contains no words excluding the Common Law remedy. In such cases the statute is merely cumulative.

The doctrine of the third section of Judge Bacon's opinion is laid down too generally. It can hardly be a just construction of the statute that the articles of a railroad corporation may be filed as soon as subscriptions amounting to \$1,000 for every mile of the proposed road have been made and ten per cent. of the gross amount of such subscriptions paid in. It would be more exact to say that the articles may be filed as soon as subscriptions, whereon ten per cent. has been paid in good faith by the subscribers, have been obtained to the amount of \$1,000 per mile. Any other construction would give place to most palpable frauds.

These questions which may now be considered as finally settled have long been disputed subjects with the profession, and their decision will have a great tendency to secure to railroad corporations their equitable rights.

Norfolk and Petersburg Railroad.

We are gratified to learn, says the Norfolk Herald, that the company have made a contract with a London house, through its agent in Petersburg, Mr. John Dunlop, for 8,500 tons of iron for the road, the first cargo of which is to be delivered in February next. The road being all graded and ready for the rails, the road will then be energetically and rapidly prosecuted to its completion, which, it is confidently believed, will be accomplished in October, 1857.

Australia.

The London *Times* gives the following statement of the remarkable progress of one of the Australian colonies. It shows in a striking manner the attractive power of gold in directing the movements of wealth and population:

Of all British colonies the history of Victoria has been the most marvellous. It has, indeed, been more marvellous than the history of any colony on record. Melbourne, the capital of the province, was founded only twenty years ago, and it is only some half-a-dozen years since it was a wretched outpost at which a few stray ships touched. Yet now the population is more than 50,000, and the trade is something fabulous. There is no region in the world that can give a better account of the period that has intervened between its rise and the present date. The trade of Victoria was in 1854 not less than one hundred times greater than it was only fifteen years before; the population had multiplied itself more than thirty times in the same period. The truth is, that these marvels of progress apply more or less to the whole of our Australian settlements, but Melbourne is the centre of the movement. Last year it exported gold to the value of nearly £12,000,000, and from our Australian correspondence it appears that the exports during the present year are at a still increasing rate, and this gold it is that has created the colony and sustains its prosperity. Compared with itself, the advances of the Australian region cannot be fully appreciated; it is when we bring it into comparison with wealthy and long established colonies, such as those of British North America, that we begin fully to comprehend the difference. We then find that the infant colony is an infant colony is an infant Hercules,—that Victoria alone consumes of our exports more than all our colonies in North America. And it is not merely the necessities of life which it thus absorbs; all the Australian settlements are good customers—indeed, our best customers—in all that relates to the luxuries and the refinements of social existence. The whole of our exports of printed books, for example, in the year 1854, amounted the value of £445,000; of this Australia took more than a third, the United States took less than a third, and the remainder was divided in dribblets among a multitude of countries. That Melbourne took a large share of the exports to Australia may be concluded from the fact that two booksellers in that city subscribed alone for three hundred copies of Mr. Macaulay's last publication.

Baltimore and Ohio Railroad.

The Board of Directors, during the meeting yesterday, declared a semi-annual dividend for the Main Stem of *three per cent.*, payable on the 21st instant, and a semi-annual dividend for the Washington branch of *four and a half per cent.*, payable on the 15th inst., both at the Merchant's Bank.

The deliberations of the meeting were marked by great harmony and good feeling, and a considerable amount of general business was disposed of previous to the adjournment. The only matter of general interest is the following preamble and resolution, which were offered by Mr. J. W. Garrett and unanimously adopted:

Whereas the present and prospective rapid increase in the business and revenues of this company, the prosperous condition of the finances, its assured position in reference to regular semi-annual dividends, and the valuable and important additions and improvements now being established in its western connexions, untiedly present a state of facts realizing long deferred anticipations, which fully justifies and renders expedient and advisable the action proposed—therefore,

Resolved, That it is the policy of this Board to construct all the remainder contemplated of the second track between Baltimore and Piedmont at as early a period as advantageously practicable, and that the committees on construction and on purchases be and they are hereby authorized and directed to effect the necessary arrangements for the requisite material from time to time as the President and the Road Department may advise,

and that said double track be prosecuted as speedily as it can be economically and judiciously constructed.

The Beaver Extension.

The extension of the Cleveland and Pittsburgh railroad from Wellsville to Beaver, where it connects with the Pittsburg, Fort Wayne & Chicago road, is now completed, and an excursion train has passed over the route—the distance being twenty-two and a-half miles. The road will be opened to Steubenville, seventeen and a-half miles further, during the present month, there connecting with the Steubenville and Indiana railroad, and it will be completed to Wheeling and Bellaire in October, where it will connect with the Baltimore & Ohio and Central Ohio railroads. The maximum grade of the entire river line is 13.2 ft. per mile, and minimum radius of curvature 2,865 feet.

Alexandria and Washington Railroad.

The work on the railway connecting Alexandria with the Federal Metropolis, progresses finely.—The depot on St. Asaph street, has been enclosed and covered, and workmen are busily engaged in adjusting the "turn-table" and other machinery necessary for the accommodation of the engines, which will arrive here next week. But a short distance of the space between the Long Bridge and the Alexandria depot yet remains without rail, and the road will soon be in complete order for the trains.—*Alex. Sentinel*.

Delaware, Lackawanna and Western R. R.

This company have just completed a contract between the National Anthracite Coal Company (an enterprising Philadelphia concern near Scranton, Pa.) and the Delaware, Lackawanna and Western Railroad, by which the former will furnish the Railroad with some 500,000 tons of the best coal of that region, delivered in the next two or three years, for the New York market.

Mexican Railroads.

From a reliable source we learn that a plan is now being completed to construct various lines of railroads from this city to different towns in the valley of Mexico. The plan is decidedly practicable, and it has been a wonder to us that railroads have not been built in this valley long ago. The immense amount of travel and freight which is constantly passing over the valley is enough to satisfy any one that rail conveyance would pay well. The first track to be laid down is from here to Tacubaya; afterwards lines will be run on to Contreras, San Agustin and other places. The experiment we are certain cannot fail to be successful.—*Mexican Extraordinary*.

Kennebec and Somerset Railroad.

We learn from the Skowhegan *Clarion* that the rails on that road are already laid as far as Pishon's Ferry. The balance of the iron has arrived, and it is the intention of the Contractors to put on a double gang of track-layers, so that the whole track will be completed within six weeks, if the weather proves favorable.

Louisville and Nashville Railroad.

The new Board of Directors of the L. and N. R. R. met yesterday and re-elected Ex-Gov. John L. Helm President, and Benj. Spaulding, Esq., Vice President of the Company. The election of these ardent and energetic friends of this great enterprise will be gratifying to the stockholders and to the public. Gov. Helm has proved a most efficient officer, and has, by his untiring industry and perseverance, relieved the company from many of the difficulties which have heretofore materially interfered with its progress. The Lebanon branch

owes its approach to completion mainly to the enterprise and assiduous attention of Mr. Spaulding. Under the management of this Board of Directors and its present officers we expect to see the great work go ahead rapidly. We shall take occasion in a few days to suggest some means for pushing the work more rapidly and surely and more economically for the company, the stockholders, and the public than heretofore.—*Louisville Journal*.

Stonington R. R.

Mr. Gilis F. Ward has been re-elected President of the New York, Providence and Boston railroad. The survey of the route to connect this road with the New London road, is now being made.

Harrisburg and Lancaster Railroad.

By the Annual Report of the President and Directors of the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company, just received, we learn that the gross amount of income from the road during the last fiscal year, was \$454,806, being an increase of 110,582 over that of the previous year. The expenses were \$259,946, leaving a profit to the stockholders, after paying the interest on the funded debt and the current expenses of \$151,947 37. After paying the usual dividend of 10 per cent. on the capital stock of the company, there will be a surplus remaining of \$67,781 33, from the year's business.

To Railroad Contractors.**KNOXVILLE & KENTUCKY R. R.**

PROPOSALS will be received at the office of the Company, in Knoxville, Tenn., until Saturday, the 16th day of November, for the Grading and Masonry of the first division, extending from Knoxville to the Base of the Cumberland Mountains, a distance of thirty miles.

This Division covers a large amount of very heavy work. It will include a Tunnel of 1,050 feet in length, 15,000 cubic yards of masonry of all kinds, and nearly 1,600,000 cubic yards of earth and rock excavation.

The Company have good stock subscriptions, and loan from the State of Tennessee, amounting to nearly \$800,000 applicable to the construction of this Division.

The country through which the road passes, is rich and productive, and abundantly able to furnish the necessary supplies to contractors. The work will be divided into sections of about one mile each.

The Company claim the right of reserving the light sections at this time, unless included in the same contract with one or more heavy sections, the object being to secure the completion of the entire work as nearly as practicable at the same time; the right is also reserved, to reject any proposals that are not satisfactory.

Bidders will be required to give security, or satisfactory evidence of their ability, for the due performance of any work that may be awarded them.

Plans, profiles and specifications may be seen and other information obtained at the office of the Chief Engineer in Knoxville.

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M. B. FAICHAUD, Chief Engineer,
Knoxville & Kentucky R. R.**HUDSON RIVER BRIDGE.
Notice to Contractors.**

OFFICE OF THE HUDSON RIVER BRIDGE CO., AT ALBANY, September 25th, 1856.

PLANS and Specifications for the Superstructure of the Bridge to be erected by this Company across the Hudson river, at Albany, will be received by the Directors at any time within sixty days from the date hereof, at their office in the Exchange, in the city of Albany. The plans may be for a Superstructure of either Wood or Iron.

By the terms of the charter, the Bridge is to be constructed with a draw of sufficient width to admit the free passage of the largest vessels navigating the river, and at least two hundred feet in width; or two draws of at least one hundred and fifty feet each.

Information may be obtained at the office of the Company, as to the location of the Bridge; and all the particulars necessary to be understood by those who may wish to submit plans and specifications.

The Plans must be in detail, accompanied with an estimate of the cost of all the items.

The Company reserve the right to reject all the plans, or to adopt portions of any of those which may be submitted.

A Premium of Five Hundred Dollars will be paid for the plan which may be accepted by the Directors, or if portions of different plans be adopted, the premium will be divided in such manner as the Directors may deem proper.

By order of the Board,

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G. L. WILSON, Secretary.

SOUTHERN RAILROAD.



State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. & CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the super-structure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track-laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perches.

Mts cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the **FIRST DAY OF NOVEMBER NEXT**, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track-laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions; this line of 21 miles, the second of 23 miles, the third of 38½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one half in the stock of the company. 3. One-third in cash, payable in the same way, one third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials and the company reserve the right of accepting any or declining all.

Maps profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point.

It extends from Brandon in a line almost directly east eighty-two and a-half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public and has been donated by Congress; and it is, perhaps, not greatly over-estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

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WM. C. SMEDES,
President of the Southern R. R.



LOCOMOTIVE TYRES.

THE attention of Railroad Managers and Superintendents, throughout the United States, is particularly directed to the superior quality of the *genuine Low Moor Tyres*, which are now furnished by direct importation from the manufacturers, through their regularly appointed agents at New York and Boston; and they are, at the same time, cautioned against using the *spurious* article which is often palmed upon purchasers, by parties whose sole object is to obtain a large profit, without giving in return a corresponding good quality. Numerous instances have come to the knowledge of the manufacturers where persons have actually sold tyres stamped "Low Moor," which had only a small portion of Low Moor iron in them; and in some cases the tyres have been made entirely of common iron, with merely the stamp of "Low Moor" forged upon them. Persons wanting the genuine article should be careful to obtain their supplies through the legitimate source.

Short bars cost much less than long bars, and are frequently imported to be welded in America. The objections to tyres made of such bars are as follows:—When two or three bars, made at different times and from different blooms, (possessing, as they must, different degrees of hardness,) are united to form one tyre, it is evident there must be inequality in the wearing of the iron. When two short bars are used to form one tyre, an extra heat becomes necessary, and the four ends must be again heated for welding, which nearly affects each whole bar—often causing it to scale, and in most cases burning the iron. Tyres made in this manner waste much in turning off, and the

most valuable part of the iron—the surface—is thrown away. The risk of breakage is always greatest at the welding parts; hence the *more* we do the more liability to break. Many welders in America totally neglect to use for the *glue* iron of a similar quality to the tyre itself; while at Low Moor, an iron for both glue and tyre is always selected of such quality and hardness as will insure perfect uniformity throughout the whole finished tyre.

At Low Moor, all the iron for tyres is broken into pieces about four inches square, and each piece is carefully examined by an experienced workman, who rejects all such parts as contain the slightest imperfection. All the tyres are there made from one bar, and with only one weld. They are bent to a true circle, and it is a rare occurrence to have them vary from exact measure. In the blocking and welding departments all the men are paid by the day—not by the piece—so that every possible care is taken to insure the very best workmanship.

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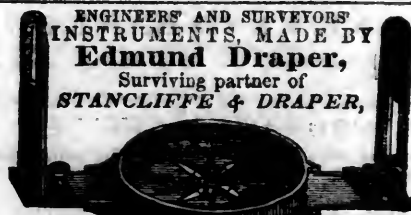
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4. " 14 " 1½ to 1.	17.	" 25 " 1½ to 1
5. " 15 " 1½ to 1.	18.	" 26 " 1½ to 1
6. " 15 " 1 to 1.	19.	" 28 " 1½ to 1
7. " 15 " 1½ to 1.	20.	" 30 " 1 to 1
8. " 15 " 1 to 1.	21.	" 30 " 1½ to 1
9. " 15 " 1 to 1.	22.	" 30 " 1½ to 1
10. " 15 " 1 to 1.	23.	" 32 " 1 to 1
11. " 15 " 1 to 1.	24.	" 32 " 1½ to 1
12. " 15 " 1 to 1.		

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letter or in person, to the undersigned, **GENERAL MAN-
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We are also allowed to refer for general information on the
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XII., No. 43.]

SATURDAY, OCTOBER 25, 1856.

[WHOLE No. 1,071, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, October 25, 1856.

Baltimore and Ohio Railroad.

THIRTIETH ANNUAL REPORT OF THE PRESIDENT AND DIRECTORS TO THE STOCKHOLDERS.

Office of the Baltimore and Ohio Railroad Co., }
1st October, 1856. }

Pursuant to the requirements of the Charter, the President and Directors submit to the stockholders of the Baltimore and Ohio Railroad Company this, their thirtieth annual report.

It is satisfactory to the Board to lay before the stockholders and the public the accompanying documents from the heads of the various departments of the Treasurer, the Masters of Transportation, of Road and of Machinery, detailing the year's work, to which the Board begs to call the particular attention of the stockholders.

1.—OF THE MAIN STEM.

The affairs of the company are shown by the statement A of the Treasurer; and the revenue and expenses are shown by the statement B.

It will be seen by this statement that the gross earnings of the Main Stem have been \$4,385,951.87, being an increase of \$674,498.02 over the previous year.

This increase is particularly gratifying, taking into consideration the unparalleled severity of the past winter, almost suspending operations for nearly two months, and causing great damage to the road and machinery; also the low stage of water in the Ohio river for the last three months, entirely cutting off all supplies of freight and passengers from that source. To all parties interested, this must give confidence in the entire success of the road, and shows that it will accomplish all that

could, at any time, have been predicted by its most sanguine friends.

The expenses of working the Main Stem for the fiscal year, and keeping the road and machinery in repair, have amounted to \$2,384,779.54, being 54½ per cent. upon the gross earnings; and compared with the previous year is 2.49 per cent. less.

In comparing the statement of liabilities and assets of Sept. 30th, with the financial condition of the company, as presented at the corresponding date of 1855, it will be observed that the following payments have been made, viz:

In liquidation of the Loan No. 1, (bonds of 1854).....	\$57,232.90
In liquidation of the loan No. 3, (Iron bonds, due Jan'y 1st, 1856).....	113,333.33
In liquidation of bills payable previously issued maturing within the year.....	476,983.95
In liquidation of debt to Ross Winans.....	84,000.00
In liquidation of loan on call.....	60,000.00

Making.....	\$791,550.18
And that the subjoined sums have been expended during the same period in adding to the capacity and facilities of the company, in the respective items of capital, viz: Cost of road, (chiefly arching tunnels).....	\$265,775.70
Second track.....	133,262.12
Rolling power.....	107,750.94
Real estate.....	37,732.27

Making.....\$544,521.03

And showing a total expenditure of \$1,336,071.21

The highly gratifying fact is thus exhibited, that in addition to the payment from the net earnings of \$170,566.23, of the funded mortgage debt, \$620,983.95, constituting the entire floating debt of the company, except the trifling sum of \$3,500 not yet matured, has been finally liquidated.

In this connexion it is proper to state, that since the 1st October, 1855, not a single promissory note has been given for the use of the company, and that all purchases of materials, machinery and supplies have been made for cash.

During the year, the sum of \$431,000 has been received of the city loan—deducting the deposit for the sinking fund connected therewith, 10 per cent., the receipt has been \$387,900—all of which sum has been used for reimbursement to the company for expenditures on second track and arching tunnels. A remainder, not yet demanded, for advances by the company on these accounts, is in possession of the Commissioners of Finance of the city.

A satisfactory feature of the balance sheet is

the aggregate of the sinking fund, viz: \$489,086.17; under the action of which, a progressively important annual reduction in the debt of the company will be effected.

The loan of one million dollars of bonds of 1854, now liquidated, except \$142,106.41, was contracted for stock in the Washington Branch road. This debt having been paid from the net earnings of the company, it is note-worthy, that the dividends on this investment, now \$1,016,800, which were during the past year \$86,428, and rent received from that company for use of Camden station, &c., \$10,000, will be a portion of its net gain, annually for divisions among its stockholders.

The balance of cash in the treasury, on 30th of September, \$427,655.04, it will be observed, is exclusive of \$149,596.60, deposited previously to that date, for the payment of interest which matures on the 1st October inst., on the city loan and the bonds of the company.

The Treasurer's Exhibit C, presents the profit and loss account; which, after deducting interest and ground rents, paid during the twelve months, discount on the city bonds sold, and tax on passengers paid to the State of Virginia, shows the clear gain for the fiscal year, to be \$1,448,748.70, or upwards of 14 per cent. on the aggregate capital stock.

The net earnings of the Main Stem, deducting all interest, &c., paid, and exclusive of the receipts for dividends and rent from the Washington Branch and increase of the sinking funds, exceeds 12 per cent.

The discount paid on city bonds, sold during the year, has, in accordance with the course for some years pursued by this company, been charged to the surplus fund. The principle thus adopted is different from the established rule among railroad companies. All discounts on bonds, the proceeds of which are expended on objects of capital, being charged by other companies to their construction account.

A semi-annual dividend of 3 per cent. was declared by the Board, and paid on 15th May last. It has been determined to make a similar dividend from the cash on hand, payable on 21st inst.

The profit and loss account exhibits a surplus of \$3,833,071.75; reduced by the dividend proposed, the amount of the undivided profits will then be \$3,529,807.75.

2.—OF THE WASHINGTON BRANCH.

The affairs of the Washington Branch are shown by the Treasurer's statements D, E, and F.

The statements show an improvement in the business. It will be seen that the statement F, that the revenue has amounted to \$444,220.09, being an increase of \$41,585.02, over the preceding year; and the expenses to \$208,276.15, being 46 885-1,000 per cent., leaving net \$235,943.94.

A semi-annual dividend of $4\frac{1}{2}$ per cent. was declared in April last, as shown by the statement F, being the profit and loss account, and the Board has also declared a dividend of $4\frac{1}{2}$ per cent., payable on the 15th of the present month.

The amount paid the State during the year, for her bonus of one-fifth of the receipts from passengers has amounted to the sum of \$78,059.11, being 31 per cent of the net earnings.

GENERAL REMARKS.

It will be observed that the aggregate revenue on the Main Stem and Washington Branch amounts to \$1,830,171.96.

In view of the large and increasing trade, the Board has deemed it wise to maintain all parts of the road and machinery in the best and most effective condition, and has authorized and urged all necessary and judicious expenditures for this purpose. The liberal course thus adopted has resulted in large disbursements, viz: on the Main Stem.

For repairs of locomotives and cars... \$602,206.41
For repairs of railway..... 582,874.28
For repairs of bridges..... 51,951.64

The true economy of these measures has been demonstrated, not merely by the remarkable exemption from casualties on the road, but by the facility and satisfaction with which this immense business has been transacted; and, the Board takes pleasure in stating to the shareholders, as a further result of this system, that from recent inspection of the road and machinery, it is fully justified in saying that both are in excellent condition.

The substitution of iron for wooden bridges is steadily progressing; for details of which reference is requested to the able and lucid report of Mr. Wendel Bollman, Master of Road. The Board also refers with pleasure to his report regarding the progress of the work of arching tunnels and constructing second track.

It is proper to state, that it has been the steadfast purpose of this company, not only to maintain and perpetuate their road and machinery in good order, but to constantly improve all perishable portions, by substituting those of a more durable and costly character, as from time to time might be deemed necessary or expedient. Of this nature are the fine iron bridges over the Moccasin, Patapsco and elsewhere, instead of the original wooden structures which were beginning to decay, and the renewed or rebuilt engines and cars which are supplied with the latest improvements, becoming, therefore, more effective and valuable in many cases than when new.

It may be gratifying to the shareholders and the community to know also, that the whole of these large outlays for improvements and renewals, has been defrayed from the company's earnings, being charged to repairs; and not even the difference in cost, as has been the usage in many other companies, charged to capital or construction account.

The large amount of work in the Kingwood Tunnel perfected, and the near completion, in the most permanent and admirable manner, of that gigantic undertaking, is a source of congratulation. The assurance of the secure condition of the tunnels and bridges on the entire line, is also gratifying.

Under the order of the Board adopted in May last, nine miles of additional second track have been completed, and the graduation and arrangements for the remainder then ordered, (21 miles,) are progressing satisfactorily. The company has now in use, in addition to 59 miles of sidings, 100 miles of second track.

The present condition of the finances of the company, and its largely increasing traffic, confirm the propriety of the rapid construction of the entire line of double track contemplated. It will, therefore, be the policy of the Board to prosecute this important work vigorously.

The valuable report of Mr. W. S. Woodside, Master of Transportation, exhibits the details of his department. The statistics are unusually inter-

esting, and present features that must attract marked attention. The immense increase in the transportation of flour, viz., from 533,320 bbls. on the Main Stem, in 1855, to 810,596 bbls. during the past year, being, exclusive of 23,487 bbls. from the Washington Branch, 109,206 bbls. in excess of the entire inspections in Baltimore in the former year, is a pregnant fact for reflection on the vast power of this road and its immeasurable value to the trade of this city.

The great increase in cattle transported, (the quantity being more than triple that of the preceding year,) the large and profitable development of our westward bound business, which for the past six months has been greater than the aggregate for any former year, the marked augmentation exhibited by the tabular statements in almost every branch of the trade of our city, exceed the expectations of the most sanguine, and the efforts and policy by which results so important and gratifying have been achieved, will doubtless command general approval and cordial appreciation.

Attention is invited to the remarks of the Master of Transportation, in reference to the utility and advantages of the electric telegraph in working the road. The recent construction of a double wire, adds much to its reliability. The company now possesses twenty-seven telegraph stations, equal to one for each fourteen miles of road. So much efficiency, safety and economy in managing the trains, are thus insured, as to cause the opinion to be entertained that a single track with proper sidings on a long line of road, with full telegraphic facilities can be as advantageously worked as a double track without that improvement.

In addition to the improved economy of the management, and heavy increase in the tonnage for the west, filling cars which have heretofore been returned empty, the large net result of the year's work, is attributable to the great natural advantage enjoyed by this road in its supply of coal for fuel on its own line at very low cost. The average rate paid by the company for coal delivered on the road at the most convenient points, has been 80 cents per ton for the past year. Thus, whilst the company has transported at such low rates, as to secure an immense traffic, the great comparative advantage over its Northern rivals, of fuel so cheap, has swelled the net profits to the highly satisfactory amount stated.

For upwards of 200 miles on the line of the Baltimore and Ohio road, inexhaustible supplies of bituminous coal exist, the comparative prospective advantage of which will be more fully appreciated when it is remembered, that on the principal Northern and Eastern lines, the cost of wood, from the large consumption, creating the necessity annually of procuring supplies from greater distances, will gradually increase.

During the year, 466,084 tons of coal exclusive of 75,596 tons consumed in the service, have been transported upon the road. The wise policy pursued by this company in reducing its tariff on coal, in the infancy of the business, uniformly fostering the trade and aiming to develop largely this, one of the most valuable of the resources of our State, has resulted as anticipated.

The bituminous coal of Maryland is now widely known and highly appreciated. Its valuable and superior character for steam and manufacturing purposes, is being daily endorsed by the largest consumers. The demand throughout the year had far exceeded the capacity of the road to transport; and, in the judgment of the Board, the time had arrived when the article would be required in increased quantity, at a rate of freight which would justify greater accommodations for the trade.

Accordingly the Board ordered an additional to the freight of 50 cents per ton, making $1\frac{1}{2}$ cent per ton per mile, to take effect on this date, with a drawback of 25 cents per ton in favor of all coal delivered and consumed in Baltimore. The discrimination has been adopted as a measure of protection and encouragement of the manufacturing and other interests of the city. Combined with this action, the board instructed the purchase of five first-class freight locomotives.

The announcement is made with sincere pleasure, that the apprehension of those who anticipate an immediate diminution in the trade from the advance are entirely dissipated.

As the whole capacity of the road for this traffic is already engaged, with the improved facilities of additional motive power and second track, it is the reasonable expectation of the board that the development of this important trade during the present year, will prove very satisfactory.

The attractions and advantages of the route for passengers are evidently becoming daily better understood and appreciated by the public, as the increased revenue from this source exceeds 10 per cent. compared with the preceding year. Great regularity and safety of the trains characterize this department. With the facility of being the only great line from the West which can ticket passengers and check baggage through, from all points, to the National Metropolis; and with the peculiar advantage of offering to merchants, and travellers for pleasure, the opportunity of visiting Baltimore, Philadelphia and New York, with the privilege of delaying in each city, at the lowest cost at which passage can be procured by any route to the latter cities, its passenger traffic may be expected to increase continuously and largely.

The energy and efficiency throughout the year of the Master of Transportation and his assistants, have commanded the fullest approbation of the Board.

In June last, Mr. Henry Tyson entered upon the duties of Master of Machinery. He has exhibited great vigor and ability in his department; and, by its improved condition, given much satisfaction. His report presenting the important statistics of this department is annexed.

The great value and importance of our connection with the Central Ohio Road, has, during the past season been most thoroughly illustrated. Penetrating at Columbus, the centre of the great net work of railways, extending to the cities of Cincinnati, Louisville, St. Louis, Chicago and the vastly productive regions lying between and beyond these points, this invaluable link has poured continuously a large and increasing trade and travel over the Baltimore and Ohio road, and into the city of Baltimore, of which, without it, both to a large extent would have been deprived. Appreciating the importance of proper arrangements for crossing freight and passengers to and from the Central Ohio road, at the Ohio River, in all stages of water, the master of road has perfected an arrangement and equipment by which all passengers, and one thousand tons of freight per day can be satisfactorily and advantageously transferred.

In July last, the Northwestern Virginia Railroad Company having failed in its applications elsewhere, appealed to this company for further aid to the extent of \$500,000, to enable it to finish its line to Parkersburg at an early day.

After very full investigation and discussion, in view of the large direct interest of this company, and the great importance of the opening of this connexion, the Board felt the duty imperative to grant the requisite assistance. The large earnings of the past year enabled the company without interfering with its established policy of regular dividends and prompt payments, to transfer \$303,012.42 of its cash resources in fulfillment of the decision of the Board. Notes for \$55,000 have been issued for their use, and the remainder will be granted in such form as to produce no inconvenience to this company.

It is reliably stated that the Northwestern Virginia Railroad will be completed and in good working order within three months; and that it has secured an efficient equipment for a large business.

The great strength of position of this road must ensure its success. The Board anticipates from this connection a large accession of business to our road, and a most important contribution to the prosperity of the city of Baltimore.

To the intelligent energy of Mr. L. S. Gordon, general freight agent, and his assistants, the com-

pany is indebted for much of the expansion of its business; and the Board with pleasure makes the acknowledgment.

The most diligent and energetic attention, under the policy approved by the Board, has been given by the transportation committee to the development and augmentation of all business that could be secured for our city; and the broad policy of giving to Baltimore the advantages of her geographical location, in all arrangements for through freight from competing points, has produced an effect in the rapid increase of her business and prosperity altogether unprecedented.

When deemed necessary to promote the trade of the city, and enable our merchants to compete on advantageous terms with rival cities, liberal deductions in the tariff have been made. In the leading staples, coffee, sugar, flour, grain and the like—this course has been pursued with most satisfactory results.

In every feature of policy, affecting the trade of the city, and the interests of the State, the Board has aimed to take enlarged and comprehensive views; and now has the privilege of congratulating the State, the city and the individual shareholders, that it has succeeded in inaugurating an era, when stockholders and tax-payers may anticipate reliably, regular returns from their investments in the road, the removal of burthens so long nobly borne, and may depend upon a rapid progress in, and protection of all the great interests involved.

Under the improved and rigid economy and accountability exacted in all departments of the service, with the continued increase of revenue reasonably expected, the Board announces its conviction, that, combined with the payment of regular dividends, the company will continue to realize a large surplus, so that it can maintain itself firmly without any further municipal or other aid; and, that from its earnings solely, it can constantly progress in perfecting desirable additions and improvements, without incurring further debt.

Whilst, therefore, the magnitude of the trade and the splendid results of this noble enterprise realizing the most sanguine hopes of its founders and friends, will add annually millions to her wealth, progress and prosperity, large sums from the earnings of the company will be directly poured into the treasury of the city of Baltimore, for the reduction of taxation.

Under auspices so favorable, with all the important connected interests finally and successfully harmonized, the Baltimore and Ohio Railroad, the pioneer of American railways, commenced thirty years since, will rapidly achieve, as the Board believes, its mighty destiny—that of the route favored by nature and perfected by art, which will have no superior on this continent.

By order of the Board,

CHAUNCEY BROOKS, *Pres't.*

Rock Island, Alton and St. Louis Railroad.

This road runs, almost on an air line, from Rock Island, through the rich counties of Mercer, Warren, McDonough, Cass, Scott, Morgan, Greene, Jersey and Madison, to Illinoistown, opposite St. Louis. Some months ago, when a committee visited our city for the purpose of interesting our citizens in this work, they were induced to forego their purpose by considerations then presented to them, and now they are here to carry out their object. Mr. P. Coffman of Jacksonville, Mr. L. E. Worcester of White Hall, Geo. Wright and David Pearson of Carrollton, with gentlemen of our own city, will soon call upon our people to see what they are disposed to do. The citizens whom they represent have not been idle or indifferent.—They have subscribed \$447,200 to the stock; and Mr. Cropsey, an Engineer, has been employed, and will put the road under contract in the course of thirty days. At the coming election on the 4th of November, Morgan county is expected to add \$100,000 to her previous subscription, and more can be raised. If our people will only look at the road—see how direct is the communication which it gives us to Rock Island—reflect that it passes

through the best and richest portion of Illinois, with which we ought to have the most intimate business relations—there can be no hesitation about filling up the list with the aid of which they desire. This being done the road will in thirty months be put in good working order.—*St. Louis Republican.*

An Act to Encourage the Construction of Railroads in Texas by Donations of Lands.

SEC. 1. Be it enacted by the Legislature of the State of Texas, that any railroad company chartered by the Legislature of this State, heretofore or hereafter, constructing within the limits of Texas, a section of twenty-five miles or more of railroad, shall be entitled to receive from the State a grant of sixteen sections of land for every mile of road so constructed and put in running order.

SEC. 2. That any railroad company having actually put under contract as much as twenty-five miles of its road or its entire road, when the length may not exceed twenty-five miles, upon filing a certified copy of such contract with the Commissioner of the General Land Office, and upon depositing with the Treasurer of the State a bond with two or more good sureties, to be approved by him in favor of the Governor of the State, in the sum of ten thousand dollars, conditioned as hereinafter required, may file an application with any District Surveyor of any land district in this State, a copy of which application shall in all cases be forwarded to the Commissioner of the General Land Office by the District Surveyor, to survey any quantity of the public domain lying and being in such district, and subject to location and entry, not to exceed eight hundred sections, and said specifications shall specifically describe the lands applied for and intended to be surveyed; and if said company shall produce and file with the District Surveyor a certificate of the Commissioner of the General Land Office, that a copy of its contract has been filed in said office for the construction of twenty-five miles or more of said road; and also a certificate from the Treasurer that a bond as required by this Act, has been deposited in his office, said application shall exempt the land so designated from any future location, entry, or pre-emption privileges, until otherwise directed as hereinafter provided; provided that no other application for a survey of lands under the provisions of this Act, shall be made for more than six months before the completion of such section; and if said section be not completed and notice thereof given as herein provided within six months from the time of application, then such lands applied for shall become subject to location and entry as if no such application had been made.

SEC. 3. That it shall be the duty of said company to cause to be surveyed the land so designated, into sections of six hundred and forty acres each, and in square blocks of not less than six miles, unless prevented by previous surveys or a navigable stream, which surveys shall be delineated upon a map or maps, the even and odd sections being differently colored and regularly numbered from one upwards to the full number contained in the block, and the field notes of said surveys and map or maps, shall be by said company deposited with the Commissioner of the General Land Office.

SEC. 4. That the condition of the bond mentioned in the second section of this Act shall be, that said company will cause to be surveyed the land designated and applied for within the time limited for the construction of said section of twenty-five miles by the contract, in the manner required by the third section of this Act; and shall actually construct the said section of twenty-five miles of said road within the time mentioned in said contract, in default of which said lands shall become forfeit to the use of the State, which forfeiture shall be declared by the District Court of Travis County, at the first term thereafter, without other formality than as hereinafter provided.

SEC. 5. That if at the time stipulated in said contract for the completion of said section of twenty-five miles, the field notes or map or maps of the land applied for, be not deposited in the General Land Office as herein required, it shall be the duty of the Commissioner to forward immediately to the Treasurer of the State and the District Surveyor of the land district where the land applied for is situate, a certificate of the fact, whereupon the land so applied for shall become subject to location and entry by any one, as if no such application had been made; and it shall be the duty of the Treasurer ten days before the session of the District Court of Travis County, to cause notice of such forfeiture to be advertised in one of the newspapers published at Austin for two successive weeks; and at such session of the District Court, it shall be the duty of the Attorney General, or, in case he be not present, of the District Attorney, to file a motion for the forfeiture of said bond, whereupon said Court shall proceed without other citation or notice, to declare said bond absolutely forfeited, and to render judgment against said company and sureties for the amount of said bond, upon which judgment execution shall issue as in ordinary cases; provided, that it shall be necessary for the Attorney General or the District Attorney to file with said motion a certified copy of said bond under the hand and seal of the Treasurer, and also a copy of the contract deposited in the General Land Office, and a certificate of the Commissioner that said surveys and map or maps of the lands applied for have not been returned.

SEC. 6. That any railroad company having completed and put in running order a section of twenty-five miles or more of its road, may give notice of the same to the Governor, whose duty it shall be to appoint some skillful engineer, if there be no State engineer, to examine said section of road, and if upon the report of said engineer, under oath, it shall appear that said road has been constructed in accordance with the provisions of its charter, and the general law of the State in force at the time regulating railroads, thereupon it shall be the duty of the Commissioner of the General Land Office to issue to said company patents for the odd sections surveyed, in pursuance of the second and third sections of this act; but in case said lands or any part thereof shall not have been surveyed at the time said section is completed, then it shall be the duty of said Commissioner to issue to said company certificates of six hundred and forty acres each, equal to sixteen sections per mile of road so completed, whereupon said company may apply to the district surveyor of any land district in this State, to survey any quantity of vacant land subject to location and entry in such district, not to exceed twice the quantity of certificates so issued, which survey shall be made, numbered, and colored as directed in the third section of this act, and upon the return of the filed notes and map or maps of such surveys to the General Land Office, and the certificates so issued, it shall be the duty of the Commissioner to issue to said company patents for the odd sections of said surveys; provided, that in case the said surveys are not applied for before the completion of any section of road, it shall not be necessary to deposit with the Treasurer a bond as required in the second section of this act.

SEC. 7. That fractional sections, containing more than three hundred and twenty acres, shall be regarded as a whole section; and two fractional sections, each containing less than three hundred and twenty acres, shall be taken as a whole section under the provisions of this act; and all the alternate or even sections shall be reserved to the use of the State, until appropriated by law.

SEC. 8. That surveys under the provisions of this act may be made by persons employed by the company, and the field notes may be deposited with the Commissioner of the General Land Office, without being recorded in the office of the District Surveyor; provided, that the State in no case will be liable for surveying any part of said lands nor

shall any company pay for the fee of patenting the odd sections as herein provided.

Sec. 9. That any railroad company in this State acquiring lands or other real estate by virtue of the provisions of this act, or by virtue of the provisions of any other act or charter enacted by the Legislature of the State of Texas, by purchase, ordinations or otherwise, shall proceed to alienate the same, except so far as may be necessary to the maintenance and running of said road, in six, eight, ten, and twelve years; that is, one-fourth shall be alienated in six years, one-fourth in eight years, one-fourth in ten years, and one-fourth in twelve years from the time of acquiring such lands or real estate, in such manner that the whole of such lands or real estate shall pass out of the hands of such company within twelve years from the time of its acquisition; provided, moreover, that said lands and real estate shall in no instance be alienated to any other corporation, except so far as may be necessary for the proper uses and the conduction of the business of such corporation.

Sec. 10. That if any company should neglect or fail to alienate its lands or real estate as herein directed, evidences of which alienation said company shall cause to be filed with the Secretary of State, it shall be the duty of that officer to notify the Comptroller of Public Accounts and Commissioner of the General Land Office of such failure to alienate, whereupon the Commissioner shall furnish the Comptroller with a list of the lands acquired by said company under this or any other act of the Legislature of the State, and the dates at which such lands were acquired; and the Secretary of State shall also furnish the Comptroller with a schedule of the lands owned and alienated by said company, as the same appears from the last annual return made to his office by said company, in pursuance of the general law of the State regulating railroad companies; and it shall be the duty of the Comptroller of Public Accounts, immediately upon receiving said returns to cause to be advertised in the newspapers in the city of Austin for sale, sixty days after such advertisement, the land herein directed to be alienated, proceeding in the order in which said lands and real estate were granted or deeded to said company; and after deducting all necessary expense of the sale, the balance shall be deposited with the Treasurer to the credit of said company.

Sec. 11. That all the alternate or even sections of land surveyed in pursuance of the provision of this Act, or of any other Act of the Legislature of this State, donating lands to any railroad company, shall be reserved to the use of the State, and not liable to location, entries, or pre-emption privileges, until otherwise provided by law.

Sec. 12. That the provisions of the Act shall not extend to any company receiving from the State a grant of more than sixteen sections of land, nor to any company for more than a single track road, with the necessary turn-outs; and any company now entitled by law to receive a grant of eight sections of land per mile for the construction of any railroad, accepting the provisions of this Act, shall not be entitled to receive any grant of land for any branch road; provided, this Act shall not be so construed as to give to any company now entitled by law to receive eight sections of land, more than eight additional sections; provided that no person or company shall receive any donation or benefit under the provisions of this Act, unless they shall construct and complete at least twenty-five miles of the road contemplated by their charter within two years after the passage of this Act; and such donations shall be discontinued in every case where the company or companies shall not construct and complete at least twenty-five miles of the road contemplated by their charter, each year after the construction of the said first mentioned twenty-five miles of road; and further provided, that the proviso herein contained shall not extend to any railroad, the terminus of which is not fixed on the Gulf coast, the bays thereof, or on Buffalo Bayou, and that nothing in this section shall be so construed as to ex-

tend the duration of any existing charters; and further provided, that the certificates for land issued under the provisions of this Act, shall not be located upon any land surveyed or tiled, previous to the passage of this Act; and further provided that this Act shall continue in force for the term of ten years from the time it shall take effect and no longer.

Sec. 13. That no railroad hereafter to be built shall be entitled to receive the additional sections of land herein granted unless the railing of such road shall weigh at least fifty-four pounds to the yard.

Approved January 30th, 1854.

Clearing House for English Railroads.

The annexed interesting account of a Clearing House for Railroads, established in London, in which 73 companies are represented, is from a pamphlet published by Mr. Charles Babbage. It is worthy the attention of our railroad managers:

Soon after the establishment of railways it was found that great inconvenience occurred, both to the public and to the proprietors, from the change of carriages, trucks, &c., at the junctions of different lines belonging to different companies. "While the measures best adapted for obviating these admitted evils were under consideration, it occurred, about the same time, to Mr. Robert Stephenson, and to Mr. K. Morison, the present manager of the railway clearing house, that a central office, constituted on the principle of the city clearing house, would furnish the remedy sought. When the idea was suggested to Mr. Glyn, he saw, at a glance, its practical bearing, lent the whole weight of his great influence to procure its being realized in practice, and was mainly instrumental in accomplishing that object."

It was quite natural that such an idea should have occurred to the minds of men of business; but the complicated conditions necessary to be fulfilled in adapting it to the use of railways, required the undivided and untiring energies of a mind exclusively devoted to the subject. Fortunately, Mr. K. Morison who had the charge of the audit department of the London and Birmingham Railway, and who had also drawn up an outline of the system he proposed, was intrusted with its execution.

On the 2d January, 1842, the system of the railway clearing house came into operation on the railways extending from London to Darlington in one direction, and from Hull to Manchester in another.

At the present time (1856) it unites 73 companies. "The main principles of the system thus widely diffused are first, that passengers shall be booked through at all the principal stations, and conveyed to their destination without change of carriage; that horses and cattle shall likewise be sent through without change of conveyance; and that goods shall, in the same way, be carried through without being either shifted or re-assorted. Secondly, that the companies respectively shall pay a fixed rate per mile for such carriages and wagons, not their own property, as they may use; and a further sum per day by way of fine or demurrage for detention, if kept beyond a prescribed length of time. And, lastly, that no direct settlement shall take place between the companies in respect of any traffic, the accounts of which have passed through the railway clearing house.

"The portion of the clearing system which relates to the settlement of accounts consists of arrangements which are simple in character, and capable of unlimited extension. From each of the clearing house stations there are sent daily to the central office in London: 1. A return of the passengers booked through. 2. A return of the horses, private carriages, and cattle booked through. 3. A return of the parcels booked through. 4. A return of the goods traffic invoiced through. 5. A return of all the carriages, wagons, &c., which have arrived or been dis-

patched, either loaded or empty. 6. Along with these returns are sent all the through tickets collected, and all the parcels' way-bills received during the way.

"From the returns thus transmitted, after they have been examined, compassed and analysed, other returns are drawn up in the railway clearing-house, and forwarded to the respective companies in a form which admits of their being verified by the parties receiving them, and exhibiting in detail the portion of the receipts of the through traffic to which each company is entitled, and the liabilities it has incurred by using the carriages and wagons of others. The final settlement of the accounts is effected by the railway clearing-house paying, or receiving, the balances, as the case may be, through the hands of the bankers who act as agents in London to the several companies. In this way all the transactions of one company with all the other companies, amounting frequently to many thousand pounds per week, are cleared weekly, by the remittance of sums seldom exceeding a few hundred pounds.

"The railway clearing-house is under the control of a committee, composed of a delegate from each railway company which is a party to the clearing arrangements. The committee holds four general meetings in the course of the year, and special meetings as often as there may be occasion. The resolutions of the company are passed in the form of recommendations to the companies to adopt the measures proposed, and have no force until they obtain the confirmation of the respective boards. The expense of maintaining the establishment is divided rateably among the companies, in the ratio of the extent of business transacted for each, after a fixed sum has been first carried to the debit of each company, for each of its stations from which accounts are sent to the clearing-house.

"The great, the crowning achievement of the clearing system is the facility, the economy, and the expedition with which it enables the railway companies to work the through traffic. It had its origin, as has been shown, in the desire of railway companies to promote their own interest, in the only way in which they can be effectually promoted, or placed in a position of permanent security—that is, by consulting public opinion. It has grown with the growth of the railway system—and unless the public accommodation be restricted, and the exigencies of the commercial, manufacturing, and agricultural interests disregarded, it must advance to the limits to which continuous communication by railway extend."

The following statement shows the very large increase of business which has taken place during the last ten years ending June, 1845 and 1855: Number of railroads, sixteen in 1845, seventy-three in 1855; length of joint lines, 6,410 miles in 1845; number of carriages of all kinds, 219,658 in 1845, 987,178 in 1855: number of goods wagons, 180,606 in 1845, 4,101,066 in 1855; amount of accounts cleared, £401,651 in 1845; £4,819,649 11s. 10d. in 1855; number of miles the rolling stock of the companies ran on lines other than their own, 168,544,234 miles in 1855; number of stations sending returns to the railroad clearing-house, 2,439 in 1855.

A brief summary of what the Clearing House accomplished in 1855 will give a tolerable correct idea of the important part it plays in the railway system.

In that year the accounts cleared amounted to nearly five millions (£5,000,000,) or one-third of the gross receipts of the associated companies. This large amount was taken in sums which did not exceed a few shillings on an average, at two thousand five hundred (2,500) stations, on seventy-three (73) railways. The routes of the traffic, a matter of great intricacy, had to be traced.

The returns of traffic forwarded from and received at each of the 2,500 stations had to be examined and corrected. Allowance had to be made for terminal expenses, working expenses, postages and tolls, and the receipt of each kind of traffic between each two stations of the 2,500 had

to be divided into three parts on the average, and frequently subdivided under complex agreements.

Yet, on the 31st of January, 1855, an account was rendered to each company, showing one sum, commonly a small one, to be due, either by it to the clearing-house or the contrary, which sum, when paid, would close all the accounts of that company with all the other united companies for the whole year; and this was done at a cost of about £26,000. Further, it was done without direct communication between companies, and without disputes. The due execution of numerous and complex agreements was watched over, and the system of accounts in use gave the companies the means of putting their accuracy to the strictest test.

Again, in the same year, the vehicles of the Companies were traced through 7,192,112 journeys on lines other than their own, over an aggregate distance of nearly 177,395,216 miles, and payment was obtained for each of these lines, as well as for 283,165 days that they were detained contrary to regulation. The sum thus recovered was £263,609 8s., and the final accounts of the year were rendered on the same day as those of the traffic. The cost was about £18,000, which includes the wages paid to the number of men placed at the junctions; a sum which is about half of what the Companies would have paid for the same work, as they must have been employed, and did at one time actually employ, two sets of men for each set now in the pay of the Clearing-House.

Important Railway Consolidation.

A Convention of Presidents and Directors of the Chartiers Valley, Hempfield, Marietta and Cincinnati, and Hillsboro' and Cincinnati railroad companies, was held in this city last week, which was occupied for several days in making arrangements for the consolidation of the several companies named into one corporation. The result of their labors, as we are informed, was a preliminary contract, designed to accomplish this end, by the formation of a joined association, under the title of the Ohio Valley Railroad Company. This title is very appropriate, in view of the geographical position occupied by the different lines of the projected enterprise, which, when completed, as a glance at the map will show, will commence at Pittsburg, and follow the general course of the Ohio, a distance of sixty-three miles to Wheeling, where it will cross by a railroad bridge to be erected hereafter. From Wheeling it will follow the west bank of the river to Marietta, a distance of seventy-eight miles; and then, crossing the Muskingum by a stupendous railway bridge, now nearly built, it will leave the bank of the stream, and pursue a direct western course through Chillicothe, cutting off the great bends of the Ohio, and, traversing in its passage the counties of Washington, Athens, Vinton, Jackson, Ross, Highland, Clinton, Warren and Hamilton, finally terminate at Cincinnati. Though at some points distant seventy miles from the Ohio, this route, it will be seen, is still nearer to it than that of any other railway, and must be looked to for their railway facilities, by all the cities and towns bordering the river between Wheeling and Cincinnati.

We have no doubt that the movement now commenced will ultimately bring about the successful inauguration of one of the most important and powerful lines of railway in the United States. As the consolidation of the various companies which compose the Pittsburg, Fort Wayne and Chicago railroad has furnished a great north-western arm to our Pennsylvania railroad, enabling it to reach in that direction clear to Chicago, so will the Ohio Valley railroad supply it with a great south-western arm stretching from Pittsburg to Cincinnati, and beyond the latter point, by means of the Ohio and Mississippi railroad, already in great part constructed, all the way to St. Louis. The effect of the union proposed will practically be, that but three companies will occupy the ground from Philadelphia to St. Louis, extending more than a thousand miles, and that

their material interests will induce them to make every effort to bring the travel and traffic from the whole intervening country to this city.

A great feature of the proposed Ohio Valley Railroad will be, that it will be the only railway which will carry the Pennsylvania gauge across the State of Ohio, and another, not less important, will be, that it will be the only route by which the three great Atlantic cities, Philadelphia, New York and Baltimore can connect by an unbroken and continuous iron track with the Queen City of the West. As in earlier days the Ohio river was the common thoroughfare by which the cities of the seaboard sought the South-west, it is fair to presume that, in the changed condition of things, the Ohio Valley Railroad will be used for a similar purpose, as no other combination of lines can afford equal facilities to the cities we have named, for the accommodation of their trade with Cincinnati and St. Louis.

In proof of the facility with which the consolidation here spoken of may be effected, and the reasonable time within which it may be completed, we may state that the companies proposed to be embraced in it have made great progress towards the consummation of their several enterprises. One hundred and sixty miles of the Marietta and Cincinnati and Hillsboro', and twenty-two miles of the Hempfield railroads are now in operation. Thirty-eight miles more of the former, which will finish the line west of Marietta, will be opened for traffic by January. The residue of the Hempfield, between Wheeling and Washington, will be similarly ready in December. The Chartiers Valley road, from Washington to Pittsburg, is nearly graded, and can be finished in four months. A large amount of work has been done on the Marietta road between Marietta and Wheeling, and the whole may be put in condition to receive the cars by next midsummer, so that within a year from the present time the whole line may be in running condition. Up to the present period the total expenditures of the four companies may be stated as follows:

Marietta and Cincinnati.....	\$7,767,680
Hillsboro' and Cincinnati.....	1,262,073
Hempfield	1,800,000
Chartiers Valley.....	360,000

Total.....\$11,189,753
—*Phila. U. S. Gazette.*

The Projected Russian Railways.

The Russian Government intends constructing for the present the following lines:—The line from Moscow to Theodosia, with branches to Odessa and the Dnieper; the line from Moscow to Nishag Novgorod; and the extension of the trunk line from St. Petersburg to Warsaw, until it meets the prolongation from that of Königsberg and Libau.

By means of the first line of rail the country will possess the quickest communication between the corn growing south on the one hand, and the north of Russia, together with Western Europe, on the other hand, between the south and the Black Sea, especially Odessa, where hundreds of granaries now hold the immense produce of the south. The second line, in traversing a great part of central Russia, leads to that great emporium, where the famous fair, from June 29 to the end of July, annually collects a quarter of a million of men, and causes dealings to the amount of 123,200,000 roubles. The third line is the most important for Germany. It will become a grand route of communication and traffic between the whole of the east and that of the west, a real world line, that will develop in all their plenitude the resources of both east and west. It will multiply the imports and exports, seeing that it will run from the Atlantic into the very heart of Russia, and by making Germany the central point of this commercial current, will impart fresh growth to our trade and industry.

The entire projected system of railways will cover an extent of about 8,900 versts (about 2,500 miles) and if we estimate each verst on the average as requiring an outlay of sixty-eight or

seventy thousand roubles, the whole will absorb a capital of about 270,000,000 of silver roubles.—As may be supposed, after so exhausting a war, Russia can only raise this colossal sum through the help of foreign countries, which, on their part, have taken up the magnificent scheme with real enthusiasm, having full reliance on the result, notwithstanding the singularly unfavorable period.

Three great rivals are now contending for the grant. The first, as usual, is Rothschild, whom many journals have long since assured of obtaining the concession, but which capitalist, perhaps, gives himself less trouble about the matter than the rest. The two remaining candidates are the two companies, who aptly designate themselves as the French and the Germano-Belgian. The former was created, it is true, by Stieglitz, but the French element preponderates in it. There belong to it the two Pereires, Hottinguer, Thurneysen, Von Eichthal, Pescatore, Fould in Paris, Hope of Amsterdam, the Barings of London—all of them names of the best repute in the financial world, and all of whom explore the region of industry in every field. This company has been for months past negotiating with the Russian Government, and it only recently sent one of the Pereires, Hottinguer and Thurneysen to St. Petersburg for the purpose of concluding the negotiations. The other company ranks amongst its members notabilities of equal mark, such as J. R. Bischoffsheim at Brussels, Sal. Oppenheim, Jun., & Co., and the Schaaffhausen Union Bank in Cologne; the Berlin Trade and Discount Company, also Anhalt and Wegener in Berlin; the Bank of Darmstadt, Holl and Schmidt, in Frankfurt; C. F. Lobecke & Co., in Breslau, &c.—all which houses and institutions have acquired a special reputation by their energetic participation in the most varied and great enterprises of the age, all of whom, too, present the best guarantee for the due execution of the very boldest project. This company conferred even earlier, perhaps, than the other in St. Petersburg with the imperial government; it is represented there by Messrs. Wendelstadt, the Director of the Darmstadt Bank, and Brouwer de Hogendorp, of Brussels, the President of the Belgian Railway Committee and representative of the Belgian government, to which a two-third will shortly be added in the person of the banker, E. Oppenheim, of Cologne. It has hitherto encountered some difficulties, because it only offered to make one line, whereas the other company tendered for the whole system. Lately the second company has also resolved, however, upon undertaking the whole, so that it now remains to be seen which of the two can drive the other out of the field.

It is not to be gainsayed that the French company possesses a very powerful support in Baron Stieglitz, the celebrated Russian capitalist; but the other company will prove a very dangerous competitor, notwithstanding. At the time the latter found itself almost the sole bidder, it committed the fault of screwing up its demands too high, the tendency of which would have almost been to create an oppressive perennial monopoly in Russia; and the other companies surprised it on this blind side, for they offered more favorable conditions to the government. In fact, should the second company carry the day, such a result can but prove acceptable to us. Our country will assuredly not share to such a degree in the benefits arising from the undertaking, should it fall into French instead of German hands. The permanent influence conferred by concession confers in its turn the power of turning the stream of traffic from one direction to another. The self-evident importance of this fact has been already perceived by the Belgian government, and for this reason it has sent, as we have before stated, an official representative to St. Petersburg. It is said that the Prussian government will give its moral in every case, and perhaps also its official support. It is at least permitted us to hope that the Russian railways will confer all possible benefit on our own fatherland.—*Augsburg Gazette.*

Railway Share List.

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.	149	1,588,100	2,973,700	6,019,929	470,647	110,247	none	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	---	---	---	---
Androscog. & Kennebec.	56	598,042	1,622,908	2,210,947	200,476	110,247	none	5	South Western	92	1,047,496	465,500	1,624,920	253,506	141,168	8	---	---
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,600	---	---	---	---	Tennessee and Alabama	30	243,486	---	679,908	In progr.	---	---	---	---
Portland, Saco, & Portland.	51	1,367,000	119,237	1,486,237	270,212	112,491	6	82	Tennessee and Missouri	---	170,931	---	175,340	In progr.	---	---	---	---
Boston, Concord, & Montreal.	93	1,508,093	1,050,512	2,771,537	390,221	143,565	2	14	Memphis and Charleston	217	2,179,440	2,327,002	4,025,768	811,631	159,572	---	---	---
Cheshire.	58	2,085,925	899,312	3,175,637	335,919	134,454	6	74	Mobile and Ohio.	163	2,503,555	1,802,921	4,536,412	169,932	100,236	---	---	---
Concord.	35	1,600,000	8,242	3,016,633	370,529	138,299	2	59	Mesa Central.	188	642,534	---	628,308	In progr.	---	---	---	---
Northern, N. H.	82	2,768,400	---	---	---	---	---	---	N. O., Opelousa & G. W.	56	2,630,425	1,017,645	2,667,568	In progr.	---	---	---	---
Conn't & Passumpsic Riv.	61	1,048,145	757,608	1,780,662	162,657	55,173	none	4	Vicksburg, Shreveport & Tex.	66	111,750	---	107,585	In progr.	---	---	---	---
Rutland & Burlington.	120	2,233,376	2,662,399	5,378,429	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	---	2,500,000	In progr.	---	---	---	---
Vermont Central.	117	1,530,000	3,550,236	5,483,366	820,119	214,793	none	1	East Tennessee and Va.	16	625,425	---	1,032,781	In progr.	---	---	---	---
Boston and Lowell.	27	1,330,000	325,635	2,188,565	489,764	130,377	6	53	Nash. and Chattanooga.	151	2,319,330	1,497,031	3,848,694	316,000	112,177	---	---	---
Boston and Maine.	33	1,078,974	150,000	1,179,535	854,426	339,096	6	77	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	264,973	138,694	---	---	---
Boston and N. Y. Central.	71	2,240,300	1,518,071	3,483,918	59,917	8,740	none	7	Lexington and Frankfort	29	430,055	158,099	587,071	93,263	43,635	6	---	---
Boston and Providence.	47	681,690	280,533	997,252	119,221	63,036	none	65	Lexington and Danville.	65	694,444	62,734	747,178	In progr.	---	---	---	---
Boston and Worcester.	68	4,500,000	655,428	4,865,419	1,008,004	404,461	6	82	Louisville and Frankfort	65	698,238	609,061	1,589,566	244,014	96,902	0	---	---
Cape Cod.	62	1,591,110	273,241	1,802,244	236,568	103,787	5	40	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.	---	---	---	---
Connecticut River.	60	2,683,400	2,947,737	4,021,016	647,281	306,998	---	---	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,852,862	298,293	140,823	none	30	---
Eastern, Mass.	307	8,540,000	153,700	3,765,938	681,163	225,071	---	---	Clev., Col., and Cin.	141	4,647,020	1,225,587	4,513,722	1,290,295	732,066	9	101	---
Fitchburg.	30	800,242	225,535	983,521	In progr.	---	---	---	Cleveland and Toledo.	200	2,676,425	2,689,301	5,124,629	736,272	396,986	10	72	---
North-Eastern.	21	500,000	---	533,953	196,401	56,533	6	---	Clev. and Mahoning	108	---	---	628,583	In progr.	---	---	---	---
N. Bedford and Taunton.	37	3,015,100	292,650	3,362,949	653,499	296,738	6	83	Clev. and Pittsburgh	133	2,780,741	3,043,992	5,827,468	581,877	300,518	---	---	---
Old Colony and Fall River.	77	2,323,541	1,033,670	3,209,727	268,726	87,313	none	6	Cin., Hamilton & Dayton	60	2,153,900	1,921,213	2,987,767	508,271	278,012	---	---	---
Vermont and Mass.	155	5,150,000	5,966,420	10,496,905	1,869,673	633,013	7	89	Cin., Wilm. & Zanesville.	131	1,220,450	1,131,265	2,326,456	In progr.	---	---	---	---
Western, Mass.	43	1,141,000	205,565	1,551,271	240,780	75,760	2	42	Columbus and Xenia.	156	1,454,550	149,200	1,481,738	356,365	187,518	10	82	---
Worcester and Nashua.	72	2,350,000	939,000	3,313,932	730,012	352,799	10	118	Dayton, Xen. & Belpre.	63	437,838	422,658	860,496	In progr.	---	---	---	---
Providence and Worcester.	122	2,098,110	2,030,665	4,060,869	258,685	119,011	none	---	Dayton and Michigan.	140	1,076,802	803,011	1,185,826	In progr.	---	---	---	---
Harvard, Prov. and Fitchburg.	110	2,000,000	414,240	2,431,773	339,196	71,427	none	---	Dayton and Western.	35	310,000	500,000	793,769	---	---	---	---	---
Housatonic.	57	1,081,800	524,244	1,580,728	220,459	93,768	---	---	Easton and Hamilton.	42	454,990	904,489	1,156,135	171,929	65,000	20	---	---
N. York and N. Haven.	62	3,000,000	2,376,803	5,376,803	684,306	338,777	none	25	Little Miami.	65	2,963,921	1,171,785	3,648,172	681,562	336,703	---	---	---
N. Haven and N. London.	60	734,268	735,165	1,450,318	88,007	30,318	none	---	Mad River and L. Erie.	205	2,451,550	2,272,932	4,446,661	---	---	---	---	---
N. London, W. & Palmer.	66	509,200	1,073,673	1,594,383	124,044	66,430	---	---	Central Ohio.	138	1,620,927	3,485,074	4,298,443	Recently opened.	---	---	---	---
Norwich and Worcester.	32	439,005	1,625,098	1,840,695	117,716	9,904	---	---	Ohio and Penn.	187	2,451,700	3,219,000	6,670,700	1,111,626	662,117	9	50	---
Albany Northern.	35	643,330	371,859	974,323	In progr.	---	---	---	Pittsburg, Mayev & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---	---
Black River and Utica.	100	1,487,874	1,501,183	2,819,096	172,476	86,333	---	---	Patty, Manat & Newk.	127	1,850,000	2,206,357	3,552,357	328,958	164,479	---	---	---
Buffalo, Conn. and N. Y.	92	786,339	2,857,819	3,401,868	286,302	31,896	---	---	Seloto & Hocking Valley.	135	408,975	500,000	888,858	In progr.	---	---	---	---
Buffalo and St. Line.	69	1,300,000	1,040,000	2,494,364	679,750	356,763	10	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---	---
Canandaigua and Elmira.	47	434,111	922,303	1,276,706	174,089	69,506	---	---	Tol., Washab & St. Louis.	242	2,500,000	4,530,000	---	In progr.	---	---	---	---
Canandaigua & Niagara F's	88	1,315,000	2,279,564	3,495,832	---	---	---	---	Cin., Log. & Chicago.	255	4,196,679	1,006,125	2,080,433	In progr.	---	---	---	---
Cayuga & Susquehanna.	144	3,768,466	9,250,362	12,737,898	1,812,097	603,946	28	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,562	---	---	---
Hudson River.	95	1,876,148	668,949	2,555,986	301,793	116,462	none	26	Ind. and Cincinnati.	86	1,213,723	1,442,859	2,178,461	356,012	193,142	7	60	---
Long Island.	634	24,164,860	14,462,742	25,523,913	5,653,581	3,162,126	8	83	Indiana Central.	66	611,400	1,261,179	1,907,911	350,176	134,375	---	---	---
New York Central.	464	10,022,958	25,126,609	33,439,431	5,488,993	2,827,118	none	30	Ind., Clev. & Pittsburg.	83	826,825	1,099,400	1,831,225	226,058	93,010	---	---	---
New York and Erie.	138	5,717,100	4,069,798	9,786,203	1,686,677	234,126	14	---	Jeffersonville.	80	1,014,252	694,000	---	206,544	94,318	---	---	---
Northern, N. Y.	118	1,633,022	4,406,874	6,470,714	520,153	135,754	none	1	Madison and Indianapolis.	87	1,647,700	1,336,518	1,205,000	286,146	112,880	---	---	---
Oswego and Syracuse.	35	399,000	216,681	723,683	126,540	59,932	3	---	New Albany and Salem.	238	2,535,121	5,281,848	6,643,189	645,827	370,002	---	---	---
Pottsdam and Watertown.	29	467,200	294,189	749,683	In progr.	---	---	---	Penn. and Indianapolis.	73	974,800	604,355	1,502,162	287,512	139,702	10	---	---
Rensselaer & Saratoga.	23	610,000	140,000	896,428	241,749	82,600	7	---	Terre Haute and Ind.	73	1,341,500	2,387,155	3,214,162	In progr.	---	---	---	---
Saratoga and Whitehall.	48	500,000	396,000	719,000	71,000	21,089	none	---	Chicago and Rock Is'd.	182	1,610,000	---	---	1,077,312	---	---	---	---
Syracuse & Binghamton.	30	768,389	1,578,804	2,272,777	169,484	22,503	---	---	Chicago and St. Louis.	220	1,639,100	1,684,736	2,584,622	722,580	379,821	20	---	---
Troy and Boston.	27	487,830	737,079	1,109,822	156,363	56,134	---	---	Chicago, Burl. and Quincy.	88	1,202,500	2,133,050	2,920,241	471,899	219,588	---	---	---
Watertown and Rome.	97	1,370,378	700,979	2,068,003	404,874	172,474	3	90	Central Military Tract.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---	---
Delaware Delaware.	64	1,000,000	1,619,000	2,619,000	2,017,127	961,941	12	124	Ohio, St. Paul & F'd du Lac.	259	5,441,500	3,318,039	7,742,614	2,315,786	1,192,042	22	109	---
Camden and Amboy.	94	3,000,000	1,407,200	2,607,200	122,417	50,090	---	---	Galea and Chicago.	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	---	---	---
Camden and Atlantic.	60	369,320	1,522,131	1,729,642	122,417	50,090	---	---	Illinois Central.	98	569,889	818,544	1,388,342	In progr.	---	---	---	---
New Jersey.	30	3,482,850	690,000	4,310,011	861,514	500,747	10	118	Peoria and Quawwa.	147	1,780,295	3,292,408	4,870,568	Recently opened.	---	---	---	---
New Jersey Central.	63	2,090,000	2,296,176	4,386,176	393,728	171,603	---	---	Ohio & Miss. (Wet Div.).	173	2,281,420	1,256,000	3,537,420	In progr.	---	---	---	---
Morris and Essex.	43	1,157,805	375,000	1,634,550	229,341	96,207	6	---	Terre Haute and Alton.	185	838,000	1,128,964	1,966,969	In progr.	---	---	---	---
Albany Valley.	44	1,637,867	342,564	1,980,431	192,241	96,207	6	---	Detroit and Milwaukee.	282	6,032,444	5,096,018	10,688,158	2,215,288	879,660	10	92	---
Catskill, W. & Erie.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,445,208	2,410,000	876,000	10	87	---
Cumberland Valley.	66	1,099,500	12,211	1,191,833	140,381	66,934	---	---	Green Bay, M.L. & Ch.	155	764,074	442,726	1,193,756	In progr.	---	---	---	---
Del. Lack. & Western.	109	3,061,622	3,884,702	6,022,667	528,911	259,243	6	80	Milwaukee and Miss.	106	1,826,428	2,467,889	3,578,757	691,543	417,443	17	77	---
Erie and North East.	30	600,000	150,000	750,000	---	---	---	---	Milwaukee & Western.	72	354,861	132,000	614,238	In progr.	---	---	---	---
Philad. & Sunbury.	33	600,000	1,200,000	1,848,812	89,535	53,335	---	---	Milwaukee and Horicon.	15	554,200	---	854,100	In progr.	---	---	---	---
Little Schuylkill.	28	2,606,100	548,222	3,407,651	363,301	255,9												

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. inconvertible	7	1 April, October	"	1866	97 1/2	97 1/2
Bellefontaine and Indiana	600,000	Do. convertible	7	1 Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	1 Jan'y, July	"	1868	85	85
Do. do.	300,000	Income, guar. Cl. Col. & Cin.	7	1 Feb'y, August	"	1859	85	85
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	78	81
Do. do.	800,000	2d do. inconvertible	7	1 March, Sept.	"	1866	82 1/2	82 1/2
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	82	84
Do. do.	465,000	2d do. do.	7	1 May, Novemb.	"	1880	82	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	1 Jan'y, July	"	1868	85	85
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	1 May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	1 Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	1 Feb'y, August	"	1860	85	85
Do. do.	1,200,000	Do. on Branches	7	1 March, Sept.	"	1872	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	1 Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1867	7	1 April, October	"	1862-72	65	75
Do. do.	1,200,000	Do. inconvertible	7	1 April, October	"	1862-72	65	75
Covington and Lexington	400,000	Do. do.	6	1 April, October	"	1867	85	85
Do. do.	1,000,000	2d mortgage, convertible	7	1 March, Sept.	"	1883	85	85
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	1 April, October	"	1875	91	91
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	1 Jan'y, July	"	1873	80	80
Galeta and Chicago	2,000,000	Do. inconvertible	7	1 Feb'y, August	"	1868	84	84
Do. do.	2,000,000	2d mortgage, do.	7	1 May, Novemb.	"	1875	85	85 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	1 April, October	"	1868	80	80
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 Apr. 10 Oct.	"	1868	96	96
Jeffersonville	300,000	Do. 2d sec. inconv.	7	1 April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	1 May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	1 Jan'y, July	"	1860-61	80	82
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	1 March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	1 May, Novemb.	"	1874	87	89
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	1 Feb'y, August	"	1865	70	72 1/2
Little Miami	1,600,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	1 April, October	Boat.	1860	100	102
Do. do.	600,000	Do. do.	8	1 March, Sept.	"	1869	95	96
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	1 Jan'y, July	N.Y.	1862	85	86
Do. do.	550,000	Do. 2d do. 1858	8	1 April, October	"	1863	85	86
Do. do.	1,250,000	Do. 3d do. 1860	8	1 June, Decemb.	"	1867	88	89
New Albany and Salem	500,000	Do. 1st section	10	1 April, October	"	1868-62	85	85
Do. do.	2,325,000	Do. oth. sec. con. till 1868	8	1 May, Novemb.	"	1864-76	85	85
Northern Cross	1,200,000	1st mortgage, convertible	8	1 Jan'y, July	"	1873	90	90
Ohio and Indiana	1,000,000	Do. do.	7	1 Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	1 Jan'y, July	"	1865-66	90	95
Do. do.	2,000,000	Income, convertible	7	1 April, October	"	1872	79	79
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	1 Jan'y, July	Phila.	1860	88 1/2	97 1/2
Racine and Mississippi	600,000	Do. conv. sink'g'f'd	8	1 Feb'y, August	N.Y.	1861	78	82 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	1 May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,600,000	Do. convertible	7	1 Jan'y, July	"	1866	85	85
Terra Haute and Indianapolis	600,000	Do. do.	7	1 March, Sept.	"	1866	88	100
Terre Haute and Alton	1,000,000	Do. do.	7	1 Feb'y, August	"	1867-72	77	79
Do. do.	2,000,000	2d do. do.	8	1 Feb'y, August	"	1870	71	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	1 April, October	Balt.	1885	82	83
Do. do.	1,128,500	Do. do.	6	1 Jan'y, July	Balt.	1876	85 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	90	91 1/2
Erie Railroad	8,000,000	1st mortgage	7	1 May, Novemb.	"	1867	105	107
Do. do.	4,000,000	2d mortgage, convertible	7	1 March, Sept.	"	1859	95	97
Do. do.	6,000,000	3d mortgage	7	1 March, Sept.	"	1863	94	95
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	1 Feb'y, August	"	1874	92	93
Do. do.	4,351,000	Convertible, Inscription	7	1 Feb'y, August	"	1871	85	86
Do. do.	8,600,000	Convertible	7	1 Jan'y, July	"	1862	90	91 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	1 Feb'y, August	"	1869-70	97	97 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	82	83 1/2
Do. do.	8,000,000	3d do. convertible	7	1 May, Novemb.	"	1870	86 1/2	87
Illinois Central	17,000,000	Mortgage, inconvertible	7	1 April, October	"	1875	87 1/2	87 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	1 March, Sept.	"	1860	100	107
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	1 May, Novemb.	"	1860	94	96
New York and Harlem	1,800,000	Do. do.	7	1 May, Novemb.	"	1861-72	80	82
New York and New Haven	750,000	No mortgage, do.	7	1 June, Decemb.	"	1855-60	79	82
New Haven and Hartford	1,000,000	1st mortgage, do.	6	1 Jan'y, July	"	1873	94	94
Northern Indiana	1,000,000	Do. do.	7	1 Feb'y, August	"	1861	91	91
Do. Gothen Branch	1,500,000	Do. do.	7	1 Feb'y, August	"	1868	82 1/2	83 1/2
New York Central	8,287,000	No mortgage, do.	6	1 May, Novemb.	"	1863	88	88 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-60	7	16 June, 16 Dec.	"	1864	101 1/2	101 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	1 Jan'y, July	"	1866	90	90
Do. 2d do.	1,473,000	Do. till 1858	7	1 Jan'y, July	"	1866	90	90
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	1 Jan'y, July	Phila.	1860	90	90
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	1 Jan'y, July	"	1860	90	90
Do. do. 1849	3,400,000	Do. inconvertible	6	1 April, October	"	1870	82	82 1/2

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York, 7 per ct. 1857	Feb'y, 100	102		Milwaukee, 7 per ct. coup.	X	Divers	82 1/2
Do. 5 do. 1858-60	May, 94	96		New Orleans, 6 per ct. cp. R.R.	X	Do.	77
Do. 5 do. 1870-75	August, 90	92 1/2		N. Orleans, 6 per ct. cp. municip.	X	Jan'y, July	86
Do. 5 do. 1890	November, 90	91 1/2		Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	89 1/2
Albany, 6 per ct. coup. 1871-81	X Feb'y, August, 98	101		Pittsburgh, 6 per ct. coup.	X	Divers	78 1/2
Albany, 6 per ct. coup.	X Jan'y, July, 97	98		Quincy, 8 per ct. coup.	X	Jan'y, July	85
Baltimore, 6 per ct. 1879-90	X Quarterly, 96 1/2	98 1/2		Racine, 7 per ct. coup.	X	10 Feb'y, Aug.	85
Boston, 5 per ct. coup.	X April, October, 97	99		Rochester, 5 per cent. coup.	X	Divers	95
Brooklyn, 6 per ct. coup.	X Jan'y, July, 99 1/2	100 1/2		St. Louis, 6 per ct. coup.	X	Do.	77 1/2
Clev'td, 7 per ct. cp. W.W. 1879	X Do. do., 100	101 1/2		Do. do. Municipal	X	Do.	80
Cincinnati, 6 per ct. coup.	X Divers, 88 1/2	90		Sacramento, 10 per ct. cp. 1862-74	X	Do.	73
Chicago, 6 per ct. coup. 1873-77	X Jan'y, July, 88 1/2	89 1/2		San Francisco, 7 per ct. cp. N.Y.	X	May, Novemb.	80
Do. 7 per ct. coup. 1880	X Jan'y, July, 100 1/2	100 1/2		Do. 10 per ct. cp.	X	Do.	95
Detroit, 7 per ct. cp. W.W. 1873-78	X Feb'y, August, 100	102 1/2		Do. 10 do. pay. N.Y.	X	Jan'y, July	85
Evansville, 8 per ct. cp. Long	X March, Sept., 101 1/2	101 1/2		Do. 6 per ct. pay. N.Y.	X	Do.	82 1/2
Ind. & W. City, 6 per ct. cp. W.W. 1877	X Jan'y, July, 91	95		Wheeling, 6 per ct. coup.	X	Divers	67 1/2
Louisville, 6 per ct. cp. 1880-83	X Divers, 78	80		Do. 6 per ct. cp. Mun. 1874	X	March, Sept.	81 1/2
Memphis, 6 per ct. coup. 1883	X Jan'y, July, 68	68		Zanesville, 7 do.	X	April, October	90

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending October 14, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort. 7 per ct.	85
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	80
Indianap. & Cin., 2d Mort. 7 per ct.	80
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	84
Hillsboro' & Cin., 7 per cent. 1st Mort.	47 1/2
Covington & Lexington, 10 per ct. Income	55
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Do. do. do. due July 1, 1866	85
Little Miami, Dividend Scrip, issued June, 1856	80

STOCKS.

Bellefontaine and Indiana, 50.—Cin., Ham. and Dayton, 70.	
—Col. and Xenia, 85.—Cincinnati, 85 1/2.—Covington & Lexington, 16.—Dayton & Western, 17.—Easton and Hamilton, 20.—Indiana Central, 60.—Indianapolis and Cincinnati, 70.—Little Miami, 89.—Mad River & Lake Erie, 17.—Marietta and Cincinnati, 14.—Ohio and Mississippi, 6.—Hillsboro' and Cincinnati, 14.—Peru and Indianapolis, 12.—Cincinnati, Wilmington and Zanesville, 12.	

By HEWSON & HOLMES.

For the week ending October 15, 1886.

BONDS.	Per ct.
\$2,500 Cov. & Lex., 10 per cent. Income.	60
1,500 Indianap. & Cin., 10 per cent. due 1869-90	80
2,000 Indianap. & Cin., 7 per ct. 2d Mort.	80 (& int.)
5,000 Cov. & Lex., 7 per cent. 2d Mort.	66
1,000 Little Miami, 6 per ct., 1st Mort.	80
3,000 Cleveland and Toledo, 7 per cent. 1st Mort.	85
1,000 Cincinnati 6 per cent.	78
2,000 Fayette Co. Ky., 6 per cent.	78
525 Little Miami, Dividend Scrip, June, 1856	60 1/2

STOCKS.

23 Shares Indianapolis & Cincinnati	70
200 " Cincinnati and Chicago	2 1/2
10 " Cincinnati, Hamilton, & Dayton	70
74 " Columbus and Xenia	86
10 " Do. do.	88
150 " Ohio and Mississippi	8
300 " " 60 days	6 1/2
31 " Little Miami	90
40 " Cin., Wilm. and Zanesville	15
200 " Hillsborough and Cincinnati	14
12 " Clev., Col. and Cincinnati	100

Extract from De Coppel & Co.'s Money Circular for the European Steamers of the 22nd Inst.

[TRANSLATED.]

New York, Monday, Oct. 20, 1886.

Our stock market since our last advice of 14th inst. has not been animated, if we except three or four of the leading railroad shares which continue to be the object of a lively speculation. The fluctuations have been unimportant, but the tone is rather better than at the close of last week. The question of the possibility of a suspension of specie payments by the Bank of France is variously commented upon. It has caused a decline or French exchange, and occasional an uncertainty and a timidity, owing to the influence such a measure may exercise upon the movement of specie from this country, which are detrimental to our stock market assuming more firmness. The same absence of demand for investment stocks, such as city, county and railroad bonds, continues to be experienced; in this state of things our quotations for this class of securities must necessarily often be nominal. State Stocks—Very moderate transactions in Virginia 6s at previous rate, and in Missouri 6s at 1 1/2, and in Tennessee 6s at 1 1/2 per cent. advance. City and County Bonds.—We know only of a few small transactions in Cincinnati 6s, issued for municipal purposes. Railroad Bonds.—Besides in Illinois Central Constructions, which have been animated and which close at a decline of 3/8, there has been very little movement. Some New York Central 6s have been done at a rise of 1 per cent., and at private sale some Ohio and Pennsylvania Income at some decline. The speculation in the shares of the La Crosse and Milwaukee railroad, and the wide fluctuations which have resulted from it, have induced some transactions in the various classes of convertible bonds of this company. Railroad Shares.—The operations have been large in Erie, Reading, N.Y. Central and Cleveland and Toledo. The latter is quoted ex-dividend 4 per cent. The quotations of these shares are all higher than last week. Since the land grant obtained by the La Crosse and Milwaukee railroad company, the shares have given rise to some speculation; after touching 89

they have receded to about 82. There was a good demand for Illinois Central for foreign account; they rose 1 per cent. Money, without being scarce, continues in good demand. Short loans at 7. Paper without change at 8a10 for 1st class, and 10a12 for less known names.

DE COPPET & CO.

Marie & Kanz' Money Circular for the European Steamer of the 22nd inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Oct. 20, 1856.

The advices received by the *Persia*, to which reference was made in our circular of the 14th inst., have continued to absorb attention. These advices announced a financial crisis in France and Germany, and the advance of the rate of the Bank of England to 5 per cent., consols leaving off at 92½; they reported, moreover, a decided rise in the Paris Bourse. The critical state of the market, and this sudden and inexplicable advance in the face of it, lead many to believe that the Government had determined to authorize the Bank of France to suspend specie payments. Notwithstanding this impression, somewhat prevalent here, our stock market far from experiencing the shock which affected it a year ago under similar fears, has exhibited great strength; and our quotations, to-day, show a slight advance over those of our last circular. But the amount of business, with the exception of a few stocks has been restricted. Bills drawn on France have become difficult to negotiate, even at a concession in the rate. Money is easily obtained for loans, payable on call, but there is an indisposition to invest or loan it for longer periods. Should the fears regarding the Bank of France be verified, the first effect would doubtless be favorable to the Paris market, and a corresponding feeling would be experienced in London and New York. But the blow to confidence which a like necessity could not fail to occasion, would tend to check speculation and to restrict business everywhere, pending the issue. And for such a curtailment, our market would be well prepared owing to the absence of speculation which has been noticed here for several months past. On the other hand the political, no less than the financial distrust might, as was the case in 1848, cause a considerable current of capital to flow from Europe to America. In State stocks the sales have been small, Missouri are 1½ per cent. higher, Indiana ½ per cent. lower. Railroad bonds inactive; Illinois Central bonds have been dealt in to a fair extent at 1 per cent. decline; N. Y. Central 6 per cents are 1 per cent. higher; Terre Haute and Alton 2d mortg., 2 per cent.; La Crosse and Milwaukee 1st mortgage bonds have been sold at 2 per cent. advance. Railroad shares are generally higher, with active sales of the same stocks referred to in our last circular; Erie is 1 per cent. higher, Reading, ¾; N. York Central, ¾; Panama, ¾; Michigan Central, 1½; Michigan Southern, ¾; Illinois Central, 1; Cleveland and Toledo, (ex-div.) 1¾; Chicago and Rock Island, 1¾; Galena and Chicago, ¾; Cleveland, Columbus and Cincinnati, 1¾; Cleveland and Pittsburg, 1; La Crosse and Milwaukee, after advancing to 89, closes at 83. Money is easy for loans on call, but in fair demand for business paper; on call, 7 per cent.; first-class paper, 8a10; names less current, 10a12. Exchange is firm on London at previous rates, 109¼a109¾; Paris difficult to negotiate, 5.16¼a5.20; other continental cities firm at higher rates. MARIE & KANZ.

The work of preparation for a double track upon the Norristown Railroad is rapidly progressing, and the road bed of solid, substantial material has been laid between Manayunk and Norristown. The matter will be pushed forward as rapidly as possible. At Norristown, the new depot is going up with celerity.

The track on the West Chester and Philadelphia Direct Railroad has been graded from Rockdale to Lenni, the Point at which the Baltimore Cen-

tral Railroad intersects it. The cars now run to Lenni. The track on the Baltimore road will be laid to Avondale, Chester county, as soon as possible.

American Railroad Journal.

Saturday, October 25, 1856.

Baltimore and Ohio Railroad.

The annual meeting of the stockholders of this company was held at the office of the company in Baltimore, on the 20th inst. The annual report of the President and Directors was read by the Secretary, J. I. Atkinson, Esq., and unanimously adopted.

After considerable discussion in reference to the important measure of dividing the earnings of the road appropriated in years past, and during the prostration of the company's resources, to the work of construction, and distributing them pro ratio between the city and the private stockholders who may be such at the time the division is made, the following preamble and resolution were unanimously adopted:

Whereas a large amount of the net earnings of this company have from year to year been retained, and applied to the construction of the road, and stocking the same with motive power; and whereas the several Presidents and Boards of Directors, have repeatedly recognized these revenues as a debt and promised to pay the same whenever the means of the company warranted it, and whereas the trade of the company has, within the last four years, increased from \$1,408,172 to \$4,385,952, indicating great prosperity with well founded hopes for continued increase and corresponding profits. Believing, therefore, that the time has fully come when the promise so often made, and so long deferred, should be redeemed, be it

Therefore Resolved, That the President and Directors be and they are hereby requested to make provision for refunding to the stockholders, in such form as they shall deem judicious, the amounts which, from time to time, have been withheld from the net earnings of the company, and that the same be done on or before the first of April next, unless, however, such changes, not now anticipated, shall have occurred in the financial condition and prospects of the company as in their judgment shall render a further postponement of the repayment in question advisable.

The State will, probably, have no claim to share in this division as it has always received a regular dividend. The amount of these undivided earnings is \$3,529,807 75. The resolution adopted by the stockholders does not define the mode in which the division is to be made, but it will, probably, be accomplished by issuing bonds to amount named upon which the company will pay interest, and which will be computed hereafter as a portion of the cost of constructing the road.

The following gentlemen were unanimously re-elected directors for the ensuing year:

John Hopkins,	William Lamping,
Benjamin Deford,	Columbus O'Donnell,
Francis Burns,	William H. Norris,
Marcus Denison,	Wesley Starr,
John W. Garrett,	Nathan Tyson,
William A. Hack,	Samuel W. Smith.

As we publish the report of the President entire in another part of the JOURNAL, and as the interest felt by the public in this work will induce its general perusal, we shall simply refer to its principal

statements. The condition of the company, as presented by the report, is one of unexampled prosperity. The road is accomplishing more than the most sanguine of its original projectors ventured to predict. The gross earnings of the Main Stem have been \$4,385,951.87, being an increase of \$674,498.02 over the previous year. Notwithstanding this large increase in receipts, the percentage of the working expenses have been decreased. The cost of working the Main Stem, and keeping the road and machinery in repair, having been but \$2,884,779.54, equal to 54½ per cent. of the gross earnings, which is 2.49 per cent. less than the previous year.

Since September 30th, 1855, there have been paid from the net earnings of the road, \$170,566.23 of the funded mortgage debt, and \$620,983.95 of the floating debt; in addition to which \$544,521.03 have been appropriated to increasing the capacity and facilities of the road; amounting in the aggregate to \$1,336,071.21, by which the entire floating debt of the company has been liquidated, with the exception of \$3,500 not yet matured.

The net earnings of the Main Stem alone exceed 12 per cent. The clear gain for the fiscal year is stated at \$1,443,780.70—being upwards of 14 per cent. on the aggregate capital stock. The sinking fund has been increased to \$489,086.17. The profit and loss account shows a surplus of \$3,529,807.15, after paying the regular semi-annual dividend of three per cent., due on the 21st inst. The balance of cash in the treasury, Sept. 30th, was \$427,655.04; which is exclusive of \$149,596.60, previously deposited for the payment of interest due on the 1st inst. The sum of \$387,900, the net proceeds of the city loan of \$431,000, has been used to replace the expenditures of the company on second track and arching tunnels. All purchases for the use of the road have been paid in cash, since Oct., 1855.

It is worthy of note, that the one million loan of 1854, contracted for stock in the Washington Branch, has been reduced to \$142,106.34 from the net earnings of the company. The dividends on this investment, (now amounting to \$1,016,800) which were during the past year \$86,428, and \$10,000 received from that company for the use of Camden Station, will be a portion of its net gain annually, to be divided among the stockholders.

During the year nine miles of second track have been completed, and the construction of the twenty-one additional miles is progressing. The company have now in use 100½ miles of second track; besides 59 miles of siding. Iron bridges have in many instances been substituted for wooden ones. The important and costly work at the Kingwood tunnel is approaching completion; while the secure position of all the tunnels and bridges on the line is satisfactorily reported.

Railroad Iron.

1,000 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard, now on the way from English shipping port. For sale by THEODORE DEHON, 10 Wall st., near Broadway, NEW YORK.

Oct. 23d.

1m43

Railroad Iron.

500 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard. In port, and for sale by THEODORE DEHON, 10 Wall st., near Broadway, NEW YORK.

Oct. 23d.

1m43

Journal of Railroad Law.

OBSTRUCTIONS TO NAVIGATION.

Among the interesting questions that have arisen from our grand system of railway travel, is that conflict of the conveniences of society which occurs when a railway is to be carried across navigable streams, bays and arms of the sea. Railways are justly encouraged by every community. On account of the benefits they bestow they are endowed with certain peculiar privileges: they obtain monopolies, they secure rights which the law will not allow to individuals. But it is always on the condition that they will do no injury to the public. There are doubtless many inconveniences to private individuals, many grievances which no compensation can recompense, for which no damages can atone. But all these are overlooked in comparison with the benefit conferred upon the community in general. But they have no right to destroy prescriptive and original means of communication, to obstruct navigable rivers, or prevent the usual means of transportation in order to facilitate their own.

The Hudson River Railroad, passing along the shores of the river from which it takes its name, has undoubtedly injured the property of many proprietors on its eastern bank. The splendid water fronts of many country seats have been ruined: the seclusion which men of wealth have sought is disturbed much against their inclination by the shrill steam-whistle, and the noisy passage of countless trains. These are inconveniences which must be submitted to for the general advantage of the community: *Damna absque injuria*.

But when the direct course of their railroad would impede the navigation of the branches and bays of the river, the company are compelled by the terms of their charter to construct drawbridges, and to provide that their right of way should not deteriorate the usual and original channels of travel and transportation.

Getty against The Hudson River Railroad Co. 10 Barbour, 617.

In this case the plaintiff owned a farm situated on a bay in the river to the north of Hudson. In the year 1849, the railroad company under their charter proceeded to build their road on an embankment, and on piles directly across the mud flats on the east side of the river, at the distance of one thousand feet from the shore at high water. At low water the flats across which the railroad passed were nearly or quite exposed. By this the plaintiff was prevented from selling sand from the sand banks on his farm. The brickmakers on the opposite side of the river had been accustomed for many years to obtain moulding sand in greater or less quantities from the plaintiff. This sand was then taken chiefly in the winter across the ice by teams, and in summer by scows of some sixteen to sixty tons burthen, both with and without masts, which could be brought within fifty feet of the shore at high water.

The plaintiff brought his action against the company for damages, and also claimed a decree that they should be compelled to build a drawbridge for the convenience of navigation. The company contended that, as the road was constructed in the river, one thousand feet from the shore, not taking or touching the plaintiff's lands or in any way interfering with his rights on lands belonging to the

State of New York, and that as there was no dock or other convenience for navigation inside said road, no drawbridge was required by the terms of their charter in such case.

By the Court.—The general question of damages for injuring the private rights (of navigation, fishing, etc.) of individual proprietors along the banks of this river where the company has under its charter built on the property of the State, would seem to be very clearly decided and adjudged, and can need no discussion here.

If this case be not so different from those by reason of the plaintiff's location on a bay, as to entitle him to a drawbridge, then he has no right to recover damages for an obstruction that is there by leave of the State on lands of the State. Is he then entitled to have a drawbridge built there in case his prayer for specific relief be granted? I must say that the answer to this seems to me as plain as does that to the previous part of the case and it is two-fold. 1. No one individual can maintain this action for a specific performance of a public duty imposed for the public benefit, and that public the people of the State, and *they only*, can institute proceedings to compel a compliance with that duty. 2. It cannot be that this "bay," if correctly described in the statement of facts, is such a bay as, by the 15th section, the company are bound to furnish with a drawbridge, "to provide for free passage of such vessels as heretofore have passed or now can pass." That some sort of water craft can at sometimes pass near to shore of a curve in the stream, does not make the "bay" spoken of. It can mean in view of public necessity such bays only as have a general navigation deserving the name of navigation.

Portland, Saco and Portsmouth Railroad.

We have received the sixteenth annual report of this company, showing the general condition of the road, including the improvements and repairs of the past year, and its financial condition to May 31, 1856. The receipts have been—

From passengers.....	\$192,885.12
Freight.....	61,299.70
Mails, etc.....	16,029.63
	\$270,214.45

And the expenditures have been—

Operating road.....	\$138,921.84
Interest.....	8,801.58
Charged to renewal.....	10,000.00
	157,723.42

Net income.....	\$112,491.03
Deduct—An'ty to Swasey..	\$300.00
Dividend Dec. 1855.....	41,892.00
" June 16, 1856.....	45,000.00
	87,192.00

Leaving a balance of.....	\$25,299.03
Surplus earning to May 31, 1855.....	67,898.11

Total surplus earnings..... \$93,197.14
From which the following should be deducted:

Paid Eastern R. R. and Boston and Maine.....	\$27,898.11
Old steamboat and other accounts charged off.....	16,158.26
Lost on stock sold to pay bonds.....	12,432.00
For cotton burned at Biddeford.....	1,502.84
	57,990.71

Surplus May 31, 1856..... \$35,206.43

The indebtedness of the company on the 30th of April was—

Bonds due April 1st, uncalled for.....	\$10,000.00
Dividend to this date, due June 16, '56.	42,059.00
Notes payable, but not due.....	42,800.00
	\$94,859.00

The means of payment are—

Cash and cash items.....	\$41,600.00
Due from Kennebec and Portland R.R.	12,000.00
Sundry accounts.....	6,500.00
Surplus to May 31st, as above.....	35,206.43
	\$95,306.43

The cost of railway per Report 1855

was..... \$1,317,605.38

Expended the last year—

Land for gravel pits....	\$350.00
Land at Saco river.....	881.00
Cost of Commercial-st. in Portland, which appeared in the assets last year, and which is now charged to railway.....	40,382.39
	41,613.39

Present cost as per books..... \$1,359,218.77

Expended for property accounts, from which an income is derived, viz:

Portsmouth bridge.....	\$32,000.00
Kennebec and Portland railroad.....	100,000.00
Land and wharf at Hallowell, and sundries...	3,417.80
	135,417.80

Total expenditure..... \$1,494,636.57

The equipment of the road consists of 11 engines, 3 mail cars, 80 freight cars, 9 hand cars, 4 1st class passenger cars, 3 2d class passenger cars, 18 gravel cars, 2 baggage platform cars, 2 stone cars.

The remaining bonds of this company became due on the 1st of April, and were promptly provided for by the sale of the stock held by the corporation for that purpose. This relieves the road from all the indebtedness except that which must arise for short periods only, in operating the road.

The Directors in May last, made an examination of the entire road, bridges, buildings, etc., and found it, as a whole, in most excellent condition.

Most of the bridges upon the line of the road have either been rebuilt, or repaired, and are all pronounced safe and trustworthy.

The trains have been run during the year without accident.

The track at the Portsmouth bridge, has been relaid with new iron, and the bridge itself put in thorough repair.

The fences, which were much injured by the severe snows of last winter, are undergoing repairs.

In consequence of the severity of the weather, the current expenses of the company were largely increased, while the receipts, from the same cause, were much diminished.

About eight miles of the road-bed has been raised upon gravel. Eighteen thousand new sleepers have been put into the track, and between two and three hundred tons of iron rails has been taken up, cut, and relaid upon new sleepers, together with about one hundred and fifty tons of new and re-rolled iron. Additional side tracks have been laid at several stations when found necessary.

The following table will show the receipts and

produces no very extraordinary changes; but such has not been the case with Illinois or Chicago. In 1851, the population of the State was not far from 875,000, and of this city about 31,000. The railroads in operation were—42 miles of the Galena and Chicago Union, 11 of the Aurora Extension, and 45 of the Great Western. This total of 98 miles was laid with strap rail. The grain exports of Chicago by Lake were 2,000,000 bushels in 1850, and 4,750,000 in 1851; and the receipts of lumber by lake were 100,000,000 feet in 1850, and 125,000,000 in 1851. Asking the reader to keep these facts in remembrance, we proceed with the history of the construction of the road.

The first engineering party was organized in Chicago on the 21st of May, 1851, and commenced preliminary surveys of the Chicago Branch, making Chicago a point of departure, and by the middle of summer seven other parties had been organized and were in the field, viz: at Freeport, La Salle, Bloomington, Decatur, Cairo and Urbana; and the whole line was surveyed and located previous to December 31, 1851. The work of construction was commenced at Cairo and La Salle about Christmas of the same year.

On the first of December, 1851, the Galena and Chicago Union Railroad was extended from Elgin to Belvidere, 38 miles—this portion of that line being the first heavy rail laid in Illinois, and the first step in the right direction in railroad improvement in the West.

Col. Mason spent a portion of the winter of 1852 in Washington, engaged with Mr. Neal in selecting the lands donated by the charter.

In February, 1852, the Michigan Southern Railroad cars reached Chicago, making the first railroad connection with the east, and the event was duly celebrated by guns, dinners and speeches.

The first contract for grading the Illinois Central was made on the 15th of March, 1852, for that portion of the branch between Chicago and Calumet, and covered a distance of fourteen miles. It was hurried along for the purpose of allowing the Michigan Central Railroad to enter the city, and was completed on the 24th of May following, and a railroad communication opened between Chicago and Detroit.

Public contracts were first made in June, 1852, and the grading of the 1st, 2d, 6th, 8th, 9th and 10th divisions let, and on the 14th of October following, the 3d, 4th, 5th, 7th, 11th and 12th divisions were put under contract.

After a long contest with the city of Chicago, finally, on the 14th of June, 1852, the City Council passed an ordinance permitting the Illinois Central to enter the city and locate its line along the shore of Lake Michigan. In July, the first instalment of the first English loan of \$4,000,000 was paid, and it was not until this payment had been made that the originators of the enterprise had confidence in its success.

During the Summer and Fall of 1852, the railroad system of Chicago was considerably enlarged. August 2nd the Galena and Chicago Union was extended to Rockford, ninety-two miles from Chicago. On the 8th of October, the Chicago Alton and St. Louis was opened from Alton to Springfield, seventy-two miles, and on the 11th the Chicago and Rock Island road was opened from Chicago to Joliet, forty miles, thence it was extended to Morris, twenty-one miles further, January 5th, 1853, and to Peru, thirty-nine miles more, the 21st of March of the same year.

In March, 1853, Col. Mason was elected Superintendent of the road, and continued to discharge the duties of that office, in addition to those of the Chief Engineer, until the appointment of Mr. Done in December, 1855. On the 16th of May, 1853, the first sixty miles of the Illinois Central, from LaSalle to Bloomington, was opened for business, and the company commenced working the road on its own account. Thereafter the road was opened and worked on from point to point, as shown in the statement below. Of course we have space for little else than dates and events, but we call attention to this statement, believing that the achievements here recorded will justify the ex-

pression made use of above, that Col. Mason's success in building the Illinois Central has no parallel in the history of Civil Engineering.

DATES OF OPENING BY SECTIONS.

Main line, Cairo to La Salle	308 miles.		
La Salle to Bloomington,	60 miles,	May 16th,	'53.
Bloomington to Clinton,	23 "	Mar. 14th,	'54.
Clinton to Decatur,	22 "	Oct. 18th,	'54.
Cairo to Sandoval,	118 "	Nov. 22d,	'54.
Decatur to Sandoval,	85 "	Jan. 1st,	'55.

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GALENA BRANCH, La Salle to Dunleith	146 miles.		
Mendota to La Salle,	16 miles,	Nov. 14th,	'53.
Freeport to Warren,	25 "	Jan. 9th,	'54.
Warren to Scales Mound,	14 "	Sept. 11th,	'54.
Scales Mound to Galena,	12 "	Oct. 30th,	'54.
Mendota to Freeport,	62 "	Feb. 1st,	'55.
Galena to Dunleith,	17 "	June 12th,	'55.

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CHICAGO BRANCH, Chicago to Centralia	250 miles.		
Chicago to Calumet,	14 miles,	May 15th,	'52.
Calumet to Kankakee	42 "	July 11th,	'53.
Kankakee to Spg. Creek,	31 "	Dec. 2nd,	'53.
Spring Creek to Pera,	22 "	May 18th,	'54.
Pera to Urbana,	20 "	July 24th,	'54.
Urbana to Mattoon,	44 "	June 25th,	'55.
Mattoon to Centralia,	77 "	Sept. 27th,	'56.

250

During the time Col. Mason has been engaged in this work, single handed as it were, as Chief Engineer of the Illinois Central, Schuyler, Burrall, Griswold and Osborn have one after the other held the Presidency; Ketchum, Burrall, Edgar and Perkins the Treasuryship; Alosfen, Bunce and Ackerman have been Secretaries; while Neal, DuPuy and Wilson have had charge of the Land Department, and Wyman, Van Nortwick, Comstock, Done, Clarke and Watson have acted for greater or less lengths of time as Superintendents of the road, and the Railroad System of Illinois has expanded from 98 miles of strap-rail, May 1851, to 2,400 in October 1856.

Meantime Chicago has increased its population from 31,000 to 110,000, and the State of Illinois from 875,000 to 1,500,000. The export grain trade of Chicago has swelled steadily year by year until it equalled 15,750,000 of bushels last year, and promises to reach 20,000,000 of bushels in 1856. The import trade in lumber has increased in a corresponding ratio, and was equal to 326,000,000 feet in 1855, and gives every indication of touching 450,000,000 for the year 1856.

In this brief statement of events we omit giving an account of the natural obstacles presented in a country comparatively new, to the construction of a line made at right angles to the movement of trade and emigration; we will allude only to the vindictive opposition of jealous towns and belligerent cities to the location of the line and construction of the road: we shall not enlarge on the flood and fevers of the two first years, nor the cholera of the third, nor the cholera and money-panic combined of the fourth, but leave these matters to a more minute and longer history of the road.

Col. Mason leaves the Illinois Central in the prime of life and manly vigor. He has acquired since his residence with us the confidence and esteem of all ranks and conditions of men, and we think it would be difficult to name another enjoying so wide a personal popularity in the State of Illinois, and especially a popularity founded on those graces of mind and heart which distinguish him even among high-minded Christian gentlemen.

Col. Mason is at present engaged in building the Dubuque and Pacific Railroad, the pioneer railroad of the rapidly growing city of Dubuque, and in several other minor enterprises. He will, we venture to predict, take a leading part in some of those great schemes of Pacific Railroad improvement, which seem to be slowly rounding into form, and to give evidence of exceeding the largest of

the present, as much as these the least of the past.

At this time the Illinois Central holds a position before the financial and railroad world sufficiently high and distinguished to confirm the sagacity of the most sanguine of its original projectors, and to justify the assertion that it is "the most splendid enterprise of modern times."

This road may be said to have solved the problem of the successful and profitable cultivation of the entire prairies of the State, and the solution seems to threaten a revolution in agriculture, almost equal to that of cotton manufacturing by the introduction of machinery and steam power. As a consequence, the Illinois Central Railroad is commencing to a magnitude beyond all expectation. Its interests and business, promising to take a breadth and vastness that will outstrip all calculation and override all management, and the enterprise to embarrass rather by excessive vitality than any want of it, insures the cultivation of every acre of the prairies in the Free States, and renders this problem worth considering—whether, since such a double miracle has been wrought on the prairies of Illinois by railroads, a similar one in kind, though not in degree, notwithstanding local peculiarities, may not be wrought on the magnificent prairies and mineral lands of the Southwest.—*Chicago Press.*

The Silver Question.

The present state of the silver question and the excitement and alarm it is producing on the continent, have caused attention again to be directed to the bearing of the monetary laws of India. Up to 1835 gold was a legal tender in that country, but a measure was then passed for an exclusively silver standard. In 1841, however, the local government finding that gold was apparently becoming scarce and increasing in value throughout the world, authorised their collecting officers to receive it whenever it might be offered. This state of things continued for several years, the practical result being just the same as that of a double standard such as exists in France. But the gold discovered in Australia immediately produced an extraordinary disturbance. Considerable remittances soon arrived in India from that country, and it was, of course, found that as the value of this metal began to depreciate in relation to silver, the population availed themselves of the privilege of making their payments in it, and that it would thus rapidly displace silver in the various treasuries. Prompt measures were therefore necessary. If the new movement had been allowed to go on, the government would have been in the predicament of having to make all their payments in silver, since, silver being the absolute legal tender, every one could demand it from them, while all their revenue receipts would be in gold, and they would thus not only have been placed in an inextricable difficulty, but would have sustained all the loss from the relative difference daily extending between the values of the two metals. Hence the only question was, whether they should bring silver again into exclusive circulation by rescinding the authority granted to their officers in 1841 to receive gold, or at once substitute a gold for a silver standard, in harmony with the English practice, and establish a debased silver coinage merely as tokens and for convenience. The former was the course adopted. The Indian Government, taken by surprise at the threatened revolution in all their financial relations, and apparently apprehensive that they were about to suffer in some indescribable way from gold being poured into the country without limit, resolved to demonetize that metal. Accordingly, in December, 1852, a notification appeared, that from the 1st of January, 1853, no gold mohurs would be received in the public treasuries. On the arrival of this news in England, the injudicious features of the measure were pointed out. It was seen that it would tend to check the trade rapidly opening up between India and Australia, that it would increase and complicate the disturbances about to result from the gold discoveries, and that it must also be highly impolitic for a Government with a public debt

of £45,000,000 sterling, and heavy liabilities to a multitude of annuitants, to shut themselves out from the advantages which the new order of things was about to present to all who were laboring under fixed obligations. It was true that the argument against any arbitrary change in the standard required to be taken into account, since when debts have been contracted to be paid in one description of currency, no Government can have a right to alter the terms by decreeing that they shall be paid in another; but at that time, although silver was nominally the standard, gold and silver had both been virtually recognized as currency for many years, and the selection of either one or the other as the exclusive standard for the future could have been made without objection. These views, however, did not prevail. The India and China Association of London entered into correspondence with the India House on the subject, but the East India Directors restricted themselves to a general intimation that it should receive their watchful attention. The new order by which gold was effectually put out of circulation went into operation, and has prevailed ever since. The result has been exactly such as was anticipated. In return for the large balance of her exports over her imports India will receive only silver, and, unless preventive measures are adopted, she may thus perhaps in the course of years drain Europe of that metal. As far as she is concerned, the only evils produced are those originally predicted—namely, the obstructing her trade with Australia, and the large relative augmentation that will be created in the burden of her public debt. She also has to pay a more than relative disproportion of price for the silver she receives, owing to the expenses of suddenly collecting and shipping it in large quantities; but this is perhaps made up by the gradual increase in value of that which she has already obtained. Neither to England is the point one of vital importance. France and the other countries of continental Europe are chiefly concerned, and the question is how long will they persevere in the palliatives of raising their rates of discount or of buying specie at a loss before recognizing the measure to which they must come at last, and which was wisely adopted by the United States almost at the outset of the movement.—*London Times*.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 55 lbs. per yard, of Messrs. GUEST & CO. and BAILLY BROS. & CO.'s make, shipping from England during the present month for New York. For sale by J. BOORMAN, JOHNSTON & CO.,
90 Broadway, New York.

Sept. 25th, 1856.

2m

New York.

HUDSON RIVER BRIDGE. Notice to Contractors.

OFFICE OF THE HUDSON RIVER BRIDGE CO., AT ALBANY, September 25th, 1856.

PLANS and Specifications for the Superstructure of the Bridge to be erected by this Company across the Hudson river, at Albany, will be received by the Directors at any time within sixty days from the date hereof, at their office in the Exchange, in the city of Albany. The plans may be for a Superstructure of either Wood or Iron.

By the terms of the charter, the Bridge is to be constructed with a draw of sufficient width to admit the free passage of the largest vessels navigating the river, and at least two hundred feet in width; or two draws of at least one hundred and fifty feet each.

Information may be obtained at the office of the Company, as to the location of the Bridge; and all the particulars necessary to be understood by those who may wish to submit plans and specifications.

The Plans must be in detail, accompanied with an estimate of the cost of all the items.

The Company reserve the right to reject all the plans, or to adopt portions of any of those which may be submitted.

A Premium of Five Hundred Dollars will be paid for the plan which may be accepted by the Directors, or if portions of different plans be adopted, the premium will be divided in such manner as the Directors may deem proper.

By order of the Board

6140

G. L. WILSON, Secretary

SOUTHERN RAILROAD.



State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the superstructure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perch.

The cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the FIRST DAY OF NOVEMBER

NEXT, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track-laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 82½ miles, which will be divided into three subdivisions; the first of 21 miles, the second of 28 miles, the third of 33½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one-third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a-half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work exists, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst this National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

WM. C. SMEDES,
6138 President of the Southern R. R.

Railroad Iron.

1,000 TONS BEST QUALITY WELSH RAILS, "Erie" pattern, 56 lbs. per yard, now ready for delivery, for sale by

VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.

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900 TONS BEST QUALITY WELSH RAILS, T pattern, 56 lbs. per yard, now ready for delivery, for sale by

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October, 18, 1856.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 56 lbs. per yard, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by

VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 56 lbs. per yard, now due at New Orleans, for sale by

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NEW ENGLAND

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JOHN HOPPER, Agent and Attorney for the Company.

CAPITAL and accumulation of PREMIUMS to meet losses,

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One-half of the first five annual premiums on life policies loaned to insurers if desired; the remaining half may be paid quarterly.

The premiums are as low as those of any reliable Company.

This is the oldest American Mutual Life Insurance Company and one of the most successful.

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AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

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In addition to their usual business, this Company is prepared to take Fire Risks upon
Railroad Property of all Descriptions,

AS FOLLOWS:

1 They will name a premium at a low rate upon a policy to cover ALL the perishable property of any Railroad Corporation.

New York, August 27th, 1866.

The Railroad Companies desiring insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2 This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.
New York, July 21st, 1886.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILA DELPHIA, Penna. 321f

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**KASSON'S
LOCOMOTIVE EXPRESS**

FOR THE RECEIPT AND TRANSPORTATION OF

LOCOMOTIVES,

PASSENGER AND BOX CARS
OF ANY GAUGE

To the Western and South-Western States.

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49 Merchants' Exchange, Wall Street.

THE subscribers have formed a Co-Partnership under the name of **DRAKE & CARTER**, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Loaning Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be JAMES M. DRAKE and GALEN A. CARTER. EDWARD B. LITTLE Esq. has contributed Fifty Thousand Dollars as special partner.

D. & C. will occupy the Office No. 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)

JAMES M. DRAKE. GALEN A. CARTER.

Lord & Wright,

Counsellors at Law, Cincinnati, Ohio. 18f

WILLIAMS & PAGE,

No. 44 Water Street.

BOSTON, MASS.,

RAILROAD SUPPLYING AGENTS

and Commission Merchants, for the Sale of

Iron Rails, Chairs, & Spikes,

ENGINES, CARS, AND MACHINERY.

BUSH & LOBDELL's and other kinds of WHEELS,

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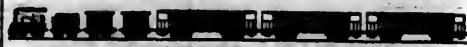
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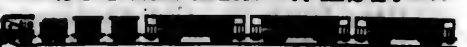
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GEORGE A. PARKER, Sup't.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HENSHAW, Civ. Engineer, of the practical organization of the New York and Erie Railroad. It shows in detail its entire physique in every department of the road. Such information in regard to one of the greatest railroads in the world must be deeply interesting to all connected with the management of such concerns. The impressions are on fine paper 12 1/2 inches. Price \$1 for thick or map paper and \$1.75 mounted on rollers. Those on map paper can be sent by mail.

Address JAMES W. HILTON,
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July 2nd, 1856

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 44.]

SATURDAY, NOVEMBER 1, 1856.

[WHOLE No. 1,072, VOL. XXIX.]

Masses. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, November 1, 1856.

Annual Report of the Railroad Commissioners for the State of New York.

The present age, impatient at the slow pace of the past, has advanced with such rapid marches to the achievement of so many and such brilliant results, by the wonderful discoveries in every range of art and science, and their immediate application to the useful, that it may be characterized not only as the age of progress, but also that of the practical.

It has been said that thought must be impregnated by thought to produce any practically useful effect. In the past, so many were the barriers opposed to its transmission that coincidences were limited, and great discoveries comparatively rare.

In the present, the railway, telegraph, and a prolific press, bring the thoughts of millions simultaneously to bear upon the solution of every question, thus generating comparisons, and resulting in countless discoveries and improvements.

The march of civilization in the old world, first followed the course of rivers, the margins of the pacific inland seas, and of the ocean shores.

With the discovery of the mariners' compass, the broad oceans which separate the eastern and western continents became the highway over which civilized population flowed to the latter, where, following the same general law, it spread itself along the lines of the water courses which penetrated the interior of the continent.

The successive improvements in naval architecture, and the application of steam to the propulsion of vessels, has now rendered every water

surface of the globe tributary to the transmission of property, population and the intercourse of nations.

The advance of civilization from the water courses into the interior was much retarded by the slow progress and limited extent of improvements in land transport.

The transfer of burthens from the backs of animals to wheeled carriages initiated the common highway, the improvements of which, until the present century, terminated in the paved road, with its better grades and more durable surface.

While animals furnished the only means of travel on land, their use was limited to the wealthy, and all improvements in that direction served rather to check than to stimulate travel among the productive classes. The last quarter of a century has developed the application of steam power to land carriages, and with the establishment of the modern railway traveling has become democratised by being placed within the means and reach of all classes of society.

With this facility of communication the interior becomes closely connected with the metropolis, while commodities, discoveries and opinions now circulate with a rapidity hitherto unknown.

That phenomenon of the age, the avalanche of civilization upon the solitudes of the West, where population is trebled in five years, is due to the combined effects of the application of steam to water and land carriage, the former furnishing a cheap transport to those fertile districts, and the latter a rapid communication with the interior of the same.

With business men, economy and rapidity of conveyance are the great desiderata—the first stimulates and increases consumption, thus adding to profit; the latter extends the range of business over a wide extent, and enables the merchant to make the granaries of the interior tributary to his warehouse.

A fertile interior demands a great commercial depot, which must be fed through the common roads, the great canals, and finally perfected by radiating lines of railway, which compels a tribute from the productions of an extended area.

The engineers of Europe started upon the principle that the track of a railway must be made perfectly rigid, for which purpose costly expedients were adopted—granite sills and cross-ties were placed upon macadamized beds lying below the reach of frost; iron and stone alone were used; wood was discarded.

American engineers at first followed their example; the cost of constructing railroads upon this plan was found so far to exceed the means of the country as to throw a serious barrier against their extension. Necessity soon forced our engi-

neers to adopt a cheaper method of construction, which being found superior in utility and economy, was introduced with unexampled rapidity throughout the land; an investigation of the advantages of this system being made by European engineers, has resulted in the rejection of rigid foundations, and the adoption of the elastic gravel road bed and wooden ties of the American system.

The railways of America and Europe are, to a great degree, constructed upon such different principles that the characteristics of each country must be regarded in determining the value of our system.

In Europe population seems to have reached its full extent, and an established location. Correlative with this, internal commerce and business has its definite direction, so that the projector of a railroad may in advance determine with considerable accuracy its future resources and value.

In America there is a continued increase of population, which has no precedent in the history of the world; equally remarkable is the constant wave-like movement of that population westward. These two causes lead to a constant change in the movements of trade. While the trade of the Atlantic cities is increasing, that of the interior is not only increasing but is multiplying with a rapidity which it is difficult to realize.

This constant expansion of population and commerce over the interior requires more capacities and extended transport facilities.

The common roads of the West are generally of the worst kind; the soil which is so fertile is, for that reason, unsuited for the construction of good ones; the paved roads of Europe would prove too costly, and to meet the urgent requirements of cheapness and a speedy conveyance, the railway becomes the only available substitute at hand.

Regarded in this connection, it will be borne in mind that our roads, while they develop the latent resources of the country, are constantly creating a new business; the establishment of a line of railroad is immediately followed by a rapid settlement of the adjacent country; the introduction of various branches of industry soon renders the road productive, and before the cheap structures are worn out or decay, the profits are sufficient to replace them with more durable ones.

Moreover, capital is too limited, and has too high a value to warrant the expense of European roads; the loss of earnings during the longer period required for the construction of more permanent works, and the accumulated interest, would preclude all possibility of a remunerative return.

There are other considerations in favor of the American railroad, which are alike applicable to the European; although these have hitherto been

presented to the Legislature, their importance may justify a recurrence to them.*

"The railroad, considered as a machine, is of recent invention. Its power, capacity and endurance have not even yet been fully ascertained. As the two former are developed, the substitution of improved forms for increasing its efficiency, either in capacity, speed or economy, becomes necessary, and these substitutions are more extensive than they are in other machines of older date or use."

"A brief statement of some of the most prominent of these substitutions may be alluded to before opinion is expressed of the allowance necessary to be made to the expense of railroads under this head."

"The superstructure of some of the earlier of the modern railroads was made by placing a thin flat bar of iron on longitudinal timbers which rested on stone blocks, protected from displacement by frost by filling the trenches below them with small broken stone. In some cases the iron bar was placed on continuous stone sills."

"The first change made was the substitution of bars of greater thickness; then succeeded the H rail, of nearly the present form, weighing fifty pounds per lineal yard, resting on longitudinal sills; subsequently the weight of iron rail was successively increased to sixty, seventy, and seventy-five pounds, cross-ties were used, which were placed on longitudinal sills, and finally these sills were removed and gravel ballasting substituted."

"The first cars used were coach bodies, of the ordinary form, placed on four-wheeled frames; afterwards the bodies were enlarged and the form changed, and finally the bodies were adapted to contain sixty passengers, placed on two separate trucks, attached loosely to the bodies so as to permit them separately to adapt themselves to the curves and inequalities of the track."

"The motive power at first was horses, and on steep inclinations stationary steam power."

"The first locomotive engine used weighed but six tons, and these have been successively increased to ten, sixteen, twenty and twenty-six tons, while on some of the freighting roads engines of forty tons weight (including the tenders) have been introduced."

"The foregoing list of changes shows how imperfect a machine the railroad was when many of them in this country were first commenced, and how many radical changes have been necessary in the construction of their ways and works."

"The present state of perfection in the machine, renders it probable that new substitutions of its important and expensive parts will annually become more rare, but yet it may be safely assumed that some expenses of this character will continue to accrue, and must be provided for in estimating the cost of our railroads or their value as an investment."

"The experience of some of the older railroads for a considerable period, proves that the substitutions of the character mentioned have cost a sum equal to from one to two per cent. per annum on the original cost of the road."

In earlier times the political economist regarded with dread the natural increase of population, and looked to the depletion occasioned by war, pestilence and famine as the remedy for so serious a calamity; but the economist of to-day regards the true wealth and prosperity of a country as dependent upon its ability to sustain and increase its population.

Western Europe presents an area of soil originally as productive, though of less extent, than our own country, but labor is there so borne down and burdened with the maintenance of expensive forms of government, and has so much to pay for interest upon old debts contracted for non-productive purposes, that little of what is produced goes to the direct compensation of the producer. Here industry is comparatively untaxed, and the laborer reaps a rich reward. Hence the great tide of immigration that is setting so steadily towards our shores.

* State Engineer's Report on Railroads for 1854.

The migration of the earlier ages was that of savage hordes upon civilization; the migration of the present day is that of industry, intellect and wealth upon the solitudes of the west. That of the past went forth to destroy and lay waste; that of to-day goes to create and build up.

The husbandman of Germany may harvest one crop on his native soil, migrate, plant and harvest another within the year, from his prairie farm beyond the Mississippi, meanwhile transferring himself and his family over one fourth the circumference of the globe.

The immigration has heretofore been mostly from the crowded fields and cities of western Europe. In addition to this we now have a massive migration of the Scandinavian race—not of the pauper and enfeebled classes, but of almost entire communities—with vigor, wealth and intellect, and with peculiar susceptibilities for assimilation with American habits—seeking a new home where it can reproduce its civilization. As the promised land to the Israelite, so seems to them the boundless West, with its genial climate, its fertile soil, and its ready access to the markets of the world.

Such an immigration, composed mostly of the strong, vigorously and healthy, will support itself by its labor the second year after its arrival, and after the third year will be adding to the general wealth by the profits of its toil.

Half a million of such emigrants will in three years add twenty millions of dollars to our wealth. Although a great part of the benefit of this will accrue to the western States, still a considerable portion must come to New York. The transportation of this emigration across her territory has already proved a source of profit to her railroads; in a few years the surplus products of their labor will be freighted back.

Compared with the amount of their products, the exports of the west have hitherto been limited; the rapid influx of both foreign and domestic emigration necessarily created a large home consumption, so that a considerable portion of the current of agricultural products has been westward to meet this demand. The current could only be diverted when the settlers themselves produced a surplus.

When this westward wave had rolled beyond their influence, the more easterly of the western States turned their surplusage towards the Atlantic. Thus far we have received but the drainage of the lakes, and the strips of country along the margins of the railroads and canals that discharge into them.

It will not be long ere the vast network of railroads which penetrate the interior districts, tapping the current of trade which will equal their utmost capacity.

The railroad having now become so important an element in developing the resources of the country, and in directing the currents of trade, it may be useful as well as interesting to trace its progress from the commencement up to the present period.

The date of the first introduction of the railroad is disputed. As now constructed, it is but the development of the improvements of the common road from the bridle path to the levelling of the rough, uneven ground, necessary for the rude wheeled carriages. As civilization and art progressed, these were improved to those splendid military paved roads which were carried to their perfection under the Romans, and in modern times by the McAdam roads, so extensively built in Europe, and moderately so in this country.

The Apian-way, and other paved roads of this period, were copied and introduced in England for the conveyance of large quantities of coal from the collieries to the sea ports. To retain the wheels on these pavements side guards were built, and then followed the substitution of timber ways with similar guards, with the horse path between.*—The rapid wear of the surface of these timbers led

* These may therefore be considered as the first railroads, having flanges on the rails instead of on the wheels.

to the covering of them with plates of cast iron.—The first wooden tram railways were brought into use at Newcastle in England a little previous to 1650.

About 1790 the edge rail of cast iron was introduced, and the wheels of the carriages provided with flanges. These flanged wheels, however, had been previously used to some extent on the roads laid with wooden rails.

Malleable iron rails were first introduced in 1808, at Cumberland, but were not generally used until 1820.

In 1811 there had been nearly 200 miles of iron tram railways laid down in Wales.

Previous to 1750 the wheels of railway carriages were made of wood, but about that time iron wheels were substituted.

Stationary steam engines were used in 1808 to haul the carriages up steep grades by means of ropes.

In 1759 Mr. Watts suggested the idea of a steam carriage, and in 1784 obtained a patent therefor.

In 1787 Oliver Evans obtained a patent in this country for a steam carriage, and in 1804 built a locomotive dredging machine, which traversed the streets of Philadelphia for a mile and a half, and was then placed on a boat and its power applied to a wheel in the stern, which propelled the vessel.

In 1804 a locomotive engine was tried upon a railroad in Wales, but it was unsuccessful in consequence of the difficulty of obtaining sufficient adhesion upon the rail. This was remedied in 1811 by the application of the power to a rack or toothed rail.

The first railway which was opened for public traffic and the carriage of passengers was the Stockton and Darlington in 1825. The celebrated trial of locomotives on the Liverpool and Manchester railroad in 1829 resulted in determining the successful application of the locomotive engine to railway transport.*

The first canal built in Great Britain was in 1775. In 1829 there had been built in that country 108 canals, extending 2,682 miles, and costing \$150,000,000.

The Quincy railroad, built in 1827, was the first constructed in the United States. The Maunch Chunk, 9 miles long, was built in 1827.† The first passenger railroad was the Baltimore and Ohio, which was opened, with horse power, for 15 miles in 1830. The Mohawk and Hudson railroad was opened for public travel with horse power in the summer of 1831. The South Carolina railroad, commenced in 1830, was opened for public travel in 1832 for a distance of 62 miles.

Locomotives were first used in this country in 1831 on the Mohawk and Hudson railroad, and the next year upon the Baltimore and Ohio, and on the South Carolina railroad. The first engines were built by the West Point foundry, and weighed 4 tons, and ran 20 miles an hour.

On all of the railroads in the United States, there were in use, on the first day of January, 1856, 10,120 passenger, baggage and express cars, 38,961 freight cars, 2,825 gravel cars, and 1,115 locomotive engines.

The annual increase of railroads in operation in the United States will be seen from the following table:

	Miles.		Miles.
In 1828.....	3	In 1843.....	4,174
In 1829.....	28	In 1844.....	4,311
In 1830.....	41	In 1845.....	4,511
In 1831.....	54	In 1846.....	4,870
In 1832.....	181	In 1847.....	5,036

* The increased rate of speed which the locomotive attained at several periods will be seen from the following table:

In 1824 the locomotive ran	6 miles an hour.
In 1829 the locomotive ran	15 miles an hour.
In 1834 the locomotive ran	29 miles an hour.
In 1839 the locomotive ran	37 miles an hour.
In 1847 the locomotive ran	70 miles an hour.
In 1853 the locomotive ran	100 miles an hour.

† The Maunch Chunk railroad was built in 63 days at a cost of \$27,000.

Miles.	Miles.
In 1833..... 676	In 1848..... 5,265
In 1834..... 762	In 1849..... 6,197
In 1835..... 918	In 1850..... 7,350
In 1836..... 1,102	In 1851..... 8,856
In 1837..... 1,421	In 1852..... 10,878
In 1838..... 1,843	In 1853..... 13,315
In 1839..... 1,920	In 1854..... 15,511
In 1840..... 2,167	In 1855..... 19,338
In 1841..... 3,319	In 1856..... 21,440
In 1842..... 3,877	

The annual increase of railroads in operation in Great Britain will be seen from the following table:*

Miles.
Previous to December 31, 1843..... 1,952
June 30, 1844..... 2,148
June 30, 1845..... 2,441
June 30, 1846..... 3,036
June 30, 1847..... 3,816
June 30, 1848..... 4,252
June 30, 1849..... 5,447
June 30, 1850..... 6,308
June 30, 1851..... 6,698
June 30, 1852..... 7,076
June 30, 1853..... 7,512
June 30, 1854..... 7,803
December 31, 1854..... 8,054
December 31, 1855..... 8,297

The following table shows the length of railroads in operation, and the miles of surface and number of inhabitants to one mile of railroad, in the principal countries of Europe and North America.

NAME OF COUNTRY.	Miles of railroad in operation.	Miles of surface to one mile of railroad.	Number of inhabitants to one mile of railroad.
Great Britain and Ireland.....	8,054	15	3,411
Belgium.....	1,095	10	4,024
Germany and Austria.....	5,340	17	7,251
Prussia.....	2,290	48	7,131
France.....	2,480	83	14,400
Italy.....	170	797	132,353
Russia.....	422	4,740	142,915
Spain.....	60	3,038	236,934
Cuba.....	300	144	4,155
Canada.....	1,031	337	1,787
United States, east of the Mississippi.....	21,440	38	1,075
North-Western States.....	7,966	30	731
North-Eastern States.....	3,923	16	776
Middle States.....	5,044	20	1,300
Southern States.....	5,463	74	1,336
Western States.....	739	110	2,950
New York.....	2,615	10	1,327

The Legislature of the State of New York chartered the Mohawk and Hudson Railroad Company in 1826, and it was opened for public travel in 1830. In 1832 charters were granted to

* The railroads in Great Britain in 1855 consisted of 7,424 miles of the narrow gauge, 667 of the broad, and 206 mixed gauge.

The amount of ordinary capital was...£169,604,017
Preference capital was..... 52,818,026
Loan capital was..... 75,161,341

Total cost.....£297,583,284

The average dividend paid on ordinary capital was 3-12 per cent., on preference capital 4.92, and on loan capital 4.35 per cent.

The number of persons conveyed in 1855 was 118,595,135, and the receipts therefrom £9,525,205. The receipts from goods traffic were £11,982,394.

The working expenses, including rates, taxes and government duties were 48 per cent. of the receipts.

the New York and Erie, Troy and Saratoga, Hudson and Berkshire, Batavia and Buffalo, Lake Champlain and Ogdensburg, Auburn and Syracuse, Rome and Watertown, and the Ithaca and Owego railroad companies, and in the following year to the Utica and Schenectady, Whitehall and Rutland, and the Buffalo and Black Rock railroad companies, all of which have since been constructed.

In 1836, the Legislature granted a loan of the credit of the State to the amount of three millions of dollars, to aid in the construction of the New York and Erie railroad. In 1838, the Legislature granted similar loans to the Ithaca and Owego, the Canajoharie and Catskill, and the Auburn and Syracuse railroad companies, to the amount of \$637,700, and in 1840 to the Auburn and Rochester, the Hudson and Berkshire, the Tioga, the Tonawanda, the Schenectady and Troy, and the Long Island railroad companies, to the amount of \$648,000.

The sum loaned by the State to the New York and Erie railroad company was subsequently donated to that company, and several of the other loans have been cancelled by the failure of the companies to pay the principal or interest.

The following table will show the date when the several railroads of this State were opened for public travel.

In	Miles opened each year.
1831.. The Mohawk and Hudson. 17 miles... 17	
1832.. The Saratoga and Schenectady, 22 miles, and 1 mile of the New York & Harlem..... 23	
1833.. 1 mile of the New York and Harlem... 1	
1834.. The Ithaca and Owego, 29 miles, and 2 miles of the New York and Harlem... 31	
1835.. The Rensselaer and Saratoga, 25 miles. 25	
1836.. The Utica and Schenectady..... 78	
1837.. The Tonawanda, 44 miles; the Lewiston, 3 miles; 15 miles of the Long Island and 2 miles of the New York and Harlem..... 64	
1838.. The Hudson and Berkshire..... 31	
1839.. The Syracuse and Utica, 53 miles, and 2 miles of the New York and Harlem 55	
1840.. None.	
1841.. 46 miles of the New York and Erie, and 5 miles of the Long Island..... 51	
1842.. The Albany and West Stockbridge, 38 miles, the Auburn and Rochester, 78 miles; the Schenectady and Troy, 21 miles; 10 miles of the Long Island, and 6 miles of the New York and Harlem..... 153	
1843.. The Auburn and Syracuse, 26 miles; the Attica and Buffalo, 31 miles, and 7 miles of the New York and Erie... 64	
1844.. 52 miles of the Long Island and 12 miles of the New York and Harlem . 64	
1845.. The Cayuga & Susquehanna, 29 miles; the Buffalo and Niagara Falls, 22 miles; the Troy and Greenbush, 6 miles, and the Skaneateles & Jordan, 5 miles..... 62	
1846.. 8 miles of the New York and Erie.... 8	
1847.. 25 miles of the New York and Harlem. 25	
1848.. The Saratoga and Whitehall, 40 miles; the Oswego and Syracuse, 35 miles; 140 miles of the New York and Erie, and 29 miles of the New York and Harlem..... 244	
1849.. The Chemung, 17 miles; 59 miles of the New York and Erie, and 75 miles of the Hudson river..... 151	
1850.. The Northern Ogdensburg, 118 miles; the New York and New Haven, 14 miles; 78 miles of the New York and Erie; 18 miles of the Watertown and Rome, and 69 miles of the Hudson river..... 297	
1851.. The Canandaigua and Elmira, 47 miles; 128 miles of the New York and Erie, and 52 miles of the Water-	

town and Rome.....	227
1852.. The Buffalo and State Line, 69 miles; the Troy and Boston, 26 miles; the Plattsburgh and Montreal, 23 miles; the Sixth Avenue, 4 miles; 51 miles of the New York and Harlem; 20 miles of the Watertown and Rome, and 44 miles of the Buffalo, Corning and New York.....	237
1853.. The Albany Northern, 33 miles; the Troy and Bennington, 5 miles; the Troy Union, 2 miles; the Canandaigua and Niagara Falls, 99 miles; the Buffalo and New York City, 91 miles; the Rochester, Lockport and Niagara Falls, 77 miles; the Sacketts Harbor and Ellisburg, 18 miles, and 46 miles of the Buffalo, Corning and New York.....	371
1854.. The Syracuse and Binghamton, 80 miles; the Flushing, 8 miles; the Brooklyn City, 17 miles, and Third Avenue, 4 miles.....	109
1855.. 26 miles of the Black River and Utica, and 30 miles of the Potsdam and Watertown.....	56

Alexandria, Loudoun and Hampshire R. R.

The annual meeting of the stockholders of the Alexandria, Loudoun and Hampshire Railroad was held in Alexandria on Tuesday last. Lewis McKenzie, the energetic President of the road, submitted on behalf of the Board of Directors the fourth annual report, which furnishes a review of this great work of improvement from its commencement to the present time.

The report states that a subscription of \$75,000 or \$100,000 from the county of Loudoun would secure the early completion of the road to the Shenandoah river, and, indeed, to Winchester. Without it the company will be embarrassed for the requisite funds to prosecute the work between Clark's Gap and the river. The subscription by Clarke county is restricted to operate therein. The Board confidently expects Alexandria to aid to the extent of \$200,000 or \$250,000 in procuring the means to put the road in working order. This is argued with much ability and force. They have secured well situated depot grounds at Alexandria and Leesburg. The work under construction is divided into two sections, one in charge of Mr. R. G. Bowie, and the other under Mr. Randolph.

The Board annexes an able and highly interesting report from their Chief Engineer, C. P. Manning, of which the following is a synopsis:

Last year's report showed that ground had been broken upon sixteen of the forty sections between Alexandria and Clarke's Gap. The value of the graduation and masonry then executed had reached \$70,000. The value of the same kind of work done up to the close of the past year is \$238,364; from which deduct the first named sum and a residue of \$168,364 is given, or \$14,000 per month, which, though well applied, has not advanced the work to that stage of progress which was confidently hoped. The difficulties will be explained by the Board.

The work now in progress embraces the grading and masonry of twenty-nine of the forty sections already alluded to. Taking all the sections as one piece of work, the result is that nearly one-half of the graduation and masonry is already executed.

The thirty-sixth section terminates at Leesburg, and hence the division which has been made in the nine sections classed in the report.

To complete the graduation and masonry of these forty sections, it is estimated that at least \$305,000 will be necessary. The road could be sufficiently prepared for a track, and for temporary use, by the expenditure of \$250,000; but this plan of opening a railroad for public use is not deemed advisable.

The masonry of Goose Creek Bridge, the largest structure of the kind east of the Shenandoah river, is nearly done, and the arch bridge which

spans Sugarland Run is in a state of similar forwardness.

Hope is expressed that recent private subscriptions and the improved condition of the money market will soon permit the expenditure of at least \$25,000 per month. This would ensure the completion of the road as far as Clarke's Gap in one year. With this view the present forces on the line should be concentrated upon sections seventeen, twenty-seven and thirty-two. It is also desirable that the eastern terminal section be commenced forthwith.

The engineer commenced in May last to extend the permanent location of the road westward from the Shenandoah river, through Clarke county to the border of Frederick county, and thence to run a new experimental line through a portion of the latter to this latter place.

The length of the located line, from the east bank of the Shenandoah river to the west bank of Opequon creek, is a fraction less than twelve and one-half miles. The length of the experimental line from the latter named point to Winchester is a fraction over four and one-half miles—total seventeen miles and a fraction. The distance by actual measurement from Alexandria to Berryville is seventy miles. Winchester eighty and one-half miles.—*Winchester Republican*.

Land Grant to the La Crosse and Milwaukee Railroad.

The *Daily Wisconsin*, of the 14th inst., contains the following synopsis of the bill granting the public lands to the La Crosse and Milwaukee railroad company:

"We publish to-day the act of the Legislature conferring the North-western land grant on the La Crosse and Milwaukee railroad company. An examination will show that it is a fair and liberal law. While it will immensely develop the resources of the State, it is so liberal to the company that they will be able to obtain the large means to complete this immense chain of improvements. The distance from Madison to Columbus, via Portage city, to the St. Croix river, and from there thence to Bayfield, on Lake Superior, by way of Superior city, is about 475 miles. The amount of land the company will obtain will be about 1,500,000 acres, 1,000,000 of which, it is not extravagant to say, will be as good wheat land as there is in the Union. Population will soon flow along the proposed line of the road, and by the time the road is completed to the St. Croix river, the way business will make the road return a fair interest, for in our new and prolific country a farmer of the second year settlement is able to send considerable wheat to market.

"Our Eastern friends will observe that the La Crosse railroad is to pay 4 per cent. of its gross earnings to the State, to commence after 50 miles of the land grant road is completed. The Illinois Central is obliged to pay 7 per cent. Section 8 gives a very useful power to build steamboats, barges, &c., to complete their connections with other roads, &c., if the road should terminate at Prescott, at the mouth of the St. Croix river, this would be a valuable franchise.

"We have ten years' time to complete the entire chain of roads.

"The exemption of the road and its appurtenances from all taxes in lieu of the 4 per cent. State, county and village, except special sidewalk tax, is an important franchise, inasmuch as the Illinois Central law was drafted so obscurely on this very point that the counties are now trying to tax the road. Our exemption is clear and undoubted.—We note these differences so that Eastern capitalists, when we come in the market to borrow millions of dollars to carry on our road, will perceive that the security for repayment to the bondholder is as good as that of the Illinois Central, which in Europe is now considered the best railway security in America.

"We hope to see the road finished to the St. Croix river within three years, and meanwhile our St. Paul friends need build only 20 miles of rail to connect and run the Milwaukee cars into the

heart of the thriving city of Minnesota; and thence we will draw the business of that vigorous young State."

Financial Condition of France.

The report of the French Minister on the financial condition of France is a document that must be received at the present moment with a considerable degree of caution; for, although we have no desire to aggravate the financial difficulties which at present cause great embarrassment to the Government of our ally, we cannot blind our eyes against facts which present themselves to the world in an unmistakable form; nor do we intend to adopt the course pursued by some of our cotemporaries in thinking our own system of finance and banking as vastly superior to that of our neighbors. The relative positions of the two countries do not admit of an equitable comparison, because they represent states of things which are entirely dissimilar. That part of the report addressed to the Emperor which has reference to the state of French commerce speaks for itself, and on the whole is satisfactory, clearly showing the elasticity of the resources of the country under great emergencies; and the statements with regard to the revenue are equally encouraging; but these are not the points which are likely to embarrass seriously the Government of France. The difficulties to be encountered are spread over a wider field, and are, in the abstract, almost independent of the financial position of the Government, though they are certain to involve it in their consequences. France has engaged in a course of speculation which is so immense in its ramifications that it extends over a great portion of Europe. We do not accuse either the Government or the Bank of encouraging this evil, but the fact remains indisputable; and however willing we are to admit that the natural and industrial resources of France are very great, these gigantic speculations cannot be sustained without an adequate amount of moneyed capital for their basis. Have we any satisfactory evidence to show that these immense credits are placed upon a satisfactory foundation? Most assuredly not. If the speculative movements to which we refer had been confined to France alone, the danger would have been much less, and a remedy would have been far more easy of accomplishment; but they are scattered over the whole continent of Europe, in almost every conceivable form, and the day of reckoning is at hand, as must assuredly come in all such matters; and it is not improbable that some of the best institutions of France may suffer by the follies which have been committed. All eyes are now fixed upon the Bank of France, and those who have floated in the sea of speculation are looking to it for support or deliverance. How this is to be accomplished remains to be seen. If, however, the Bank is to be called upon to support that vast superstructure of credit which has been raised by the leading speculators of Paris, we think the result is certain. It will not be long possible to prevent the withdrawal of the principal amount of specie from its coffers, and with that a suspension of cash payments would become inevitable. But, looking at the condition of the Bank, independently of these speculations, there appears to be less cause for alarm. By the last return, which was on the 11th of September, the amount of bullion in the Bank was £9,432,000; and although this sum was less by £469,000 than the amount given in the previous return, it was considerably in excess of the amount held at the commencement of the present year. In the monthly return for January, the amount of specie was £7,984,000, and in February it was increased to £8,575,000; but this increase of £591,000 was sustained by purchases made by the Bank at a cost of £42,570 during the month; and the Bank has only been able to sustain its specie by similar means up to the present time, at a total cost for premiums paid which amount to £495,570. So long as France was engaged in an expensive war, there was some legitimate reason for its adopting this course to maintain its metallic resources; but to continue it to maintain an "exaggeration" of speculations, as they are termed,

must ultimately prove fatal to the Bank itself, and lead to the most ruinous consequences. The remedy, therefore, seems to be to separate itself from these transactions by a gradual process of liquidation, and restore that equilibrium between its specie and circulation which is necessary to maintain the credit of the institution. We cannot see that a suspension of cash payments can reasonably be suggested, unless a very unexpected diminution of specie be shown in the forthcoming return; and we are inclined to believe that such a suggestion can only proceed from a class of persons whose hope of support is placed entirely in the assistance afforded by the Bank. But as the report has been received with great confidence in certain quarters, it is necessary that the question should be fairly stated, and we think it would be a singular anomaly in the history of banking for a bank to suspend cash payments with eight or nine millions sterling of specie in its vaults. That the difficulties which threaten the Bank are formidable must be admitted, and that a financial crash would also involve the Government in its consequences; but whatever phase they may assume, it is evident that some restriction must be placed upon that spirit of speculative enterprise which, if not checked by a decided hand, may endanger even the stability of Napoleon's throne.—*London Morning Herald*.

New York and Boston (Air-Line) Railroad.

The adjourned annual meeting of the stockholders of this corporation was held at Ballou's Hotel, Woodsocket, R. I., on the 22d instant, for the purpose of electing a new board of directors, and of transacting such other business as might then legally transpire. This was one of the most numerous and animated meetings of the stockholders that has assembled for a long time past. Parties were present in considerable numbers from Boston and various points along so much of the line as passed through Massachusetts, from several points in Rhode Island, and from various locations in Connecticut—especially from Middletown and New Haven.

Upwards of half a million of dollars in stock were represented.

Hon. Charles R. Alsop, President of the company, presided.

After a complete discussion of the affairs of the company in almost every aspect, which was conducted with much good temper, for the space of several hours, the following gentlemen were elected Directors for the ensuing year, by a large preponderance of the votes present, namely: Hon. John Ross, of Toronto, Canada; Alex. M. Ross, Esq., of Montreal, Canada; Hon. John M. Wood, of Portland, Maine; A. B. Ely, Esq., of Boston, Mass.; Marshall S. Rice, Esq., of Newton, Mass.; Dr. Hiram Allen, of Woonsocket, R. I.; D. S. Whipple, Esq., of Pascoag, R. I.; Sam'l Russel, Esq., of Middletown, Conn.; Nathaniel Hasward, Esq., of Colchester, Conn.; and Wm. Adams, Esq., of Medway, Mass.

It was resolved that the Board should consist of thirteen members, the remaining three not elected at this meeting to be apportioned between New Haven, Ct., and the city of New York.

During the counting of the votes for Directors, several gentlemen from various points along the line between Woonsocket and Boston, expressed what they believed to be the prevailing desire of the people on this section of the route to see the work pushed forward with animation; and all of them gave good promise of assistance in the event of confidence in the enterprise being sustained and strengthened.

Much importance was attached to the value of influential names of gentlemen in Canada and elsewhere, and it was confidently hoped that valuable additions in this respect would be obtained from the city of New York. Towards the close of the meeting, committees of two persons in each township were appointed to raise such an amount of subscriptions as would insure the completion of the railroad to Woonsocket (about twenty miles) early next spring. This proposition was under-

stood to be so shaped that the parties along this part of the line who might subscribe as above stated, were to elect three trustees, who should take charge of the amount subscribed, and that said trustees should pay out said sum so subscribed, only for work done upon the road from the time of its resumption, and for no other purpose. — *Boston Advertiser*.

Ohio and Mississippi Railroad.

Crafts J. Wright, Esq., on behalf of the Ohio and Mississippi Railroad First Mortgage Bondholders, has notified the Trustees of the Ohio and Mississippi railroad that the bonds that have fallen due are unpaid, and that consequently the concern will have to be sold out to meet this demand. There is said to be danger that the immense investments made by Cincinnati to build the road will thus be entirely lost, and that many stockholders will also be sufferers. — *Cin. Gazette*.

Journal of Railroad Law.

When private property is taken from its original owners under the right of eminent domain for purposes of public utility, it can be taken only and strictly for those purposes. When those purposes terminate or are abandoned, the property reverts to the original owners. We have seen that mere consequential damage cannot be held a taking, for it affects only the use of property, it is but a restriction of the use of property by the sovereign power of the State and gives no claim to compensation. But when the action is such as to take away all beneficial use of the land it ought to be regarded as a taking requiring compensation.

But it is to be observed in all cases that if the easement be once abandoned and the property in the land revert to the owner in fee, then it is sacred and the public cannot touch it save on a new and formal appropriation.

The railroad company that secures a right of way across the lands of a citizen, secures it for the peculiar purpose for which it was incorporated and for that alone. So long as they exercise their right it is theirs, but when once they have abandoned it, it reverts to the original owner, and during the time of their occupancy they cannot prevent the owner in fee of the land from working it, from cutting timber, from removing soil, from enjoying the herbage, from digging the minerals if any there be therein, so long as he does it without prejudice to their right of way.

This doctrine is laid down in the case of *Blake against Rich*. N. H. Supreme Court. — (Not yet reported).

It was held by the Court, that the fee in land taken for the purpose of constructing a railroad under the laws of this State remains in the owner of the soil from whom the land is taken subject to the easement of the corporation as leased to them by the State. The exclusive right of property in the land, in the trees and herbage upon its surface, and the minerals below it, remains unchanged subject always to the right of the corporation to construct and operate a railroad over and through it as authorized by law.

But the right of the owner to the profits of the soil must be held subservient to the rights of the railroad company. Their interest is primarily to be protected and every thing incident to their right of way follows as a matter of course. All acts of the owner of the land to secure the profits of the soil must respect the prior claim of the railroad company to the occupancy of the pre-

mises. And where the right of way has been ceded by the owner reserving the right to the profits of the land, this reservation must be understood to secure such profits only as may be reserved without impeding or endangering the rights of the company. This point is discussed incidentally in a recent decision delivered in the English House of Lords.

Caledonian Railway Company against Sprot. — (Not yet reported.)

By the act of incorporation establishing this company, any proprietor was empowered in conveying his land to the company to reserve the minerals, but if he should afterwards work them, he must give security to the company that the railway should not be endangered or interrupted. Sprot bargained with the company and conveyed to them a tract of land, reserving the minerals with full liberty to work them, &c., subject to the provisions of the Act. For this conveyance he received a compensation from the company, but in his claim he did not include any estimate of loss by not being able to work the mines near or under the railway. Several years after he discovered a valuable mine under the railway, and finding that he could not work it without damage to the latter, called upon the company for compensation.

Held, reversing the decision of the Court of Sessions, that Sprot could not now claim compensation for loss or not being able to work the mine. The decision in this particular case as far as regards Sprot's claim to compensation in the premises may have lessened upon the technical independence of the contract. But the rights incident to a right of way are settled in the dictum of the Lord Chancellor in this case.

The conveyance of the surface of land for a particular purpose as for a house or a railway gives to the grantor an implied right of support sufficient for the object contemplated, from the soil of the grantor adjacent as well as subjacent. If no purpose is stated then such support as is reasonable for the land as it existed at the time of the grant.

Mobile and Ohio Railroad.

We are pleased to learn that the work on the northern portion of the Mobile and Ohio railroad is progressing rapidly. The company has made a purchase of two thousand tons of iron, which will complete the track from Columbus, Kentucky, to the Tennessee line; and, as the road-bed is now ready, there will be no delay in putting down the track, and consequently, the company will not lose over ten months' interest. The prospect is that, if ordinary progress be made in track-laying at the northern end, in Kentucky, there will be, before the close of next year, one hundred and forty miles in running order, which will leave only about one hundred and thirty-five miles between Mobile and Columbus, Kentucky, to be provided for.

From Mobile to Cairo the inhabitants are all interested in the success of this great enterprise, and if they would give in accordance with their ability, or even in proportion to the benefits which the completion of the road promises them, it would not stop one day for the want of means. This section now unprovided for, extends through the richest portion of East Mississippi, where the necessity of a railroad is deeply felt by the planters especially. The saving which a railroad would enable them to make, would in two or three years amount to a sum sufficient to build this one hundred and thirty-five miles. If they will devise some plan to raise their proportionate

share of the cost, the work will speedily advance toward completion.

The earnings of the road, now complete from Mobile to Macon, during the month of September last amounted to \$40,000; and it is expected that they will, during the present month, amount to over \$60,000. — *Mobile Planter*.

The Main Trunk Safe.

We learn that the Commissioners of the Atlantic and Gulf railroad met recently, in the city of Milledgeville; present, Hon. Charles Spalding, C. J. Munnerlyn, F. R. Young, Wm. Ponder, Hon. E. C. Anderson and Dr. James P. Screven.

The full sum necessary to secure the subscription of half a million from the State was subscribed as follows: \$200,000 by the city of Savannah, \$200,000 by the Savannah, Albany and Gulf railroad company, and \$200,000 in private subscriptions, chiefly from the counties of Decatur and Thomas.

Certified lists of subscriptions were made out and furnished to His Excellency, the Governor, in compliance with the requirements of the Act of Incorporation.

It was provided that after not less than thirty days' notice, an election shall be held in the city of Milledgeville, for nine Directors, under the supervision of the Commissioners, or any five or more of them. The stockholders will vote in this election either in person or by proxy, as may be desired. — *Sav. Republican*.

The Rights of Mortgagees of Railroads.

At the recent session of the Legislature of Wisconsin an act passed of great importance to the holders of railroad mortgage bonds of that State. The act stipulates:

First: That the mortgage shall cover real estate acquired and road constructed after the execution of the mortgage.

Second: That the rolling stock (when by the terms of the mortgage it is braced therein) is declared a fixture on the road, and covered by the mortgage.

Third: That the act is to apply to mortgages executed before as well as after its passage.

Fourth: That upon foreclosure the franchise passes to the mortgagees.

Louisville and Nashville Railroad.

The annual meeting of the stockholders of the Louisville and Nashville railroad was held at Louisville last week, and the Board of Directors was re-elected. It appears that upon the main stem thirty-one miles, extending from Louisville to the Rolling Fork, have been constructed and are in operation; and enough iron for one additional mile is on hand. Of this remaining part, 134 miles have been put under contract, and 21 1/4 miles have not been let. The 155 1/4 miles yet to be made will cost as follows:

Grading, masonry and bridges.....	\$1,900,000
Rail superstructure.....	1,630,000
Machinery.....	770,000

Total.....\$4,300,000

The gross value of the work done for the year ending September 25th, 1856, is \$191,780. — *Cin. Enquirer*.

Mineral Point Railroad.

The *Chicago Press* states that the equipment of the Mineral Point Railroad has been purchased, and is partly on the ground, the remainder being on the way. The track is being laid at the rate of over half a mile a day, and it is expected that in less than sixty days the work will be completed. In the course of the present week regular trains will be put on to run the first eighteen miles of the distance. The line of the road is from Warren, Ill., to Mineral Point, Wis., a distance of thirty-two miles. The cost is \$1,000,000. At Warren the road connects with the Illinois Central, which at Freeport connects with the Galena and Chicago. The contractors for the entire line are Messrs. Luther Beecher and Alvan Wilkins of Detroit.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,978,700	6,019,929	470,647	110,247	6	73
Androscog. & Kennebec	55	588,042	1,622,905	2,210,947	209,475	110,247	none	10
Kennebec & Portland	56	1,114,725	1,661,236	2,470,000	270,214	112,491	none	5
Portl., Saco, & Portsmouth	51	1,387,000	119,237	1,486,327	233,234	120,534	6	86 1/2
Boston, Concord, & Montreal	93	1,808,093	1,059,512	2,771,310	336,221	143,665	14	14
Cheshire	53	2,083,926	899,318	3,170,687	336,221	143,665	6	74 1/2
Concord	35	1,500,000	8,242	1,412,057	336,221	143,665	2 1/2	59 1/2
Northern, N. H.	82	2,748,400	none	3,016,633	370,529	138,290	2 1/2	59 1/2
Con't & Passumpsic Riv.	61	1,048,148	787,008	1,780,062	132,077	66,173	none	4
Norland & Burlington	120	2,293,376	2,662,396	6,378,428	384,971	140,373	none	1 1/2
Vermont Central	117	6,000,000	3,550,236	8,463,366	820,119	214,788	none	53
Rutland & Lowell	27	1,830,000	325,635	2,155,635	489,764	140,373	7 1/2	77 1/2
Boston and Maine	83	4,076,974	150,000	4,179,535	854,426	339,000	none	7
Boston and N. Y. Central	74	2,240,309	1,518,671	3,463,199	60,417	8,740	none	6 1/2
Boston and Providence	35	3,160,000	359,132	3,677,154	558,671	219,689	none	82 1/2
Boston and Worcester	68	4,500,000	655,428	4,865,499	1,008,004	404,461	5 1/2	40 1/2
Cape Cod	47	681,090	280,598	997,252	119,221	65,527	5 1/2	40 1/2
Connecticut River	52	1,691,110	278,241	1,802,244	280,653	103,787	3 1/2	40 1/2
Eastern, Mass.	60	2,583,400	2,947,737	4,021,616	647,281	305,906	none	74
Fitchburg	57	3,540,000	153,700	3,765,998	681,163	225,071	7 1/2	74
North-Eastern	30	800,242	225,535	968,621	In progr.	56,538	6 1/2	83
N. Bedford and Taunton	21	600,000	none	600,000	198,491	65,738	6 1/2	83
Old Colony and Fall River	87	3,015,100	202,650	3,362,949	285,726	87,313	none	6 1/2
Vermont and Mass.	77	2,232,541	1,033,670	3,209,727	1,689,673	630,013	7	89 1/2
Western, Mass.	158	5,160,000	5,968,420	10,495,906	294,750	75,760	2 1/2	42
Worcester and Nashua	46	1,141,000	205,665	1,346,665	311,450	138,057	70	18
Providence and Worcester	43	1,610,020	335,461	1,806,696	370,012	152,799	10	18
Hartford and N. Haven	72	2,350,000	939,000	3,313,933	268,082	119,611	none	10
Hart'd, Prov. and Fishkill	122	2,008,110	2,030,665	4,060,969	339,196	71,427	none	10
Housatonic	110	2,000,000	414,240	2,414,240	220,459	93,765	none	10
Naugatuck	57	1,081,800	624,244	1,680,723	884,306	338,577	25	25
N. York and N. Haven	62	3,000,000	2,376,803	5,376,803	88,007	30,318	none	25
N. Haven and N. London	50	738,258	735,165	1,450,318	124,044	48,430	none	25
N. London, W. & Palmer	66	800,000	1,073,973	1,694,363	104,236	88,458	2 1/2	25
Norwich and Worcester	66	2,122,800	873,489	2,996,289	171,716	9,904	none	25
Albany Northern	32	439,005	1,625,098	1,640,695	In progr.	9,904	none	25
Black River and Utica	35	643,330	317,569	2,819,099	172,478	69,333	none	25
Buffalo, Conn. and N. Y.	100	1,487,874	1,601,183	3,401,868	198,392	31,896	none	25
Buffalo and N. Y. City	92	798,439	2,637,849	3,401,868	198,392	31,896	none	25
Buffalo and St. Line	99	1,800,000	1,040,000	2,494,364	679,750	345,763	10	25
Canandaigua and Elmira	47	434,111	922,392	1,275,796	174,089	69,506	none	25
Canandaigua & Niagara F.	98	1,315,000	2,279,854	3,496,832	135,433	48,469	none	25
Cayuga & Susquehanna	35	687,000	506,698	1,193,698	181,027	60,948	28 1/2	28 1/2
Hudson River	144	3,755,466	9,250,362	12,735,398	1,012,057	116,462	none	28 1/2
Long Island	95	1,874,148	608,949	2,483,097	301,793	116,462	none	28 1/2
New York Central	634	24,154,580	14,462,742	28,523,913	6,553,983	3,162,120	8 1/2	89 1/2
New York and Erie	404	10,923,365	15,128,608	26,051,973	6,553,983	3,162,120	8 1/2	89 1/2
New York and Harlem	139	6,717,100	4,069,769	8,758,203	1,635,577	234,126	14 1/2	14 1/2
Northern, N. Y.	118	1,833,022	4,409,874	5,476,714	520,163	136,754	none	1
Oswego and Syracuse	35	399,000	210,681	723,683	126,540	59,982	3 1/2	3 1/2
Potomac and Watertown	29	467,200	294,189	749,683	In progr.	82,600	none	7
Rensselaer & Saratoga	35	610,000	140,000	896,428	241,100	21,099	none	7
Saratoga and Whitehall	48	500,000	595,800	1,095,800	159,484	25,503	none	7
Syracuse & Utica	30	768,309	1,578,804	2,274,777	169,484	25,503	none	7
Troy and Boston	27	437,830	787,079	1,109,222	169,484	25,503	none	7
Watertown and Rome	97	1,370,378	700,979	2,065,063	404,874	173,474	3 1/2	75
Boliver Delaware	64	1,000,000	1,619,000	2,619,000	101,556	75,434	none	12
Camden and Amboy	94	3,000,000	1,407,209	4,407,209	961,941	106,080	12	124
Camden and Atlantic	60	399,330	1,523,131	1,726,461	801,514	500,747	10	118
New Jersey	30	4,842,850	900,000	5,742,850	398,728	171,403	6	6
New Jersey Central	63	2,000,000	2,064,176	1,636,550	229,341	94,267	6	6
Morris and Essex	53	1,157,505	375,000	1,988,217	Recently opened.	52,450	6	6
Albany Valley	44	1,637,867	842,564	3,540,000	219,253	69,994	6	6
Oatway, W. & Erie	69	1,700,000	1,940,000	1,191,832	146,381	69,994	6	6
Cumberland Valley	56	1,099,500	12,211	6,022,687	528,911	259,263	6	80
Del. Lack. & Western	109	3,061,622	3,884,702	6,022,687	528,911	259,263	6	80
Erie and North East	26	600,000	180,000	760,000	99,632	53,335	10	10
Philad. & Sunbury	33	600,000	1,200,000	1,348,811	99,632	53,335	10	10
Little Schuylkill	28	2,006,100	546,222	3,407,615	363,301	259,930	9	9
Northern Penn.	19	2,930,856	731,492	3,287,073	328,728	171,403	6	6
Pennsylvania	206	12,565,525	7,619,096	18,435,459	3,533,333	1,829,277	6	98 1/2
Phil. and Reading	96	11,030,309	7,438,800	19,004,180	4,321,793	2,593,915	10	77 1/2
Phil. W. & Baltimore	98	5,512,506	3,032,008	7,979,466	442,440	371,124	9	45
Phil. Germ. & Norristown	38	999,250	376,800	1,274,160	206,981	113,448	9	59 1/2
Pittab. & Connelleville	147	1,339,601	111,493	1,369,630	In progr.	87,124	9	59 1/2
Sunbury and Erie	206	2,003,740	292,898	2,075,580	In progr.	253,500	3	56 1/2
Williamport and Elmira	78	1,500,000	2,192,364	3,464,454	503,800	253,500	3	56 1/2
Baltimore and Ohio	392	13,105,000	9,670,491	26,031,507	3,711,423	1,601,000	8	86 1/2
Washington Branch	41	1,656,000	25,000	1,650,000	5,444,738	558,427	282,182	6
Northern Central, Md.	84	1,800,000	2,630,000	4,430,000	729,658	In progr.	111,863	none
North-Western Va.	166	413,583	4,816,073	2,764,047	211,860	111,863	none	68
Orange and Alexandria	97	1,457,800	639,622	2,739,362	123,466	68,710	none	68
South Side	123	1,671,700	280,000	914,896	In progr.	68,710	none	68
Pittab. & Steubenville	82	1,221,277	1,051,248	1,484,516	379,366	72,391	none	68
Virginia Central	138	2,500,000	999,780	3,499,780	256,290	126,329	none	68
Virginia and Tennessee	149	2,000,000	3,200,000	3,200,000	316,300	144,662	none	68
Richmond and Danville	22	708,100	256,048	1,148,054	151,947	73,234	none	68
Richmond & Petersburg	130	1,000,000	736,006	1,708,169	232,172	120,212	none	68
Rich'd, Fred. & Potomac	63	769,000	158,602	1,009,115	263,874	123,661	4	4
Petersburg and Roanoke	228	4,000,000	4,235,000	8,235,000	Recently opened.	151,004	none	68
North Carolina	171	1,070,775	1,739,989	2,330,877	329,800	151,004	none	68
Wilmington & Manchester	97	973,300	120,673	1,135,451	173,928	103,392	2 1/2	2 1/2
Raleigh and Gaston	109	1,201,000	380,000	1,719,048	291,219	138,776	6	6
Charlotte and S. Carol.	165	1,293,464	968,800	1,999,080	214,965	206,774	6	6
Greenville & Columbia	208	4,188,020	2,731,545	7,133,848	1,585,991	883,402	9	9
South Carolina	37	179,842	225,000	1,092,222	251,076	161,108	7 1/2	7 1/2
Atlanta and La Grange	211	4,156,000	960,991	4,416,991	1,068,202	560,350	7 1/2	7 1/2
Georgia	191	5,838,149	none	3,838,140	1,250,670	645,774	9	9
Georgia Central	102	1,280,580	167,712	1,647,043	350,802	96,104	10	96
Meigs and Western	116	1,274,000	664,810	1,929,416	249,128	113,824	8	8
Memphis & W. Point	116	1,274,000	664,810	1,929,416	249,128	113,824	8	8

U. S. GOVERNMENT SECURITIES.

Loan, 6 per ct.	OFF D. PER CT.	ASKED PER CT.	Loan, 6 per ct.	OFF D. PER CT.	ASKED PER CT.
Do. 6 do.	1856-102	1862-112	Do. 6 do. comp.	1868-118	1868-118
Do. 6 do.	1867-118	118 1/2	Do. 6 do. Tex. ind.	1869-107	118 1/2

STATE SECURITIES.

Maine, 6 per ct.	1860-104 1/2	103	Indiana, 6 per ct.	1869-118	118 1/2
Massachusetts, 5 per ct.	1859-98 1/2	99 1/2	Do. do. pref. 5 do.	1869-118	118 1/2
Do. 5 do.	1860-104	107	Kentucky, 6 per ct.	1869-118	118 1/2
New York, 6 per ct.	1860-104	107	Louisiana, 6 do. cp. long.	1870-106	106
Do. 6 do.	1864-109	110	Maryland, 6 do. cp.	1870-106	106
Do. 6 do.	1866-110	113	Do. 5 do. cp.	1870-106	106
Do. 6 do.	18-73-114	115 1/2	Missouri, 6 do. cp.	1872-98 1/2	98 1/2
Do. 5 1/2 do.	1860-101 1/2	101 1/2	N. Carolina, 6 do. cp.	1873-93 1/2	93 1/2
Do. 5 1/2 do.	1865-101 1/2	101 1/2	Ohio, 6 do.	1868-100	100
Do. 5 do.	1858-100	102 1/2	Do. 6 do.	1868-101 1/2	101 1/2
Do. 5 do.	1866-102	104 1/2	Do. 6 do.	1870-105	105
Do. 4 1/2 do.	1858-99-64	100	Do. 6 do.	1875-105	105 1/2
Alabama, 5 do. comp.	85	95	Do. 5 do.	1866-100	100
California, 7 do. comp.	1870-112	75	Penna., 5 do.	1867-84 1/2	84 1/2
Georgia, 6 do. do.	1872-110	99	Do. 5 do. cp.	1877-89	89
Illinois Int. Imp. 6 per ct.	1847-114	114	Tennnes., 5 do. cp.	1874-74 1/2	74 1/2
Do. 6 do. Int. est.	80	82	Do. 6 do. cp.	1874-91 1/2	91 1/2
Indiana, 6 do.	81 1/2	81 1/2	Virginia, 6 do. cp.	1866-91 1/2	91 1/2
Do.	80	83			

CITY SECURITIES.		Int'l payable.	Off'd	Asked	CITY SECURITIES.		Int'l payable.	Off'd	Asked
New York, 7 per ct.	1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	Divers	----	82½
Do. 5 do.	1858-60	May,	98	98	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	----	75
Do. 5 do.	1858-60	August,	88	89	New York, 6 per ct. cp. municip. X	Jan'y, July	Do.	----	82
Do. 5 do.	1860	Novemb.,	89	91½	Philadelphia, 6 per ct.	1876-'98	Jan'y, July	90	90½
Albany, 6 per ct. coup.	1871-'81	Feb'y, Aug.	98	101	Pittsburgh, 6 per ct. coup.	X	Divers	70	74
Allegany, 6 per ct. coup.	1871-'81	Jan'y, July	96	76	Quincy, 6 per ct. coup.	1868	Jan'y, July	73	74
Baltimore, 6 per ct.	1879-'90	Quarterly	97½	97½	Racine, 7 per ct. coup.	1873	10. Feb'y, Aug	----	85
Boston, 5 per ct. coup.	1879-'90	April October	97	99	Rocheater, 6 per cent. coup.	X	Divers	95	100
Brooklyn, 6 per ct. coup.	Long	Jan'y, July	99	100½	St. Louis, 6 per ct. coup.	Long	Do.	77½	78½
Cleveland, 7 per ct. cp. W.W. 1879	X	Do. do.	100	101½	Do. do. Municipals	X	Do.	80	81
Cincinnati, 6 per ct. coup.	X	Divers	88	89	Sacramento, 10 p.ct. cp. 1862-'74	X	Do.	70	74
Chicago, 6 per ct. coup.	1873-'77	Jan'y, July	88½	89½	S.F. & C. 7 p.ct. cp. 1865, pay. N.Y.	X	May, Novemb.	----	80
Do. 7 per ct. coup.	1880	Jan'y, July	100	100½	Do. 10 p. ct. cp.	1871	Do. do.	----	92½
Detroit, 7 per ct. cp. W.W. 1873-'78	X	Feb'y, August	100	102½	Do. 10 do. pay. N.Y.	X	Jan'y, July	----	92½
Idubque, 8 per ct. cp.	Long	March, Sept.	101	101	Do. 6 per ct. pay. N.Y. 1875	X	Do. do.	65	56
Jersey City, 6 p.ct. cp. W.W. 1877	X	Jan'y, July	91	96	Wheeling, 6 per ct. coup.	X	Divers	----	67½
Louisville, 6 per ct. cp.	1880-'83	Divers	78	80	Do. 6 p.ct. cp. Mun.	1874	March, Sept.	----	81½
Memphis, 6 per ct. coup.	1882-X	Jan'y, July	68	68	Zanesville, 7 do.	X	April, October	----	96

Northern Indiana at 76. The rise in the rate of interest has checked business in Manchester, but prices are not quoted lower, nor do manufacturers or spinners show any disposition to give way in the face of the activity and full rates ruling in the Liverpool cotton market. Cotton is quoted $\frac{1}{8}$ d. above last Friday's rates, with large sales. Those of the week will be about 64 bales. The upward tendency of the corn market has continued. Wheat may be quoted 1s. a2s. per quarter, and flour about 1s. per barrel dearer. Rails are quoted £7 15s., six months' credit, and could probably be bought a shade below that price for immediate delivery. Yours truly,

ROBERT BENSON & CO.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 29th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Oct. 28, 1856.

During the two days subsequent to our last advices of Oct. 20, our stock market was well sustained and was even looking up. The European news by steamer from Liverpool of 11th inst., telegraphed from Halifax, changed the current; the decline was at first very moderate, but to-day, upon publication of the details respecting the critical condition of the Bank of France according to the October returns, and upon the announcement here of a large specie export by the present steamer, the downward movement was hastened. The decline is particularly marked upon such of the railroad shares which have of late been largely speculated in, and which at the decline have been quite active during the week. The Illinois Central Construction Bonds, of which large amounts have changed hands, are very steadily held. Our banks continue to operate the contraction of their discounts; this occasions a very brisk demand for money, the want of which is perhaps felt as much by commerce in general as by the stock operators. Two or three failures have occurred among the produce and the dry-goods dealers.

State Stocks.—With quite a large business, Virginia 6s have been steady, and Missouri 6s declined $\frac{1}{8}$; Indiana 5s, with moderate sales, have advanced a fraction. City and County Bonds continue entirely inactive. Railroad Bonds.—The only transactions of any magnitude in this class of securities have been in Illinois Central Construction, which scarcely receded $\frac{1}{8}$ per cent.; also in Hudson, 3d mortgage with no fluctuations of importance. At private sale some Michigan Central, 1869, changes hands at about par. Also, some Ohio and Pennsylvania Income, and Galena and Chicago, 1st mortgage at some reduction of price, and Milwaukee and Mississippi, 1st section, at an advance. Railroad Stocks.—The following have been inactive: Erie at a decline of 2 per ct.; Reading of $2\frac{1}{2}$; Michigan Southern, $1\frac{1}{2}$; New York Central of 1; Cleveland and Toledo, $\frac{1}{2}$. Others which have been less animated have declined to a less degree. Money in very active demand, at 7 per cent. on call loans. Business paper more freely offered, 9a12 per cent., according to length and class. DE COPPET & CO.

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 29th inst.

NEW YORK, Tuesday, October 28, 1856.

There has been no important change in the tone of the stock market since the issue of our last report of 14th inst. The business of the fortnight has been to a moderate extent, and mainly of a speculative character in the shares and bonds of a few of the leading railroads. Purchases for investment continue on a very limited scale, and the orders from Europe are insignificant. The fluctuations in prices, from day to day, are slight, but the tendency is downward, and the quotations herewith are, in most cases, lower than those given in our last list. The rumored suspension of the Bank of France, and consequent advance of the French funds, produced a slight improvement,

which was lost on receipt of the subsequent advices. The leading feature of the market is an almost universal indisposition to purchase stocks in anticipation of an early advance proceeding, not from any want of confidence in their intrinsic value, but from an apprehension that the drain of specie and the scarcity and increasing value of money in Europe may lead to a corresponding stringency in this country. The banks in this city, as a measure of precaution, have adopted a system of curtailment which will probably be continued until their line of loans has been materially reduced, or the demand for gold has fallen considerably below the receipts. Thus far, the contraction has been attended with no serious inconvenience, nor any decided advance in the rates of interest, except on long mercantile paper. A desire on the part of capitalists to keep their funds, for the present, in an available position, produces a good supply of money on call, and the demand for some of the speculative stocks to meet maturing contracts, enables holders, occasionally, to obtain loans upon them without interest. The course of financial matters in London and Paris, during the next few weeks, will undoubtedly have a marked influence on this market; and should the accounts be such as to remove the existing apprehension, there is, apparently, nothing to prevent the market price of productive stocks from advancing rapidly to a level with their real value as investments. Of State stocks, the sales have been limited, at 91 $\frac{1}{2}$ a92a91 $\frac{1}{2}$, for Virginia 6s; 91 $\frac{1}{2}$ a92 for Tennessee 6s; 89a90 $\frac{1}{2}$ a89 for Missouri 6s; 81 $\frac{1}{2}$ a81a81 $\frac{1}{2}$ for Indiana 5s; 112 for Illinois Internal Improvement 6s of 1847; 70a70 $\frac{1}{2}$ for California 7s, 1875, and 72 $\frac{1}{2}$ for 1870's, and 106 $\frac{1}{2}$ for Ohio 6s, 1870. The fluctuations in Missouri 6s are caused by an occasional demand to meet contracts. Simultaneously with cash sales at 90 $\frac{1}{4}$, contracts at four months were made at 87 $\frac{1}{2}$. A new loan of \$1,250,000 of 6 per cent. stock, redeemable in 1874, was negotiated on 17th inst. by the State of New York, at 113 40 100a 117 26 100, or an average of 113 30-100. There were but few speculative bids, and the greater part was taken for banking purposes.

CAMMANN & CO.

American Railroad Journal.

Saturday, November 1, 1856.

Opening of the London and Port Stanley Railway.

This long expected event was duly celebrated on the 16th ult. We condense from the *Free Press* an account of the celebration:

The trains that arrived from the East and West, on Wednesday afternoon and evening, brought with them a large number of visitors desirous to take part in the celebration. Among these were citizens of Toronto and Detroit, Buffalo and Hamilton. The first arrival that was looked for was that of our friends from Cleveland, who had arranged to reach London via the Port Stanley railway by 8 o'clock in the morning, a deputation having gone down to the Port to give them a proper reception. The cars of the excursion train were entirely full, and did not contain less than nine hundred people, a large number of whom were ladies. Everything being in first rate order, the road smooth, the rails dry, and the grades easy, the train quickly attained an excellent speed and Port Stanley was soon reached, where a table was elegantly spread with suitable refreshments. Among the guests we observed Mr. J. B. Robinson, the Mayor of Toronto, Mr. Ermatinger, of St. Thomas, Mr. C. G. Brydges, Managing Director of the Great Western Railway, several Aldermen and Councilmen of the Toronto Corporation, Dr. Southwick, M. P. P., the Mayor of Detroit, and several other visitors of distinction. L. Lawraon, Esq., President of the London & Port Stanley Railway, occupied the chair.

After the viands had been duly discussed, the chairman rose and briefly alluded to the friendly

relations which now existed between the Province and the United States. He believed the opening of the various railways which had brought them into intercommunication with the States, and of which the London and Port Stanley line might be considered no inconsiderable one, would have the good effect of doing away with any of the mere national prejudices which might still be remaining.

J. B. Robinson, Esq., Mayor of Toronto, believed the excellent geographical position held by the city of London had already been fully remarked in the neighboring Republic, and he had no doubt the good opinion already formed of it would be augmented in their estimation by the opening of the new road. He believed, however, that the opening of the London and St. Mary's Railway would be looked to with feelings of still greater pleasure, especially in Toronto, as the latter city would then find herself in direct communication with her sister city of London. His Worship expressed his good wishes for the success of the London and Port Stanley Railway, and believed it would produce an ample and abundant return for the outlay on it.

C. J. Brydges, Esq., Managing Director of the Great Western Railway, being called upon, said that he could not, as a private individual, withhold his humble expression of admiration at witnessing what perseverance and determination could do, as shown in the success of the Port Stanley Railway. He was sure the interests of that Company could not be inconsistent with those of the Great Western, and he hoped a proper feeling of harmony would be established. He trusted the Grand Trunk would also encourage all arterial branches, to the benefit of both main and branch lines.

Edward Ermatinger, Esq., of St. Thomas, said the London and Port Stanley had been called a little road,—and so it was as compared with many others—but it must be remembered it was a main line to them. He had known London for many years, and was quite astonished at the proud pre-eminence to which she had now arisen.

The London and Port Stanley Railroad is about 27 miles long, and extends from Port Stanley, on Lake Erie, opposite Painesville, O., to London, C. W., where it intersects the Great Western Railway of Canada, about midway of its terminus—London being 110 miles from Windsor and 119 miles from Niagara Falls. It also connects, by steamers from Port Stanley, with the Lake Shore Railroad, extending from Buffalo to Toledo, and with the Painesville and Hudson Railroad now in progress of construction. The road will eventually be extended from London northward, via St. Mary and Mitchell, to Lake Huron, at the mouth of Saugeen River, and there connect with lake steamers.

Ogdensburg Railroad.

The Ogdensburg Railroad was sold at auction on the 21st October, at Malone, N. Y., for the nominal sum of \$3,000,000 to the trustees of the second mortgage (which is for just that amount,) for the non-payment of the interest coupons. This sale is, of course, subject to the claim of the first mortgage, which is for \$1,500,000. There is also a floating debt of about \$250,000.

Memphis and Ohio Railroad—Meeting of Stockholders.

The annual meeting of the stockholders in this road was held on Monday at the office of the Company in this city. After the reading of the Report, the high and just tribute of a unanimous reelection of the old members, was paid the Board of Directors, who, in turn, with like prompt unanimity, re-elected Robertson Topp President. The offices of Secretary and Treasurer were combined and Col. J. T. Trezevant, the efficient Secretary of the old board was elected to fill both.

The report exhibits a very satisfactory condition of the Company's affairs; and, under the auspices of the excellent officers who have control of it, we look forward to the vigorous and successful prosecution of the enterprise to an early completion.—*Memphis Bulletin.*

Finances of Virginia.

The Treasurer of the Commonwealth of Virginia has submitted the following synopsis of the financial operations of his department for the fiscal year ending September 30, 1856:

The aggregate balance in the Treasury on the morning of the first day of October, 1855, as per last annual synopsis.....\$21,323 85

To the credit of the following funds,

viz:—

To the credit of Commonwealth.....\$15,018 69

To the credit of Literary Funds.....3,056 76

To the credit of Board of Public Works.....43,847 47

Total.....\$61,822 92

Deficit on account of the Sinking Fund.....40,599 07

21,323 85

Received from the first day of October, 1855, to 30th day of September, 1856, inclusive:

On account of Commonwealth.....\$3,283,056 34

On account of Literary Fund.....198,163 23

On account of Board of Public Works.....2,498,684 86

On account of Sinking Fund.....1,665,895 49

7,683,123 77

Total.....\$7,655,799 92

Disbursed from first day of October, 1855, to 30th of September, 1856, inclusive:

On account of Commonwealth.....\$3,267,118 84

On account of Literary Fund.....163,507 64

On account of Board of Public Works.....2,536,955 39

On account of Sinking Fund.....1,614,169 86

7,581,751 73

Balance on hand, the first day of October, 1856.....\$73,372 04

To credit of the Commonwealth.....\$30,956 19

To credit of the Literary Fund.....87,712 85

To credit of the Board of Public Works.....3,576 94

To credit of the Sinking Fund.....1,126 56

\$73,372 04

New York Central Railroad.

Mr. J. V. L. Pruyn, of this city, left town for New York on Monday, and sailed with his family yesterday, in the Persia, for England. Mr. Pruyn goes out in behalf of the N. Y. Central R. R. Co., to establish in London an office for the transfer of the stock and securities of that Company. We understand he is charged with a similar mission for the Michigan Central and the Chicago and Burlington roads.

The stocks and securities of the leading railroad lines in this country, have now become so important, and command such attention in the old world, that arrangements to facilitate their transfer on that side of the Atlantic, are found advantageous both to the Companies and purchasers,

and are likely to be generally established.—*Albany Argus.*

Commerce of New York.

According to the official monthly returns of the Foreign Trade at New York, rendered by the Custom House, the imports of foreign merchandise for the calendar year, from the 1st January to the 1st October, amounted to....\$172,101,000

Add four weeks in October.....10,993,026

Total to date.....\$183,094,026

Against same time, 1855.....126,934,074

Increase to date.....\$56,159,952

The same table made the exports of domestic produce and miscellaneous goods, including foreign re-exported, from 1st January to 1st October.....\$60,637,000

Add four weeks in October.....5,587,962

Total to date.....\$66,224,962

Against same time, 1855.....53,705,160

Increase to date.....\$12,519,802

The same tables made the export of specie, direct from New York, from 1st January to 1st October, inst.....\$27,488,000

Add four weeks in October.....3,271,482

Total to date.....\$30,759,482

Against same time, 1855.....25,513,309

Increase to date.....\$5,246,173

Hamilton and Dayton Railroad.

HALF-YEAR'S BUSINESS.

Total earnings for transportation.....\$247,676

Total earnings from other sources, rent of equipment, tracks, &c.....17,824

Total earnings.....\$265,501

Deduct operating expenses of all kinds.. 119,729

Deduct interest on bonded and floating debt.....145,771

Leaves as net earnings applicable to dividend.....46,601

Which has this day been declared, 3 per cent., amounting to.....\$99,170

Leaving surplus.....\$75,453

Leaving surplus.....\$23,717

The Illinois Central Railroad.

We publish the following extract from a letter from a gentleman entirely familiar with the condition and operations of this company:

"The marked improvement in the sales and prices obtained for the Illinois Central Railroad Company's Lands the present month, compared with those for October, 1855, is well worthy of attention, indicating the increasing prosperity of the Company, and the enhanced value of Prairie property under the influence of Railroad communication. The company's sales in 1855, for the entire month of October, were 36,184 60-100 acres for \$441,494.89, averaging \$12.17 per acre. The first three weeks of this month 46,108 87-100 acres have been sold for \$749,470 21, an average of \$16.25 per acre. Every sale this season has been in single tracts to actual settlers.

The population is pouring in rapidly upon the Chicago Branch, upon which there is a largely increasing business from the Terre Haute and Alton and Great Western roads, and next year will, also, have a like result from the Peoria and Oquawka Railroad. There is hardly a question that three years hence the traffic will require a double track between Chicago and Urbana. Last year, in October, the cash for advanced interest, &c., amounted to \$18,115 48-100, and thus far the present

month to \$39,626. The interest on the bonds will be met, this year, from this source, and the operation of the Road, the business on which is now beyond the capacity of its Rolling Stock. The earnings show an increase of 60 per cent. over those of 1855. A gain of 40 per cent. next year will leave a fair dividend to the stockholders.

Cattawissa, Williamsport and Erie R. R.

At a special meeting of the Managers of the Cattawissa, Williamsport and Erie Railroad Company, held at Philadelphia, a report of its financial position, as well as of the condition of the road, was laid before them by the President. The present business of the Road shows a surplus over its expenses of an amount equal to the interest on all its bonds and about 8 per cent. on the market price of the stock; and with the rolling stock and machinery, contracted for and being delivered, it is believed that in a year's time the productiveness of the work will be so increased as to render this stock a regular dividend-paying investment. The company have no need of any further loans, and appear to be almost entirely out of floating debt. The whole amount of stock consists of Thirty-four thousand Shares at \$50...\$1,700,000 First Mortgage Bonds, 7 per cent.....1,500,000 Income Bonds, 7 per cent.....221,500 Ten per cent. bonds, negotiated.....192,500 Bills payable, back Coupons, and all indebtedness of the Company—to liquidate which the Company have \$155,000 of its 10 per cent Bonds on hand. 168,000

Total.....\$3,722,016

Its total annual liabilities will be:

Seven per cent. on \$1,921,000

Bonds.....\$120,000

Ten per cent. on balance of

funded and floating debt... 30,000

Net earnings of the road with present

trade.....\$180,000

Paper Currency.

ENGLAND, FRANCE AND THE UNITED STATES.

	Outstanding Bank Circulation.	Specie in Bank.
England.....	\$189,730,000	\$72,980,000
France.....	122,419,000	33,320,000
United States.....	165,838,000	60,072,000

BANKING—IN LONDON, PARIS AND NEW YORK.

	London.	Paris.	New York.
Capital..	\$92,515,000	\$18,250,000	\$56,047,000
Surplus..	20,513,000	2,596,000	7,060,000
Priv. deposits..	240,818,000	28,618,000	58,696,000
Public money..	88,795,000	20,282,000	13,816,000
Circ'lat'n..	107,420,000	110,395,000	8,649,000
Misc't's..	4,526,000		

Total mov'm't.....\$504,582,000 \$180,036,000 \$144,268,000

Loans & disc't.. 375,787,000 143,572,000 104,156,000

Sp'cie in bank.. 53,920,000 15,412,000 10,580,000

In Gov't Treas. Nil Nil 13,816,000

Public St'cks 74,875,000 13,596,000 5,514,000

Real est. & mis. 7,456,000 10,204,000

Total as above..\$504,582,000 \$180,036,000 \$144,268,000

COMPARATIVE SPECIE BASIS.

Mov'm't..\$504,582,000 \$180,036,000 \$144,268,000

Specie... \$53,920,000 \$15,412,000 \$24,896,000

Per centg. 10 3/4 8 1/2 17

Without meaning to question the intimate and mutually dependent money relations between this country and France and England, whose financial troubles are now the subject of peculiar concern, we deem it appropriate to present the foregoing carefully prepared figures as illustrating the relative banking position of the United States. The contrast certainly refutes the popular impression that our paper currency is excessive and our banking movement less conservative than that of England and France.

JOINT STOCK BANKS IN LONDON & NEW YORK.	
London.	New York.
Capital.....\$21,338,000	\$56,047,000
Deposits.....189,218,000	58,696,000

Together.....\$210,556,000	\$114,743,000
Loans.....\$210,557,000	\$104,156,000
Specie.....Nil.	10,580,000

Together.....\$210,557,000	\$114,736,000
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We omit the item of circulation in both instances. That of New York is secured, for the greater part, by Public Stocks. That of the London Joint Stock Banks is not reported separately from the Private and Provincial Banks. Altogether, the circulation authorised by the Peel Act of 1844, as amended in 1855, is \$37,625,000, without Bullion Security, Bank of England Notes being a legal tender. The British paper currency is therefore comprised in the issues of the

	Notes.	- Specie.
Bank of England....\$107,420,000	\$58,920,000	
Joint Stock.....32,395,000	Nil.	
Irish and Scotch....49,915,000	19,060,000	

Together.....\$189,730,700	\$72,980,000
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Missouri Railroads.

Below we give statements prepared by the Presidents of the Iron Mountain and North Missouri railroads, and addressed to the voters of St. Louis in view of influencing their action upon the call for further aid for these projects. We are gratified in being able to state that both applications have been responded to and that the sums asked for have been duly voted.—Below are the statements referred to.

Iron Mountain Railroad.

Statement of the Financial Condition of the
St. Louis and Iron Mountain R. R. Co.

Estimated cost of road.....\$4,100,000 00

RESOURCES.	
State bonds granted....\$2,000,000	
City and County bonds subscribed.....1,000,000	
Individual available....350,000	
	\$3,350,000 00

AMOUNT COLLECTED.	
State bonds.....\$993,000 00	
City and County St. Louis bonds....1,000,000 00	
Individual cash.....251,000 00	
Bonds.....75,000 00	

Total.....\$2,319,000 00

Amount expended to the 17th inst.
for road-bed, bridging and construction generally.....\$2,213,336 11
The amount yet due to the company of State bonds is.....\$1,007,000 00

To entitle us to these bonds, the company needs a further subscription of \$500,000, which will also enable us to finish the road.

The company pay off their contractors on the 10th of every month the amounts due under their contracts as the work progresses. There are no debts due by the company except some small demands incident to the progress of work of this character.

Eight-tenths of the road-bed is already finished. There are three large bridges on the road, the masonry of which is well advanced. The one on

the Maramec will be finished by the 1st of Jan'y, the other, (on Big River,) early in April. The tunnel on this side, and near Big River, of eight hundred feet, will be finished by the 1st of Jan'y. The balance necessary to prepare the road-bed for the rails, according to the estimate of our engineer, is \$480,000. The remaining expenditures will be for rails, which are already contracted for and ready for delivery at any moment demanded, track-laying, stations, ballasting, ties, rolling stock, &c. The whole road can be finished by the 1st of May next.

MADISON MILLER, President.
St. Louis, October 20th, 1856.

North Missouri Railroad.

The estimated cost of the North Missouri Railroad from St. Louis to the Hannibal and St. Joseph Railroad, a distance of one hundred and sixty-seven miles, exclusive of interest and discount, is.....\$6,012,508.70

The means applicable to the construction of the road are as follows:

State credit.....\$3,000,000	
City and County of St. Louis subscriptions....1,000,000	
Private and county subscriptions.....700,000	
\$200,000 of St. Louis county subscriptions will not be available before the 1st of April, 1858, but I hope the Legislature will loan us money or give us State bonds to anticipate it..\$4,700,000—	4,700,000

Deficit.....\$1,312,508.70
Add the sum asked of this county
and to be voted on to-day to our
means, and it still leaves us with
a deficit of.....750,000

\$572,508.70

This deficit, in my judgement, will be swelled to something over \$1,000,000 by the discount and interest paid on bonds, and for this deficit we must look to the counties along the line and to the State.

At the last session of the Legislature, when the railroad bill was pending, I asked that there might be granted to this road \$3,000,000 of State credit, one million of which was to be given unconditionally, and the other two millions on condition that this company should furnish one million. The interests of the railroad system at that time seemed to require that one million of this demand should be surrendered, but I have no doubt the Legislature to assemble this winter will give this company the sum then surrendered, and in addition, enough to complete this road not only to the Hannibal and St. Joseph Railroad line, but also to the boundary line of the State of Iowa, provided the counties on the line do their duty in increasing the subscription.

I feel confident that if this county votes the \$750,000 to this road we may rely upon getting, say \$50,000 more from St. Charles county, something more from Warren, from \$25 to \$50,000 from Montgomery county, \$50,000 from Audrain, \$50,000 from Macon, \$50,000 from Adair and \$50,000 from Schuyler, but without we set the example we need hardly expect these counties to render any further assistance than they have already done.

This road is now finished and equipped to St. Charles, a distance of nineteen and 2-10th miles, and only exceeds the original estimated cost \$22,000.

Should this county grant the aid now asked for by this company, I can promise that about the first of January next forty miles more of road will be completed beyond St. Charles, giving us a railroad through Northern Missouri of sixty miles, and by about the first of April next, the road will be completed to Mexico, in Audrain county,

which will give us a completed road of one hundred and six miles, and if the State meets my expectations in granting aid this winter, this road will be finished to its junction with the Hannibal and St. Joseph road within about 12 months from this time. From the Hannibal and St. Joseph road to the Iowa State line, it is only sixty-one miles. To build this portion of the road, the State has granted her credit to the extent of one million dollars, and will, doubtless, do whatever it is proper it should, to secure the early completion of this portion of the road. I entertain no fear of being unable to build the sixty-one miles of road when we have one hundred and sixty-seven miles completed.

In regard to the management of this road I have only to say that its affairs have been investigated by two committees, one appointed by the Legislature and one by the Governor of the State, and no fault was found. Its affairs are now being investigated again by the Board of Public Works recently elected, as will the affairs of all the railroad companies of this State to which State aid has been granted, as the law requires. We fear no investigation, on the contrary, we court it. Our books and papers are always open for investigation to those who honestly desire to do justice to all concerned, whether they are stockholders or not.

The Directors of this road are—

R. M. Renick,	Gerard B. Allen,
Thos. T. January,	John Hartnett,
A. Harper,	John D. Coulter,
Thos. B. Hudson,	W. S. Allen,
Arnold Krekel,	Jas. S. Rollins, of
Jno. J. Anderson,	Boone County,
N. B. Coates of Randolph County.	

The high character of these gentlemen is a guarantee to every stockholder and the State, that the means placed in their hands will be faithfully and judiciously applied.

The total receipts from all sources
have been, to the 1st of October....\$2,424,500
The total expenditures have been....2,533,367

Leaving an indebtedness of.....\$109,067
which our county subscription, falling due this fall, will more than pay.

An outlay of a little over \$400,000 will enable us to complete to Mexico, in Audrain county.

I have thus endeavored to make a statement that will enable every person to vote understandingly. I candidly desire the success of our railroads, believing the prosperity of our city to depend on it, and this alone prompts my efforts in their behalf.

ISAAC H. STURGEON,
President of North Missouri R. R. Co.

The Bergen Tunnel.—A Great Work.

As has been already stated, the Long Dock Company, chartered by the State of New Jersey, is cutting a tunnel, four thousand three hundred feet in length, through the Bergen Hill, about two miles from Jersey City, for the use of the New York and Erie Railroad,—the object being to afford a direct and independent approach to this city, for that great channel of travel and traffic; to secure adequate depot accommodations at the New York terminus of the road, with extensive warehouse and dock privileges for the transshipment of foreign bound freight; and especially to avoid the dangers of "Bergen Cut," arising from the number of trains passing at that point.

The tunnel is cut directly through a ledge of hard trap rock by drilling and blasting, and its construction is a very formidable work. It will be twenty-three feet in height and twenty-nine ft. six inches in width, affording ample space for two wide gauge tracks. It is estimated that 1,500 kegs of powder will be used in cutting through. There are eight perpendicular shafts or openings from the tunnel to the surface, varying in depth from 70 to 90 feet. In five of them the bottom has been reached, and the drift (tunnel) commenced. The others are nearly ready for tunneling. The eight shafts and two approaches will

present eighteen faces where the rock can be sailed, and with two sets of men for day and night, eighteen different gangs can be employed, numbering, in all, about 1,200 men. The present force is about 700 as a larger number could not now be advantageously employed. Near the opening of every shaft there is an engine of thirty-five horse power, to pump water, raise stone and inject fresh air. The large piles of stone near them show what has already been accomplished. So far as practicable, the debris is carried, by means of locomotives, to the proposed dock and depot ground between Jersey City and Hoboken, to assist in filling out the water front, which extends 1,180 feet, and will form the bulkhead for six piers, 800 feet in length. Four steam excavators are at work at this point.

The construction of this tunnel was commenced last July. The contract says the work must be completed by the 15th of December, 1857. James H. Mallory is the contractor.

The Liverpool and London Fire and Life Insurance Company, of which Mr. Sinton is the agent in this city, is one of the best foreign companies in the country. This company sustained heavy losses by the burning of Messrs. Newcomb & Brother's store and Messrs. Wallace, Lithgow & Co.'s warehouse. The losses were promptly adjusted as soon as exhibits of the same were produced to the agent.—*Louisville Journal*.

Bessemer's Process for the Manufacture of Iron.

We give below an extract from an English paper furnishing the latest information in reference to Bessemer's process for the manufacture of iron.

IRON BY BESSEMER'S PROCESS.—A sample of railway bars made at the Downley Works may now be seen at Mr. Bessemer's office by those who are curious in the matter. The rail is what is called a foot rail, weighing 60 lbs. to the yard, and originally made 22 feet long, but now reduced by successive sample cutting to 17 feet in length. Each length of rail was formed from a single ingot, 10 inches square, which was heated twice, and passed fourteen times through the rolls; both ingots experimented upon turning out thoroughly good rails. It must be evident that the labor thus expended was little more than half that usually employed in the production of a bar of the same form by the ordinary process, and we shall endeavor on a future occasion to give the exact difference in the cost of the two processes. So far as the quality of the bar goes, we think there remains nothing to be desired. We also have examined samples of tin plate, manufactured by Messrs. Phillip, Smith & Co., at the Dafen Tin Plate Works, Llanelly, and their appearance indicated a quality quite equal to that made from charcoal iron. We understand that specimens were submitted to the meeting of tin plate manufacturers, held at Gloucester on the 1st inst., and that a very large majority of those present agreed in bearing testimony to the excellent quality of the samples shown. We believe that Mr. Smith, the proprietor of the works above named, stated that he had never before produced tin plate so thin as the sample exhibited. The thinnest sheet iron now made is used in the manufacture of buttons, but some samples which were rolled at the Dafen Works have been shown to us, the substance being only equal to that of good writing paper. Thirty-two sheets of this material were rolled in one pile by successive doubling, but being red-hot at the time, some difficulty was experienced in separating the sheets one from the other. Notwithstanding this, some beautiful samples were obtained, equal in size to ordinary tin plates, and some of them—viz, those which came in contact with the rolls—present a beautiful black polish on the surface. The plates, at present, are mere curiosities, but we have no doubt that some use will very shortly be found for them, now their manufacture is comparatively easy. Nothing but the best iron could possibly

stand such a test as that to which it was submitted in the production of these plates. For ornamental work of various kinds, the material seems specially adapted; and we have no doubt but that the Russians, who have, at least since 1851, been familiar with the iron paper, can give us a hint as to various purposes to which it may be usefully applied.

Keokuk, Fort Des Moines and Minnesota Railroad.

This road is now open and running for five miles. Track-laying is pushed rapidly, and next month fifteen miles will be open, twenty-six miles in December, to Farmington, and to Bentonport, thirty-eight miles, in January, 1856, which will complete the first division.

Arrangements are in progress, and likely to be consummated, which will put under contract the second division to Eddyville, Wapello county, ninety-six miles from Keokuk, at once, and complete it by January, 1858. This will leave but sixty miles to be completed to Fort Des Moines. When the road is done, it will secure to Keokuk and St. Louis the trade of the most beautiful and productive valley in the United States.—*St. Louis Republican*.

Virginia Central Railroad.

This company have recently issued their twenty-first annual report, from which we learn that the receipts for the year ending Sept. 30th, have been—

From passengers.....	\$220,285.71
" freight.....	260,620.40
" mails.....	27,507.54
	\$508,413.65
Expenses of operating the road.....	268,576.47

Leaving as net earnings.....\$249,837.18
—or nearly 50 per cent. of the gross receipts.

This sum, if it had not been appropriated to the construction of road, would have been divided among the stockholders, after providing for interest on loans, and deducting a proper sum for depreciation of road and machinery.

The Board think the revenue of the next year may be safely estimated at \$600,000; and if the proprietors of the various springs, which next year can be reached with so much ease by this road, shall enlarge their accommodations, as their popularity will demand, they have no doubt the receipts would greatly exceed that sum. It is not an extravagant opinion, to suppose that the company lost, this year, \$20,000, for the want of accommodations for those who desired to visit the mountains last summer.

The road will be in operation by the 1st of July, 1857, to a point on Jackson's river, two miles above Clifton Forge, where it will connect with a good turnpike about thirty miles from the White Sulphur and Sweet Springs. When the valley of Jackson's river is reached, the great difficulties of the work will have been overcome, and the road will be accessible to the trade of a large and valuable portion of the western part of the State, besides bringing the Sweet Springs and White Sulphur within one day's ride for passengers from Petersburg, Richmond, Alexandria, Washington and Baltimore.

The Blue Ridge tunnel will be completed early next spring, and the cars will then pass through it, instead of passing over the top of the mountain, as they now do on the temporary track built by the company. The Engineer of the Board of Public Works reports only about 140 feet of the heading of the tunnel as remaining unfinished at

this date, and without some unforeseen accident, not at all likely to occur, that most difficult and magnificent enterprise will be completed by the 1st day of May, 1857. Col. Crozet says that "the drills from one side to the other are now heard very plainly."

As the public are laboring under very erroneous impressions in relation to the cost of the tunnel, it may not be needless to state, that the whole Blue Ridge road, reaching from the eastern to the western base of the Blue Ridge mountain, which is in process of construction on State account, comprising seventeen miles of track and three tunnels, besides the main one at Rock Fish Gap, of 4,270 ft., will be completed for about \$1,460,000. Of this sum the Rock Fish tunnel will have cost only about \$464,000. These sums are not only less than was expected, but the tunnels are believed to be below ordinary prices.

The perfect success with which the mountain track over the Blue Ridge has been operated for two years, without the slightest accident since it was regularly opened for public use, has encouraged the company to repeat the experiment at a point immediately west of the present terminus at Millboro'; where, by avoiding for the present one or two miles of the heaviest work on the whole line, the interest on the money thus saved, would, in two years, amount to the whole cost of the temporary track, which will not only serve to do all the business of the road until the Covington and Ohio road is opened, but will aid very much in the final construction of the road on its permanent location.

The following is an estimate of the cost now to be incurred in getting the road into operation to Jackson's river, and all other payments which will fall due by the 1st of January, 1858:

Engineer's estimate of bridging, unfinished grading, laying track, including cost of ties, turntables, engine-house and depot.....	\$221,965
Iron to lay from Millboro', including chairs and spikes.....	130,000
Whole cost of getting road into operation to Jackson's river.....	\$351,965
Amount of "twelve-months bonds," which may have to be paid.....	50,000
Bonds for "eastern extension,".....	20,000
"Bills payable," including notes due Messrs. Barring, for first purchase of iron.....	81,000
Interest payable from 1st Oct., 1856, to 1st Jan'y, 1858.....	113,000
	\$615,965

Means to meet the above amount.

Gross receipts from transportation, at the rate of \$600,000 per annum, from 1st October, 1856, to 1st January, 1858..	750,000
Deduct for operating the road one-half..	875,000
	\$375,000
Proceeds of State stock now on hand...	20,000
Proceeds of mortgage bonds of the company, sold on time.....	28,000
Payments to contractors in mortgage bonds and stock.....	169,995
Claims on the Board of Public Works for payments by private stockholders, not less than.....	60,000
	\$652,995

It appears, from the experience of this company, as well as that of many others, that the same section of country is everywhere steadily increasing the business which it furnishes to railroads, as

the advantages they offer to the various industrial interests in the country are daily more appreciated.

Memphis and Charleston Railroad.

The *Huntsville Independent* of the 6th says, the passenger train on the Memphis and Charleston railroad made its first run west of Tuscumbia. The train now runs regularly between eight and nine miles towards Memphis, where it meets the stages from Pocahontas. The cars will extend their trips as the track-laying progresses at both ends of the gap between Pocahontas and Tuscumbia. We are informed that the cars will be running through from Stevenson to Memphis by the 1st of February next.

Buffalo and Lake Huron Railroad.

Our road under the new company is being rapidly put in repair and running order. No needless expense or pains is being spared to have things just right. Capt. Barlow, the Managing Director, is using his best exertions to get everything systematically arranged. A first rate business can be done on this important line of road if it be well managed. As to freight, the traffic will be immense; and a large amount of through and way passenger travel may be procured by good arrangements as to punctuality, &c. Probably no man could be selected who would be as likely to render the road popular as Capt. Barlow, and we trust his praiseworthy efforts will be crowned with great success. Brantford must be very materially benefitted by this important road, and there is no doubt but that it will well pay the stockholders. We are informed that the road will be partially opened on Monday, the 20th inst., and that one train a day will be run each way from that date (until more extensive arrangements are entered into) from Buffalo to Brantford, and Paris, and three trains daily will run between Brantford and the Paris depot, to connect with the Great Western trains.—*Brantford Courier*.

Sackett's Harbor and Saratoga Railroad.

At the recent election for Directors of the Sackett's Harbor and Saratoga railroad company, the following named gentlemen were duly elected for the ensuing year, viz: Elisha C. Litchfield, Leroy M. Wiley, Lowell Halbrook, Chas. A. Macy, L. D. Coman, John R. Briggs, Electus B. Litchfield, Edwin C. Hamilton, Samuel J. Beals, and Benjamin Brandreth, of New York; Geo. Tibbets, of Troy; Daniel R. Goodwin, of Oneida; L. Paddock, of Watertown. The Board have since organized by the appointment of Elisha C. Litchfield, President; John R. Briggs, Vice-President; Charles A. Macy, Treasurer; Edmund D. Saxton, Secretary; A. F. Edwards, Chief Engineer; and John B. Mills as Consulting Engineer and Superintendent of Operations. A large amount of work on the eastern division of this road was done in 1854, when the work was temporarily suspended, owing to the non-fulfillment upon the part of the State of New York of the land grants made to the company.—This has now been fully accomplished, and the company, own in fee over 500,000 acres along its line, have provided for all its floating debt, and have procured entirely among the stockholders a subscription for \$1,000,000 of its first mortgage bonds, the first call upon which is this day announced, preparatory to the immediate resumption of the work by the contractors.

Railroad Iron.

AT NEW ORLEANS.

1,000 TONS Rails, "Erie" pattern, 58 lbs., best Welsh make, for sale at New Orleans.
VOSE, LIVINGSTON & CO.,
9 South William st., N. Y.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 John St., N. Y.

SOUTHERN RAILROAD.

State of Mississippi, City of Vicksburg,
OFFICE OF THE SOUTHERN R. R. CO.

THE SOUTHERN RAILROAD COMPANY invite proposals from contractors for the clearing, graduation, masonry, trestling and bridging, necessary to the complete preparation for the superstructure of the road-way of the eastern division of their road.

Also, for furnishing the cross-ties, and for the track-laying, with any incidental work necessary.

And for all other work, stations, platforms, depots, &c., required in the thorough completion of the road for effective operation.

The graduation amounts to 770,000 cubic yards of excavation, and 665,000 cubic yards of embankment.

The trestling to 4,000 feet.

The bridging to 600 feet.

The masonry for culverts amounts to 10,000 perch.

Min cross-ties to 180,000.

Proposals, sealed, endorsed, and directed to the undersigned, will be received until the FIRST DAY OF NOVEMBER NEXT, and will be, at the option of bidders, either for—

I. The entire work of construction, completing the road ready for the iron;

II. The work of construction, exclusive of cross-ties and track-laying;

III. For each item of work, entire and separate;

IV. For the grading of either, or a specified number of sections, of one mile each;

V. For the cross-ties to be furnished, the number specified;

VI. For the entire construction, ready for the iron, of either of the three divisions hereinafter named of said road:

The eastern division, connecting with the completed road at or near the town of Brandon, extends to the Mobile and Ohio road, 32½ miles, which will be divided into three subdivisions: the first of 21 miles, the second of 23 miles, the third of 33½ miles.

In each form of proposal, the bidder will state his item prices, and for the graduation will make his bid at so much per cubic yard of excavation and embankment, and the additional difference for "excess" of either; or for so much per cubic yard upon the largest item, and the difference for "excess."

The parties making proposals are desired to make them in four forms: 1. For the whole amount payable monthly in cash, as the work progresses, reserving twenty per cent. for final settlement. 2. One-half in cash, payable in the same way, and one-half in the stock of the company. 3. One-third in cash, payable in the same way, one third in the stock of the company, and one-third in the bonds of the company, payable in ten years, with interest at six per cent., payable annually. 4. Payable entirely in the stock of the road.

The proposals, to be considered, must be accompanied by satisfactory references or credentials, and the company reserve the right of accepting any or declining all.

Maps, profiles and specifications may be seen at this office; and any further information will be furnished upon application to the undersigned.

The Southern Railroad commences at Jackson, the capital of the State, and is finished as far as the town of Brandon; and is in good running order and well equipped, to that point. It extends from Brandon in a line almost directly east eighty-two and a half miles, to the intersection of the Mobile and Ohio Railroad, a few miles below the town of Marion, in Lauderdale county; and passes through the counties of Rankin, Scott and Newton. The line is over a high rolling country, well watered and timbered, and in point of healthfulness, economical living, &c., equal to the most favored portions of the Carolinas and Georgia. The grading, except for the first twenty miles, is generally light; and upon the most of the sections the excavation and embankment alternate favorably; the exceptions being in the two heaviest cuts. The material is of a character easily moved; the growth of the country affords abundance of timber suitable for bridging and cross-ties; and it is believed that no work offers, in facilities for construction, greater inducements to contractors, especially those using negro labor.

This company is entirely out of debt, and has due to it by reliable stockholders, about \$330,000, which will doubtless be paid as the Board of Managers may call it in. It is also a recipient under the recent grant of lands made by Congress, if they can be had along the line, which is believed to be the case, of nearly 400,000 acres of land.

The road connects with and is an extension of the Vicksburg and Jackson Railroad, completed and in full operation to the Mississippi river at Vicksburg; opposite which city, in Louisiana, commences the Vicksburg, Shreveport and Texas Railroad, now under contract for its whole distance and in rapid progress of construction. It intersects the New Orleans and Jackson Great Northern Railway at Jackson; and through that at Canton, connects with the Mississippi Central Railway, the iron of which is now being laid to Holly Springs. It intersects with the Mobile and Ohio Railroad, as already stated, near Marion, and at its point of intersection meets with the North-eastern and South-western Railroad in Alabama, and through that unites with the roads in Virginia, Tennessee and North Carolina. It is also an indispensable link in the line of Railways that are to unite Charleston and Savannah, through Montgomery, Vicksburg, Shreveport and El Paso, with the Pacific Ocean, running its entire length on the same parallel of latitude with these places. It is thus obvious that this line of work is one of the most important unfinished enterprises in the country. It is thoroughly National in its character; for it unites Maine and New Orleans, and the Atlantic and the Mississippi, by indissoluble bonds. But whilst thus National, it appeals especially for aid to southern men and southern enterprise, for when completed, with the intermediate gap in Alabama, it will, with its connections, now built and being built, run right through the heart of those great southern cotton growing States, Louisiana, Mississippi, Alabama, Georgia and South Carolina, and unites the great inland sea with the broad ocean.

These facts are stated to call attention to this line of road and to induce capitalists and contractors to embark liberally in its construction. The fifteen miles of completed Railroad with its equipments and sixty valuable slaves, many of them mechanics, is a bonus from the State of Mississippi; the public land has been donated by Congress; and it is, perhaps, not greatly over estimating the present property of the road to put it at or near one million of dollars, in which sum future stockholders who may become such by direct subscription of money or work will be at once equally interested. It will thus be seen that this road presents peculiar inducements to men of means to engage in its construction.

WM. C. SMEDES,
President of the Southern R. R.

To Railroad Contractors.

KNOXVILLE & KENTUCKY R. R.

PROPOSALS will be received at the office of the Company, in Knoxville, Tenn., until Saturday, the 15th day of November, for the Grading and Masonry of the first division, extending from Knoxville to the Base of the Cumberland Mountains, a distance of thirty miles.

This Division covers a large amount of very heavy work. It will include a Tunnel of 1,050 feet in length, 15,000 cubic yards of masonry of all kinds, and nearly 1,500,000 cubic yards of earth and rock excavation.

The Company have good stock subscriptions, and loans from the State of Tennessee, amounting to nearly \$800,000 applicable to the Construction of this Division.

The country through which the road passes, is rich and productive, and abundantly able to furnish the necessary supplies to contractors. The work will be divided into sections of about one mile each.

The Company claim the right of reserving the light sections at this time, unless included in the same contract with one or more heavy sections, the object being to secure the completion of the entire work as nearly as practicable at the same time; the right is also reserved, to reject any proposals that are not satisfactory.

Bidders will be required to give security, or satisfactory evidence of their ability, for the due performance of any work that may be awarded them.

Plans, profiles and specifications may be seen and other information obtained at the office of the Chief Engineer in Knoxville.
M. B. PRIOR, Chief Eng'r,
Knoxville & Kentucky R. R.

Railroad Iron.

1,000 TONS BEST QUALITY WELSH RAILS, "Erie" pattern, 58 lbs. per yard, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.

Railroad Iron.

900 TONS BEST QUALITY WELSH RAILS, T pattern, 56 lbs. per yard, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.
October 18, 1856.

Railroad Iron.

1,000 TONS best quality Welsh Rails, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.
August 30th, 1856.

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern, 58a60 lbs. per yard, now due at New Orleans, for sale by
VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.
October 18, 1856.

Railroad Iron.

1,000 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard, now on the way from English shipping port. For sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.
Oct. 23d. 1m43

Railroad Iron.

500 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard. In port, and for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.
Oct. 23d. 1m43

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 58 lbs. per yard, of Messrs. Guest & Co. and BAILEY, BROS. & Co.'s make, shipping from England during the present month for New York. For sale by
J. BOORMAN, JOHNSTON & CO.,
90 Broadway,
NEW YORK.
Sept. 25th, 1856. 2m

NOTICE TO RAILROAD COMPANIES. FIRE INSURANCE.



THE LIVERPOOL AND LONDON FIRE AND LIFE INSURANCE COMPANY.

37 CASTLE STREET,
LIVERPOOL.

Office, 56 Wall Street, New York.

20 and 21 POULTRY,
LONDON.

AUTHORIZED CAPITAL, £2,000,000 or \$10,000,000.

PAID-UP CAPITAL AND SURPLUS AND RESERVED FUNDS,

THREE MILLIONS OF DOLLARS---OVER HALF A MILLION INVESTED IN THIS COUNTRY.

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A DIAGRAM has recently been published by G. H. HEN-

SHAW, Civ. Engineer, of the practical organization of the

New York and Erie Railroad. It shows in detail its entire

physique in every department of the road. Such information

in regard to one of the greatest railroads in the world must be

deeply interesting to all connected with the management of

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July 24th, 1856.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, November 8, 1856.

Annual Report of the Railroad Commissioners for the State of New York. (Continued from p. 691.)

Some adequate idea of the importance of the railroad interests in the State of New York may be had from the following proportions which it bears to all other interests:

It forms one-tenth of the whole assessed valuation of real and personal estate.

The capital invested is equal to an average of \$40 to each inhabitant, or \$215 to each voter.

The number of persons directly employed on the running roads is equal to one-thirty-sixth of the voters in the State; and if to these are added those employed in constructing new roads, and those whose business is directly dependent upon this interest, in furnishing supplies, &c., it is equal to one-thirtieth of the voters, and with their families, they form one-fourteenth of the whole population.

The amount of passenger travel in the cars is equal to seven hundred and twenty-five miles per year, for every voter, and one hundred and thirty-five miles for every man, woman and child in the State.

There are forty thousand persons who travel every day, and there are twenty of these daily moving over every mile of railroad.

There are 750,000 tons of engines, cars, passengers, and freight carried annually over each mile of road, or 2,400 tons daily, or 100 tons hourly over each mile of road.

The cost of transportation of passengers and freight to the railroad companies would be equal

to a little more than three dollars to each inhabitant, or seventeen dollars to every voter per annum; and including the payments for construction, interest, and dividends, a sum equal to twice these amounts are paid.

In determining the character of works, for the improvement of transport, we must not lose sight of the law which governs their utility, viz: that the profits must be at least equal to the interest on the cost.

In ordinary machines, their size, and thus their cost, may be reduced so as to meet the circumstances of a moderate, and in many cases, even of a very small business; the steam engine may be made to perform the delicate work of the jeweler, or it may be enlarged to do the ponderous work of a rolling mill. But railroads, as applied to general business, even at their minimum cost, require a very large expenditure, and must have a trade commensurate with that cost, or they become a burthen in place of a benefit.

In the frenzy of speculation, this principle is too often disregarded and lines are commenced which can only result in serious losses to those who embark in them. In many cases those who desire the benefits of a railroad furnish too small a portion of its cost to insure a proper watchfulness in the expenditures. As so much of the money is obtained by borrowing, it is likely to be carelessly expended, or squandered, without remonstrance from local stockholders, who have comparatively so much less interest in the stock than in the benefits accruing from the completion of the road, that rather than endanger their greater interests, they wink at extravagance.

In the natural anxiety to secure the construction of the work, estimates are presented underrating the cost and overrating the prospective profits.

These under-estimates require an earlier resort to loans, and the first bonds being exhausted before the completion of the work, the issue of a second becomes necessary, while the equipment is either left wholly or in part to be obtained by a floating debt, pledge of income or some other financial chicanery.

This early resort to debt, before enough has been expended to give a good basis of security, involves a large discount, which is perhaps doubled with the second issue. When a floating debt becomes the only means of financial completion, the rapacity of the lender is the only limit to the share which must be paid.

Such a process sinks the value of the stock to its lowest ebb, and the continued drains for the payment of heavy interest keeps it there beyond the hope of recovery.

Moreover, contracts made wholly or in part payable in stock or bonds, greatly enhance the cost of the work; the contractors are rarely able

to hold such securities, and must hypothecate, or dispose of them at a ruinous discount, and the company must pay increased prices to provide for such losses.

If a road can be built in no other way than by the issue of stock and bonds, in payment of work done, then it would be well to require of all its officers that they should take and hold for a certain period a large proportion of their salaries in these securities, thus ensuring a more economical expenditure, an earlier dividend, and what is of still more importance, a moderate cost upon which future dividends are to be made.

It is a common and most delusive error to suppose that companies can be advantageously supplied with money by mere financial operations; those who have tried it have found to their cost that it but defers trouble to some period when it will return upon them, loaded with a frightful mass of discount and accumulated interest, to swallow up all that has been contributed in good faith by the stockholders.

To the errors made in the first construction of some roads is added a constant increase of the capital from year to year, until the point is reached where the profits on even a large business are insufficient to meet the interest of its cost, and sometimes even of its debts. This increase of cost, growing out of a departure from the objects aimed at in the original construction, and a chase after the phantom of "through business," "western connections," "tributary roads," while by the expenditure of further sums for "more equipment," "larger depots," "steamboat connections," and "material aid" to connecting roads, an aggregated capital has accumulated, the interest of which will impose a tax upon its local business, inasmuch as for its through business, it is compelled to maintain a competition with rival lines, who can or do perform it at a minimum profit.*

* The following extracts from a recent report of a Western railroad very faithfully indicates some of the evils of the system which we have been discussing:

"There are many difficulties in opening a new railroad in this country.

"Our roads are usually built without sufficient means to finish them in good order for business, before they are opened for traffic.

"The necessities of the company require the managers to commence using the road, and making it productive as soon as possible after the iron is laid.

"In addition to this necessity the people along the line of the road are generally anxious to avail themselves, at the earliest possible day, of the facilities afforded by the road, for the transportation of passengers and freight.

"If our company had been in possession of

The varied and complicated interests involved in the management of our present system of railroads, arising from the extension of the lines and of business connections, require greater ability, and a more faithful devotion to duty, than they have generally received. If no more ability had been exhibited in the construction of railroads than has been shown in their subsequent management, but few companies could have escaped ruin before the roads were set in operation, and yet for the former there was required a less varied ability than for the latter.

The directory is too frequently composed of gentlemen whose thoughts are engrossed with other business, who cannot bring that application and reflection required in the discussion of the grave and complicated questions upon which they are called to act at their monthly meetings, while, on the other hand, a selection is made from those possessing none of the qualifications of fitness, study, or experience of their new profession, so requisite for an intelligent and faithful discharge of their duties.

With a direction so formed, it cannot be expected that their appointments will be judiciously made; nor is it a matter of surprise that sometimes officers are chosen who make the interest of the company subservient to their own private advantage.

Stockholders generally confine their examinations to the comparatively trifling items of expenditures, and rarely discuss the more important questions of policy, which vitally affect the prosperity of the company. A great cry is made if a large salary is paid to secure the services of one whose skill or economy will save them thousands of dollars, while they are passive, or make but little remonstrance at the saddling of a large debt, or the imposition of a heavy interest upon their property, to pay for some fancied or temporary advantage over a competing line.

An allusion has been made to the error so frequently committed, in making large expenditures to secure through business, and for the consequent increase of equipment, depot facilities, steamboat connections, and aid to other railroads. It may be worth while to discuss these questions further.

A considerable portion of this increase of business has been obtained at an unwarrantable expense, and is done at too low rates to be profitable, while a large portion of the legitimate increase would have been received without effort on the part of the managers.

The stockholders and the public are continually informed of these large receipts, of the increase over those of former years, and the prospects of future business, all of which they are led to believe can be done without any corresponding increase of expenses; but year by year they find, that with the realization of the full amount of the anticipated business, their net receipts are not only increasing, but that meanwhile their stock has been diluted, or their property loaded down with funded or floating debts, incurred to secure this illegitimate business; and also, that the expense of working the road have increased faster than the proportionate increase of business.

means to finish the work at once, it would have been economy and good policy to have used their rolling stock for three or four months after the track was laid, in finishing the construction of the road.

"It had been their misfortune to get to this stage of their work out of means, and with considerable floating debt hanging over them.

"The rolling stock was about sufficient to do the business, if the road had been in good order, but had to be divided between construction and traffic, and the consequence was we were unable to do the work which offered, and the road has suffered some in reputation.

"Could we have used all our power on a finished track, we could have earned much more money, and done it much more to our own satisfaction and that of our customers."

The opinions of the late State Engineer are so apposite to these views, that we cannot refrain from again extracting from his last report:

"The charges for transportation have been reduced to the present low rates, from a mistaken opinion that it was necessary to show to the public large receipts, to accomplish which it was necessary to enter into a competition with rival roads and water lines, which was carried to an injurious extent in consequence of the fallacious statements of the expenses of transportation which the public reports exhibited.

"These reports by exaggerating the net profits of the business, have prevented the managers, even when they discovered the error, from increasing their charges to compensating rates, by the fear of public opinion and legislative interference.

"Upon any given line of railroad there is a certain amount of travel and freight, which would, in any event, be transported by it in preference to the water lines.

"In almost every case the capacity of a well-equipped, single-track road, provided with frequent passing places, and a telegraph for its exclusive use, would be sufficient for the performance of this legitimate business, which, if economically conducted, would yield the maximum profit which could be earned, and would, in most cases, be ample to assure either an immediate or an early profitable return for the investment.

"To divert from other roads any of this class of business requires a reduction in the charges, which must necessarily be extended further than merely to that portion which is diverted, and as the rate of cost of doing the business cannot be materially diminished, this reduction in the charges is taken directly from the net profits, and it therefore requires a large increase of business to yield the same amount of profit as was afforded before any reduction in the charges was made. This reduction is sometimes continued until no profit whatever is realized.

"The rival road from which the business is thus diverted will soon reduce its charges, for the purpose of reclaiming its business, and feelings of rivalry will thus be engendered, which will continue the competition until the rates become so evidently unremunerative that conventions must be held to terminate the controversy and establish equitable prices and conditions. Each company will then only be restored to its original position, with the disadvantage of having in the meantime persuaded the public that the lowest prices were sufficiently remunerative.

"The alleged necessity of showing large receipts still exists; and the attempt to maintain the business diverted from rival roads being abandoned, a competition with the water lines is commenced, or the transportation of the heavy and cheap articles of freight, which can only be maintained by rates nearly or quite as low as those charged upon the lakes, rivers, and canals, and too low, as will presently be shown, to give a fair remuneration to the railroad.

"If the cost of railroad transportation could be determined, with tolerable accuracy, by some disinterested and official authority, it would be a great step taken toward the correction of some of the most serious evils to which allusion has been made."

"The sophistry of the argument, that it is ever the true interest of the stockholders to increase receipts by carrying any portion of the business under cost, is too palpable to merit discussion. The public will always look with distrust upon the management which maintains so fallacious a doctrine."

The reports of railroad companies have rarely furnished any information on the relative amount of their through and local business; and it has been impossible to ascertain with any precision, the relative expenses of each.

The reports of the New York roads now presented show in detail, for the first time, the earnings from each of these sources. The analysis of

these reports, in another part of this communication, will show their comparative value.

On the two leading railroads of this State, the earnings for the transport of the local passengers form two-thirds of the whole, and the transport of the local freight forms three-fifths of the whole earnings.

On the Central road the earnings from the passengers are one-half of the whole earnings, and on the Erie they are less than one-third; yet the proportions between the local and through business of each class, on each road, are so much alike, as to indicate the operation of similar influences.

It is well known that the rate of charges for the through business is generally less than that for the local. If they were made the same for each, it is probable that the relative proportion would be still more in favor of the local business. To secure as much as possible of this through business, these companies have made very large expenditures in the purchase of steamboats on the western lakes and elsewhere, in constructing harbors, wharves, warehouses, and side tracks, in the maintenance of expensive agencies in every important town at the west, in aid to connecting railroads and in a larger equipment and track facilities.

It must also be remembered, that to secure and accommodate the passenger portion of this business, special trains must be provided, and required to be started at hours seldom suited to the other business of the road, and run at extraordinary rates of speed, involving a large increase of expense.

The desire to secure as much of this business (both passenger and freight,) as possible, renders it necessary to give a wide discretion to the western agents, who being rarely men of judgment, and sometimes of doubtful integrity, are led into agreements for transport at too low rates, and besides have too much opportunity to turn the business of the company to their personal profit.

The cost of performing an equal amount of local and through business at the same rate of speed is in favor of the latter. The present charges for the transport of local business are generally so much higher than those in the through business that the profit on the former considerably exceeds that of the latter.

The same desire to increase the receipts of the road induces the managers to undertake the carriage of many kinds of freight at rates so low that they may often be considered as unremunerative if all the circumstances of cost are regarded.

The increase of this description of freight requires first a large increase of power and cars, and of course then follows the necessity of double tracks, sidings, depots, wharves, etc., and additional land to be purchased at extravagant prices.

The expenditures at the stations to accommodate the passenger business need not be very large, but freight must be protected from depredation and secured from the weather, and hence expensive warehouses must be built of sufficient capacity to accommodate the largest amount of business which may be offered at the most crowded part of the season, to be unoccupied the balance of the year.

The second track, including the increased cost of labor, materials and land, will cost about as much as the first did.

A freight train, with its slow speed, occupies the track three times as much as a passenger train, and this increased freighting business either considerably enhances the expense of all the other business, or it is itself enhanced by delays, interruptions and collisions.

The misfortunes of the past are beyond remedy, but a statement of them may be rendered serviceable in suggesting a corrective and preventive against future mismanagement.

No road should be commenced until reliable estimates of the cost have been carefully prepared, and ample means have been provided for its completion.

A reliable cash subscription for at least one-half

operated for one year from January, 1857, may be estimated at, at least, \$6,000.

The connection of the road with the Pennsylvania railroad by means of the Allegheny Bridge at Pittsburgh, which is near completion, will add largely to the business and profits of both roads, by the saving of time and expense in the interchange of their passengers and freights.

An agreement ensuring harmony of operation and unity of interest, between the Pennsylvania Railroad Company and the Pittsburgh, Fort Wayne and Chicago Railroad Company, has lately been entered into, and it is believed will be productive of mutual benefit to both companies. The two roads will be operated in close connection; so as to constitute a great through line of 818 miles from Philadelphia to Chicago, and the best and shortest route between those two cities. At the same time by this line a route is opened from New York, via Philadelphia, to Chicago, nearer than by any of the more northern routes in operation. On the completion of the Allentown road of 38½ miles, a route will be opened from New York to Chicago via the New Jersey Central, Lehigh Valley, Dauphin and Susquehanna, Pennsylvania Central, and Pittsburgh, Fort Wayne and Chicago railroads, shorter by 76 miles than by the New York Central route, and 72 miles shorter than by the New York and Erie route.

The Directors of the Pittsburgh, Fort Wayne and Chicago Railroad claim for their road a position in the front rank of American railroads. The road is a single line without branches, and it will not, at the cost of its stockholders, be trammelled with those expensive, and too often unremunerative feeders. In advantages of alignment and freedom from high grades, the road is not equalled by any other one of corresponding importance. The highest grades which are between Pittsburgh and Wooster, Ohio, do not exceed 47 feet to the mile, and between Wooster and Chicago, a distance of 336 miles, there are no grades over 26 10-12 feet to the mile. Over this part of the road the deviations from a direct line are few and slight, and the increase of distance over an air-line is but small. It is believed that the whole road, from Pittsburgh to Chicago, can be maintained and operated at as low a per centage of expense as any other leading road in the country.

A glance at the map will indicate the basis of the claim of the Pittsburgh, Fort Wayne and Chicago road, to a high position among American roads.

Its termini, Pittsburgh and Chicago, two of the most important railway centres, and its general direction establishes its character as a great through route from the sea board to the growing empire of the North-West, and it needs but to name the prominent towns on the road, to indicate both its capacity for a great local business, and its strength as a grand trunk line.

Rochester, New Brighton and Beaver in Pennsylvania; Salem, Alliance, Canton, Massillon, Wooster, Mansfield, Crestline, Bucyrus, Upper Sandusky, Forest, Lima, Delphos, Van Wert, in Ohio; Fort Wayne, Columbia, Warsaw, Plymouth, and Valparaiso in Indiana; thirteen of which are county towns and centres of trade for sections of country abounding in all the elements of a large railroad business, are among the important stations between Pittsburgh and Chicago.

In its progress westward, the road has the following connexions:

At Rochester with Cleveland and Pittsburgh road; at Alliance with the same road; at Orville with the Cleveland, Zanesville and Cincinnati road; at Lakeville with Springfield, Mt. Vernon and Pittsburgh road; at Mansfield with the Sandusky, Mansfield and Newark road; at Crestline with the Cleveland, Columbus and Cincinnati, and Belfontaine and Indiana roads; at Forest with the Mad River and Lake Erie road; at Lima with the Dayton and Michigan road; at Fort Wayne with the Toledo, Wabash and Western road, forming with it a great through line from Pittsburgh to the Upper Wabash Valley, Central Illinois and St. Louis, and also a direct through line from Chicago

to Toledo. Other connections are also to be made at Fort Wayne with the Tiffin and Fort Wayne, and the Cincinnati and Fort Wayne roads, both in progress. West of Fort Wayne, at Plymouth, the road intersects the Cincinnati, Peru and Chicago road, completed from Plymouth to Laporte. Between Plymouth and Chicago it crosses the New Albany and Salem road, and the Joliet cut off of the Rock Island road. Other important lines in progress, and likely to be completed, not mentioned above, add largely to the prospective value of the Pittsburgh, Fort Wayne and Chicago road.

While this road claims unequalled advantages as part of a direct route from Philadelphia to Chicago, it does not rest its merits as an East and West route, upon this fact alone. In connection with the Toledo, Wabash and Western road, it makes a good route from Chicago to Toledo, via Fort Wayne, less in distance than by the Michigan Southern road. In connection with the Tiffin and Fort Wayne, and Cleveland, Columbus and Cincinnati road, it makes a route from Chicago to Cleveland and thence to Buffalo, shorter than by any other. In connection with the Cleveland, Columbus and Cincinnati road, from Crestline, it makes a route of uniform gauge from Chicago to Cleveland, and thence to Buffalo, shorter in time of operation, if not in distance, and possessing greater facilities for the transport of freight and passengers than by the Lake Shore routes via Toledo.

The bonds now offered are believed to be a first class railroad security, and entitled to the entire confidence of capitalists. The security being a first lien on 147 miles of road, of which 64 miles will be completed by the first of November, is ample. The current and largely increasing earnings of the Company, offer the best guaranty of the prompt payment of the semi-annual interest.

The bonds are endorsed with the stipulation of the consolidated Company, guaranteeing the prompt payment of principal and interest, and the conversion of the bonds, at the option of the holder into the capital stock of the consolidated company.

Applications for the bonds can be made to the President of the Company, or to Messrs. Winslow, Lanier & Co., No. 52 Wall Street, New York.

Milwaukee and Mississippi Railroad.

Below we give an interesting communication from the Superintendent of this road to the President:—

SUPERINTENDENT'S AND ENGINEER'S OFFICE,
Milwaukee, Oct. 29, 1856.

JOHN CATLIN, Esq., President M. & M. R. R. Co.

DEAR SIR—I have just returned from a trip over our road to the Mississippi River at Prairie du Chien, and found the track on the 24th within 80 miles of that place. From the end of the track the grading was all complete, ready for the superstructure (with a slight exception, which would not cause any detention) to the last crossings of the Wisconsin River, a distance of fourteen miles. The track will be completed to Boscobel, which is six miles from where it is now laid, so as to be ready to run the trains there on or before the 10th of November.

The timber is all upon the spot for the last bridges over the Wisconsin River, which will be completed so as not to cause any detention to the laying of the superstructure. From the last bridge to Prairie du Chien the grading, bridging and masonry is so far advanced, and so large a force is now being placed upon that portion of the road, that I think there will be no detention here.

At Prairie du Chien, the large freight depot, which is 50 by 400 feet, and is to be two stories in height, is so far advanced, (which is also the case with the Stone Roundhouse,) that both can be completed as soon as the track reaches Prairie du Chien.

Along the line of the road the station buildings are all completed to Boscobel, except in two cases; the fencing and ballasting are also nearly completed to Muscoda, which is 55 miles west of Madison and 40 from Prairie du Chien.

In short, I have to report that the work of con-

structing our road west of Madison is so far advanced, and is progressing with such rapidity, that there can be no doubt of its completion to the Mississippi river in February '57; at all events in abundance of time for the earliest opening of navigation on the Mississippi river next spring—which last is all that is really essential.

We have completed contracts with responsible parties, who are to furnish our company with two daily lines each way of steamboats between Prairie du Chien and St. Paul, to be in readiness at the opening of navigation next spring.

It is with great satisfaction that I can state to you, to the stockholders in our road, and to the public generally, that beyond a contingency our road, with all its connections and arrangements for business from New York to St. Paul, will be in complete order and ready for the earliest opening of navigation next Spring.

This is an object for which we have all labored anxiously and perseveringly for several years. At times embarrassments and difficulties have presented themselves, which could only have been overcome by men who had at all times a firm and unwavering confidence in the result when the great work should finally be consummated. It is true we have not progressed so rapidly as we might possibly have done, but I am happy to say that what we may possibly have lost, in time, we have gained in the economy with which the work has been prosecuted, and the result will be, as I honestly and sincerely believe, that we shall have the best, the cheapest, and the most profitable railroad, connecting Lake Michigan with the Mississippi River. We have no disposition to take from any road what justly belongs to it, and proceed upon the principle that all well located railroads between Lake Michigan and the Mississippi will have as much business as they can do, still we think the position of our road gives it, with its connections, advantages that no other road constructed between these points has.

I will here briefly allude to a few facts upon this point.

In the first place our road terminates on the Mississippi River about seventy miles above any other. Now, if we consider Chicago as the starting point, we can take a passenger thence over the Chicago and St. Paul Railroad to Janesville, and thence over one hundred and forty miles of our road to Prairie du Chien, from eight to ten hours in advance of the route via Dunleith, which advantage is sufficient, in my judgment, to give to at least one hundred and forty miles of our road the great bulk of travel to northern Iowa, Minnesota, St. Paul, and the great Upper Mississippi country. Then, if we start at Milwaukee, we shall find our road has connection with Chicago, via Lake Shore Railroad, and in the course of next year, to have a connection across Lake Michigan to Grand Haven, which is directly east of Milwaukee; and thence, with the Detroit and Milwaukee Railroad, with the New York Central and Erie Railroads, and with the Grand Trunk Railroad, extending to the Gulf of St. Lawrence. These routes, for at least nine months of the year, are the shortest, cheapest and quickest from the principal Eastern cities, and from New England through the Grand Trunk Railroad through Milwaukee, and over the Milwaukee and Mississippi Railroad to the great North-West.

From the two connections above mentioned, the M. and M. road is to receive an amount of through business which will have scarcely a parallel in the West, and which added to our already large local business (which, up to this time, has been our only business,) must fully establish the position I started with, that the M. and M. railroad would be the best paying road west of Lake Michigan.

Happily for the railroad interest of our State, for its prosperity, the prosperity of our State generally, and for the City of Milwaukee especially, all our conflicting railroad interests have been adjusted.

The M. and M. railroad is to occupy the central portion of our State, and through its Southern Wisconsin branch (of which I propose to speak

more particularly,) the south-western portion of the State, between which lines the great lead mineral wealth of Wisconsin lies. The La Crosse, with its branches, is to occupy the north-western portion of our State; and the North-Eastern Land Grant Railroad is to occupy the route running nearly north and south along Lake Michigan; each occupying an important portion of our State, and neither conflicting with or drawing from the other, and all having Milwaukee as a common starting point.

Some who have not been familiar with our Southern Wisconsin Branch, so called, have doubted whether its construction would add to the value of our stock.

This road leaves our main line at Milton, 60 miles west of Milwaukee, and as its construction is at present provided for, is to pass through Janesville and Monroe, in Green County, to Warren, on the Illinois Central Railroad, 26 miles east of Galena, to which point a favorable contract has been made for a running arrangement on the Illinois Central Railroad.

By a contract recently executed, the Galena people are to build from Warren to a point in our main Southern Wisconsin line, distant from Warren about eight miles, which brings it within 18 miles of Monroe, to which point the Southern Wisconsin is under contract and nearly graded. This arrangement, therefore, leaves the Milwaukee and Mississippi Railroad Company but 13 miles to build west of Monroe to complete a line of railroad in connection with the Southern Wisconsin portion of the Milwaukee and Mississippi Railroad to Galena and Dubuque, making the entire distance from Milwaukee to Galena 150 miles, and to Dubuque 167 miles. The distance from Galena to Chicago being 171 miles, and from Dubuque 188 miles, make a saving in favor of Milwaukee of 21 miles, about one eighth of the entire distance. Besides, for all freight transportation there will be a further saving in favor of Milwaukee of water transportation of 90 miles, being the distance between Milwaukee and Chicago, or a saving of about one tenth of the distance from Milwaukee to Buffalo; so that a propeller can save about one trip in ten between Milwaukee and Buffalo, as compared with Chicago.

This arrangement is independent of, and has no connection with the extension of the Southern Wisconsin from the point where the Galena branch diverges, as an independent line to Dubuque. From Dubuque west into Iowa some three or four hundred miles of railway are in the course of construction, which have received a great impetus by the grants of land recently made to that State and to those among other lines of railroads in that State.

At Dubuque, connections of the most favorable character and inducements of the most substantial kind are offered to our Company to extend the Southern Wisconsin from Galena branch to that city on an independent route.

These will be duly and properly connected, and will receive the action of the M. and M. Board when it can be done in accordance with that sound and safe system which has been adopted, to wit; of not incurring any new liability until their present engagements are fulfilled.

Having thus given briefly the facts as to the Southern Wisconsin portion of the M. and M. Road, I shall only add a few further considerations with reference to the value of this enterprise to the M. and M. Railroad. In the first place, by building from Janesville to a point 13 miles west of Monroe, or a distance of only 46 miles in all, the M. and M. Company receives the business from Dubuque and Galena, in the one case over 97 and in the other over 80 miles of railroad on to 60 of its main line, from Milton to Milwaukee, and in fact completes, by simply building 46 miles of road, 167 miles. Indeed, I have no hesitation in giving it as my opinion that this enterprise will prove the most profitable portion of the M. and M. Railroad.

EDWARD H. BRODHEAD,
Engineer and Superintendent, M. and M. Railroad.

St. Andrews and Quebec Railway.

We are authorized to state that the negotiations for the transfer of the St. Andrews and Quebec Railway to the new Company, formed in London under the title of the "New Brunswick and Canada Railway and Land Company," have been brought to a satisfactory conclusion between the deputation from England and the Board of directors in this Province; and that the seals of the Companies have been affixed to the deed of transfer. It follows, therefore, that the only thing now necessary finally to complete the arrangement, is to obtain the ratification of it by the Lieutenant Governor in Council, in accordance with the provisions of the Act of Assembly. We understand that Capt. Robinson, the President, and Mr. Street, the Solicitor to the old company, accompanied by Mr. Bates and Mr. Byrne, have proceeded to Fredericton; to attend the Council which is to be held to-morrow,—and we have no hesitation in saying that we believe a like result will follow the communications with the Executive, as have attended between the companies themselves.

We consider that the terms agreed to, with reference to the stockholders in this country, are not only perfectly equitable and fair but that they are highly advantageous to all parties concerned.

Every class "B" shareholder in the old company will hold the same amount of stock in the new corporation, and be credited with the amounts paid up thereon, without any liability of a further call until an equal amount has been paid by the new shareholders on the stock subscribed for by them. This places every one, both here and in England, on a perfectly equal footing—and there can be little doubt—indeed, we understand that Mr. Bates expresses it as his opinion that there can be none at all—that by the time the new shareholders have paid up their second call, by which time the road will certainly be open for at least a distance of forty miles, that the stock held in this country will obtain a ready sale in the markets in England.—*St. Andrews Standard.*

The Shipping Interest.

According to the New York *Shipping List*, the fortunes of the shipping interest are in the ascendant once more. Vessels are scarce, and with a good demand better rates are very readily obtained. Ship building is dull, both here and at the Eastward, but, with a revival of prosperity in the carrying trade we shall soon witness renewed activity in the ship yards. Our tonnage already exceeds that of any other nation, and at the ratio of increase during the last fifteen years, we may, at no very distant period, boast of more shipping than England and France combined. Let us glance at the progress of the mercantile marine of this country and of the world. No longer ago than 1830, the tonnage of American vessels was 1,191,776 tons; the number of seamen and watermen under the American flag, including those in the Navy, a little over 90,000. In 1855 the tonnage had increased to 5,212,000 tons, and the number of seamen to nearly 400,000, both more than quadrupled in one-fourth of a century. In 1814, the tonnage of the British commercial marine was 2,616,965 tons, employing 172,786 men and boys. In 1854, forty years afterward, the tonnage had increased to 5,043,270, and her seamen, including the 62,000 in her Navy, to nearly 400,000, both having doubled in less than half a century. The commerce, tonnage and seamen of the world, have much more than doubled during the last forty years. Every thing indicates a more rapid increase in the future. This century shall not end ere the 150,000 vessels of the civilized world, shall have become 300,000, with swifter wings, and stronger power to do the bidding of the commerce, and their 15,000,000 of tonnage shall have become 30,000,000, and their million and a half of seamen shall have become three millions—a number of men larger than this whole nation three quarters of a century since—larger than the whole Anglo Saxon race two centuries ago. A nation dwelling on the sea, drawn from every other, uniting every other, dif-

fusing its life, spirit and energy through every other; yet, peculiar to itself, a union in itself, separate from all the rest, dwelling on the sea.

The Census of Russia.

The *Moniteur de l'Armée* gives the following as the results of the census of the Russian empire, taken by order of the Emperor at the time of his accession to the throne: The total number of the population amounts to 63,000,000, the principal elements of which give results unknown to the rest of Europe.

The clergy of the Russian church stand for the enormous number of 510,000; that of the tolerated creeds, 35,000; the hereditary nobility, 155,000; the petty bourgeoisie, including discharged soldiers, 425,000; foreigners residing temporarily, 40,000; different bodies of Cossacs colonized on the Ural, the Don, the Volga, the Black Sea, the Balki, the Baschkirs, and the irregular Kal-mucks, 2,000,000; the population of the town, the middle and lower classes, 5,000,000; the population of the country parts, 45,000,000; the wandering tribes, 500,000; the inhabitants of the trans-Caucasian possessions, 1,400,000; the kingdom of Poland, 4,200,000; the Grand Duchy of Finland, 1,400,000; and the Russian colonies in America, 71,000. At the accession of the Emperor Nicholas, the census then taken only gave a population of 51,000,000. This large increase in the space of 30 years may, however, be readily understood, when it is considered that the Russian territory has now an extent of 22,000,000 square kilometres (a kilometre is $\frac{5}{8}$ ths of a mile), and a length of coast of 27,000 kilometres. If the population continues to increase in the same proportion, it will, by 1900, amount to 100,000,000. The Russian empire, according to the same document, contains 112 different peoples, divided into 12 principal races, the most numerous of which is the Sclavonian, including the Russians, properly so called, the Poles, the Cossacks, and the Servian colonies of the Dnieper. These populations inhabit the finest and most important provinces of the empire.

COMPARATIVE ELASTICITY OF WROUGHT IRON AND CAST IRON.—The mean ultimate resistance of wrought iron to a force of compression, as useful in practice, is 12 tons per square inch, while a crushing weight of cast iron is 49 tons per square inch; but for a considerable range, under equal weights, the cast iron is twice as much as the wrought iron.

A remarkable illustration of the effect of intense strain on cast iron was witnessed by the author, at the works of Messrs. Easton & Amos. The subject of the experiment was a cast iron cylinder 10 $\frac{3}{4}$ inches thick and 14 $\frac{1}{2}$ inches high; the external diameter being 18 inches.

It was requisite for a specific purpose, to reduce the internal diameter to 3 $\frac{1}{2}$ inches, and this was effected by the insertion of a smaller cast iron cylinder into the centre of the larger one; and to secure some initial strain, the large cylinder was expanded by heating it, and the internal cylinder, being first turned too large, was thus powerfully depressed.

The inner cylinder was partly filled with pewter, and a steel piston being fitted to the bore, a pressure of 972 tons was put on the steel piston. The steel was "upset" by the pressure, and the internal diameter of the small cylinder was increased by full three-sixteenths of an inch! A new piston was accordingly adapted to these dimensions; and in this the cylinder continues to be used, and to resist the pressure, the external layer of the inner cylinder was thus permanently extended 8 1-60ths of its length. In fact, it can only be regarded as loose packing, giving no additional strength to the cylinder.

Under these high pressures, when confined mechanically, cast iron, as well as other metals, appears, like liquids, to exert an equal pressure in every direction in which its motion is opposed.—*Clark's Britania and Conway Tubular Bridges.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.....	149	1,533,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	800,000	800,000	550,000	In progr.	.....	.....	.....	.....
Androscog. & Kennebec.....	55	583,042	1,622,906	2,210,947	209,475	110,247	10	8	South Western.....	92	1,067,488	445,500	1,324,920	253,806	141,168	8	.....	.....
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,000	.....	.....	.....	.....	Tennessee and Alabama.....	80	246,486	.....	679,906	In progr.	.....	.....	.....	.....
Portl. Sac. & Portsm'th.....	51	1,867,000	119,237	1,486,327	270,214	112,461	6	85%	Tennessee and Mississ.....	.....	170,931	.....	178,240	In progr.	.....	.....	.....	.....
Boston, Concord & Montreal.....	98	1,808,093	1,059,512	2,771,310	283,284	120,834	.....	.....	Memphis and Charleston.....	217	2,179,440	2,127,002	4,028,798	311,631	169,572	.....	.....	.....
Quebec.....	53	2,085,925	899,813	3,179,687	380,221	143,565	2	14	Mobile and Ohio.....	163	2,658,556	1,802,921	4,536,412	199,932	109,236	.....	.....	.....
Quebec.....	35	1,500,000	8,242	1,412,576	335,919	138,454	6	74%	Miss. Central.....	183	642,534	.....	628,303	In progr.	.....	.....	.....	.....
Northern, N. H.....	82	2,768,400	.....	3,010,639	370,529	138,299	2%	89%	N. O., Opelousas & G. W.....	55	2,930,425	671,645	2,657,585	In progr.	.....	.....	.....	.....
Concord & Passumps. Riv.....	61	1,048,145	787,608	1,780,062	162,897	63,173	.....	.....	Victoria, Shreveport & Tex.....	.....	111,750	.....	107,598	In progr.	.....	.....	.....	.....
Rutland & Burlington.....	120	2,233,376	2,662,396	5,378,428	394,971	.....	.....	.....	East Tennessee and Ga.....	111	1,000,000	1,500,000	2,500,000	In progr.	.....	.....	.....	.....
Vermont Central.....	117	5,090,000	8,550,236	8,463,366	820,119	214,793	.....	.....	East Tennessee and Va.....	16	625,425	288,593	1,033,781	In progr.	.....	.....	.....	.....
Boston and Lowell.....	27	1,830,000	325,635	2,188,598	489,764	140,377	8	73%	Nash. and Chattanooga.....	151	2,319,330	1,497,051	3,845,694	310,090	112,177	.....	.....	.....
Boston and Maine.....	83	4,076,974	150,000	4,179,636	864,426	399,090	.....	.....	Govington & Lexington.....	29	1,802,804	2,235,939	3,738,753	264,973	128,694	.....	.....	.....
Boston and N. Y. Central.....	74	2,240,300	1,818,671	3,463,138	69,917	8,740	.....	.....	Lexington and Frankfort.....	29	430,055	169,099	637,071	93,293	43,636	6	.....	.....
Boston and Providence.....	55	8,160,000	389,132	3,677,154	558,671	219,699	.....	.....	Lexington and Danville.....	.....	694,444	62,734	747,178	In progr.	.....	.....	.....	.....
Boston and Worcester.....	68	4,500,000	665,428	4,865,428	1,008,004	404,461	6%	82%	Louisville and Frankfort.....	65	698,238	669,061	1,589,586	244,014	96,902	6	.....	.....
Cape Cod.....	47	681,690	280,998	997,252	119,221	65,027	3	48%	Atlantic & Gt. Western.....	264	868,939	77,294	613,231	In progr.	.....	.....	.....	.....
Connecticut River.....	52	1,591,110	273,241	1,802,244	288,563	103,787	5%	46	Bellefontaine and Ind.....	118	1,881,625	2,025,925	2,862,652	238,293	140,823	.....	.....	.....
Eastern, Mass.....	60	2,583,400	2,947,737	4,621,016	647,281	305,998	40%	40%	Olev. Col. and Cincin.....	141	4,547,020	1,222,857	4,613,722	1,280,296	732,056	.....	.....	.....
Fitchburg.....	167	8,540,000	163,700	3,766,998	681,763	229,071	74	.....	Cleveland and Toledo.....	200	2,676,426	2,689,801	5,124,929	788,272	366,986	10	66%	.....
North-Eastern.....	30	800,2-2	225,585	988,821	In progr.	.....	.....	.....	Clev. and Minnong.....	103	.....	.....	923,833	In progr.	.....	.....	.....	.....
N. Bedford and Taunton.....	21	600,000	.....	633,958	188,491	58,553	6%	.....	Clev. and Pittsburg.....	123	2,780,744	3,043,992	5,837,466	581,577	309,518	.....	.....	.....
Old Colly and Fall River.....	87	3,015,100	292,650	3,962,949	683,499	269,738	6	83	Cin. Hamilton & Dayton.....	60	2,153,900	1,321,213	2,967,577	608,271	278,012	.....	.....	.....
Vermont and Mass.....	77	2,262,641	1,033,670	3,299,727	626,726	87,313	.....	.....	Cin. Wilm. & Zanesville.....	181	1,120,450	1,181,256	2,329,459	.....	.....	.....	.....	.....
Western, Mass.....	155	5,100,000	5,963,420	10,495,908	1,868,073	633,013	7	89%	Columbus and Xenia.....	55	1,454,550	149,006	1,451,738	855,506	187,618	10	32	.....
Worcester and Nashua.....	46	1,141,000	205,566	1,251,271	294,750	138,057	2	70	Dayton, Xen. & Belpre.....	63	437,838	422,658	860,496	In progr.	.....	.....	.....	.....
Providence and Worcester.....	43	1,510,020	335,461	1,804,696	311,430	185,067	.....	.....	Dayton and Michigan.....	140	1,076,602	593,011	1,185,826	In progr.	.....	.....	.....	.....
Hartford and N. Haven.....	72	2,350,000	930,000	3,318,932	300,012	162,711	.....	.....	Dayton and Western.....	35	310,000	500,000	733,759	.....	.....	.....	.....	.....
Hart'd, Prov. and Fishkill.....	122	2,000,110	2,000,656	4,060,809	258,685	119,611	.....	.....	Katon and Hamilton.....	42	454,090	904,499	1,155,136	171,629	68,000	.....	.....	.....
Housatonic.....	110	2,000,000	414,240	2,431,773	329,459	93,768	.....	.....	Little Miami.....	65	2,953,921	1,171,785	3,649,172	681,562	336,708	.....	.....	.....
Naugatuck.....	57	1,081,300	624,244	1,589,728	384,306	238,877	25	.....	Mad River and L. Erie.....	208	2,681,620	7,572,932	4,445,631	.....	.....	.....	.....	.....
N. York and N. Haven.....	62	3,000,000	2,878,808	5,878,808	88,007	30,318	.....	.....	Central Ohio.....	138	1,820,927	3,455,076	4,235,445	Recently opened.	.....	.....	.....	.....
N. Haven and N. London.....	50	738,258	738,165	1,450,318	124,044	64,430	.....	.....	Ohio and Penn.....	187	2,451,700	3,319,000	5,670,700	1,111,628	662,117	9	60	.....
N. London, W. & Palmer.....	54	600,200	1,073,678	1,694,388	104,236	38,458	2%	25	Pittsburg, Mayev's & Cin.....	60	371,350	31,000	390,893	In progr.	.....	.....	.....	.....
Norwich and Worcester.....	66	2,122,300	873,459	2,997,133	817,716	9,904	.....	.....	Sand'y, Mass. & Newb.....	127	1,350,000	2,206,357	3,552,357	328,968	164,479	.....	.....	.....
Albany Northern.....	32	439,005	1,625,098	1,840,095	110,236	9,904	.....	.....	Scioto & Hocking Valley.....	135	408,975	509,560	888,868	In progr.	.....	.....	.....	.....
Black River and Utica.....	35	643,530	317,859	974,328	172,476	66,333	.....	.....	Spring, Mt. Vernon & P.....	113	1,000,000	950,000	.....	In progr.	.....	.....	.....	.....
Buffalo, Corn. and N. Y.....	100	1,487,374	1,601,182	2,519,096	172,476	66,333	.....	.....	Tol. Wabash & St. Louis.....	242	2,500,000	4,530,000	.....	In progr.	.....	.....	.....	.....
Buffalo and N. Y. City.....	92	798,439	2,697,849	3,491,688	298,392	31,896	.....	.....	Cin. Log. and Chicago.....	255	1,036,679	1,006,125	2,080,433	.....	.....	.....	.....	.....
Buffalo and St. Line.....	69	1,800,000	1,040,000	2,494,364	679,750	355,763	10	.....	Evansville & Crawfordsv.....	109	706,945	1,177,596	1,844,541	127,400	94,562	.....	.....	.....
Canandaigua and Elmira.....	47	434,111	922,393	1,275,798	174,089	69,506	.....	.....	Ind. and Cincinnati.....	83	1,213,723	1,442,669	2,197,611	350,112	193,142	7	60	.....
Canandaigua & Niagara F. R.....	98	1,315,000	2,279,854	3,495,832	135,433	48,649	.....	.....	Indiana Central.....	66	611,400	1,261,179	1,978,911	880,176	134,875	.....	.....	.....
Cayuga & Susquehanna.....	35	687,000	508,088	1,187,652	135,433	48,649	.....	.....	Ind. Clev. & Pittsburg.....	83	826,828	1,099,400	1,531,225	226,658	93,010	.....	.....	.....
Hudson River.....	144	3,758,466	9,250,302	12,737,898	1,812,067	603,946	.....	.....	Jeffersonville.....	66	1,014,282	664,000	206,544	94,318	.....	.....	.....	.....
Long Island.....	98	1,876,148	2,555,986	301,793	116,402	.....	.....	.....	Madison and Indianapolis.....	97	1,647,700	1,338,810	1,296,000	236,146	112,800	.....	.....	.....
New York Central.....	534	24,184,742	14,683,742	28,623,913	6,488,993	2,627,118	.....	.....	New Albany and Salem.....	238	2,536,121	6,281,848	6,643,189	845,827	771,402	.....	.....	.....
New York and Erie.....	464	10,025,965	25,126,669	33,439,431	5,488,993	2,627,118	.....	.....	Port and Indianapolis.....	73	.....	858,314	150,000	90,000	.....	.....	.....	.....
New York and Harlem.....	138	5,717,100	4,068,769	8,758,303	1,855,577	234,126	.....	.....	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,512	198,702	10	.....	.....
Northern, N. Y.....	118	1,638,022	4,464,874	6,470,714	620,153	135,764	.....	.....	Chicago and Rock Is'd.....	182	3,141,500	2,387,155	5,214,152	.....	.....	.....	.....	.....
Oswego and Syracuse.....	85	467,200	234,189	749,633	.....	.....	.....	.....	Chicago and St. Louis.....	230	.....	.....	1,077,312	.....	.....	.....	.....	.....
Pittsford and Watertown.....	29	610,000	140,000	596,423	241,149	82,600	7	.....	Chicago, Burl. and Quincy.....	58	1,639,100	1,684,736	2,884,622	722,580	379,821	20	.....	.....
Rensselaer & Saratoga.....	48	600,000	396,800	.....	71,909	21,089	.....	.....	Central Military Tract.....	89	1,202,500	2,133,050	2,920,241	471,399	219,558	.....	.....	.....
Saratoga and Whitehall.....	45	588,266	1,678,604	2,272,777	169,484	22,503	.....	.....	Chic. St. Paul & W. d. Lac.....	176	2,800,000	1,325,000	3,625,000	In progr.	.....	.....	.....	.....
Syracuse & Binghamton.....	80	737,430	1,377,079	1,109,222	156,363	55,184	.....	.....	Galena and Chicago.....	259	5,441,600	3,318,039	7,742,616	2,315,786	1,192,042	22	106%	.....
Troy and Boston.....	27	1,870,378	700,979	2,068,063	404,374	172,474	3%	76	Illinois Central.....	627	2,279,180	10,416,392	20,374,446	1,532,118	627,962	.....	.....	.....
Watertown and Rome.....	64	1,000,000	1,619,000	2,619,000	161,355	75,534	.....	.....	Peoria and Ogawqua.....	93	690,889	313,454	1,388,342	In progr.	.....	.....	.....	.....
Belvidere Delaware.....	64	9,000,000	11,407,200	8,638,523	2,017,127	961,941	12	124	Ohio & Miss. (Wat. Div.).....	147	1,780,250	2,292,408	4,870,528	Recently opened.	.....	.....	.....	.....
Camden and Amboy.....	60	369,320	1,622,131	1,729,642	122,417	50,080	.....	.....	Terre Haute and Alton.....	173	2,281,420	1,256,000	3,537,424	In progr.	.....	.....	.....	.....
Camden and Atlantic.....	30	8,482,850	690,000	4,310,011	961,514	500,747	10	118	Detroit and Milwaukee.....	185	838,000	1,128,964	1,906,969	In progr.	.....	.....	.....	.....
New Jersey Central.....	68	2,000,000	2,304,176	4,638,149	393,728	171,603	.....	.....	Mich. Central.....	282	6,032,444	5,906,013	10,688,155	2,215,283	879,656	10	90%	.....
Morris and Essex.....	44	1,637,867	342,564	1,986,317	.....	.....	.....	.....	Mich. South. & N. Ind.....	476	6,928,900	6,319,224	11,646,208	2,410,000	875,000	10	61	.....
Allegheny Valley.....	63	1,700,000	1,940,000	3,640,000	219,253	52,450	.....	.....	Green Bay, Mil. & Ch.....	155	704,076	442,722	1,193,766	In progr.	.....	.....	.....	.....
Oatway, W																		

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	97 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77	81
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865		
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	82	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	
Cleveland, Fairview, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860		
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	77 1/2	
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	75	40
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	75	32
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	31
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	65	67
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	60
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	10
Gaiana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	91	93
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	85 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1865	90	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. do.	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	79	81
Indianap. & Cin'tl (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	86	89
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconvert.	6	2 May, 2 Nov.	"	1883	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	101	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	101
Milwaukee and Mississippi	800,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	93
Do. do.	550,000	Do. 2d do. 1858	8	April, October	"	1863	91 1/2	94 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	87	89
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92 1/2	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	72 1/2	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1870	97	98
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1866	78	82 1/2
Soloto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Stenboville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	100
Terre Haute and Alten	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	78	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	68	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	
Do. do.	1,125,000	Do. do.	6	Jan'y, July	Salt.	1875	86	87 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870		
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	101 1/2	
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859		
Do. do.	4,000,000	3d mortgage	7	March, Sept.	"	1883	95	
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	92	
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	84	85
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85	89
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	96	97
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	80	83
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	92	93
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87 1/2	87 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 abars	7	March, Sept.	"	1860	100	107
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	90	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	79	
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1859-60	79	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	80	80 1/2
New York Central	8,227,000	No mortgage, do.	6	May, Novemb.	"	1883	88	88 1/2
Do. do.	8,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101 1/2	101 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866		90
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866		99
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844 '48 '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	90	
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	82	82 1/2

CITY SECURITIES.	Int't payable.	Off'd	Asked.	CITY SECURITIES.	Int't payable.	Off'd	Asked.
New York 7 per ct. 1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	Divers	82 1/2
Do. 5 do. 1858-60	May,	93	96	New Orleans, 6 per ct. cp. R.E. X	Do.	72	75
Do. 6 do. 1870-75	August,	88	89 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	75	81
Do. 5 do. 1880	November,	89	91 1/2	Philadelphia, 6 per ct. 1876-98	Jan'y, July	90	90 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August,	98	101	Pittsburgh, 6 per ct. coup.	X	Divers	73
Albany, 6 per ct. coup. X	Jan'y, July		76	Quincy, 6 per ct. coup. 1868 X	Jan'y, July		74 1/2
Baltimore, 6 per ct. 1870-90	Quarterly	95	97	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug		
Boston, 5 per ct. coup. X	April, October	95	98	Rochester, 6 per ct. coup. X	10 Divers	95	100
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99 1/2	100 1/2	St. Louis, 6 per ct. coup. Long X	Do.	77 1/2	78 1/2
Clev'td, 7 per ct. cp. W.W. 1876 X	Do. do.	90	101	Do. Municipal X	Do.	80	81
Cincinnati, 6 per ct. coup. X	Divers	88	89	Sacramento, 10 per ct. 1862-74 X	Do.	70	72 1/2
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	88 1/2	89 1/2	S. Francisco, 7 per ct. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. 1880 X	Feb'y, July		100 1/2	Do. 10 per ct. pay. N.Y. 1871 X	Do. do.	80	92 1/2
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	100	102 1/2	Do. 10 per ct. pay. N.Y. 1875 X	Jan'y, July	83	85
duquesne, 6 per ct. cp. Long X	March, Sept.	91		Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	83	85
Jersey City, 6 per ct. cp. W.W. 1877 X	Jan'y, July	94		Wheeling, 6 per ct. coup. X	Divers	87 1/2	87 1/2
Louisville, 6 per ct. cp. 1880-83 X	Divers	80		Do. 6 per ct. coup. 1874 X	March, Sept.	81 1/2	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	68		Zanesville, 7 do. X	April, October	96	

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending October 29, 1866.

BONDS.	
\$1,000 Cin. Ham. & Dayt., 7 per ct. 2d Mortg.	83
360 Do. do. Dividend Scrip.	106
8,000 Little Miami, 6 per ct. 1st Mortg.	80
3,000 Cov. & Lex., 7 per ct. 2d Mortg.	66
3,000 Indianap. & Cin., 10 per ct. due 1869.	95
1,000 Indianap. & Cin., 7 per ct. 2d Mortg.	80
2,500 Cin. Cambridge and Chicago, 10 per ct.	
Real Estate	25
5,000 Ohio and Miss. 7 per ct. 1st Mortgage	70
725 Little Miami, Dividend Scrip. June, 1856	81
1,200 Indianap. & Cin. 7 per ct. Dividend	70
6,000 Cincinnati 6 per cent.	80
500 Colum. & Xenia, 7 per cent. Div. due '61	90

By KIRK & CHEEVER.

For the week ending October 28, 1866.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.		80
Covington & Lexington, 2d Mort. 7 per ct.		65
Ohio & Missisippi, 2d Mort. 7 per ct. (Eastern Division)		80
Indianap. & Cin., 2d Mort. 7 per ct.		80
Cin. Ham. & Dayton, and Mort. 7 per ct.		84
Hillsboro' and Cin., 7 per ct. 1st Mortg.		47
Covington & Lexington, 10 per ct. Income		55
Indianapolis and Cincinnati Dividend		72
Columbus and Xenia Dividend, due Jan'y 1, 1861		85
Do. do. due July 1, 1861		85
Little Miami, Dividend Scrip. issued June, 1856		80 1/2

Marie & Kanx's Money Circular for the
European Steamer of the 5th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Nov. 3, 1866.

The state of affairs in Europe continues to be the leading influence on the market. By the "Atlantic," from Liverpool, the 14th, Consols declined $\frac{1}{4}$; money continued in demand in London, and the Bank had decided to make no further advances on public securities; in France, the position showed no improvement. These advices, joined to the heavy specie shipments on the same day, per the "Persia," induced during three days heavy sales, and a serious decline on almost the entire list of stocks. Although money has become in great demand, in consequence of the restrictive measures adopted by our banks with a view to check the too rapid overflow of coin, the scarcity is not, however, sufficiently great to justify in itself so considerable a depreciation; the sales are, to a great extent, made in the expectation of increased stringency during the present month, and because of the doubt as to what reduction the Banks may feel compelled to make in their loans and discounts to prevent excessive exports of specie. Exchange on London and Paris has already fallen to rates that leave no profits to specie shippers, and yet gold continues to be carried out by every steamer leaving for Europe. To-day the market closes with a strong rally in consequence of a favorable Bank statement, and the satisfactory advices per "Canadian," with Liverpool dates, to 22d ult. Consols 91 $\frac{1}{2}$ @ 92. State Stocks are more active, but lower, excepting Missouri, which are $\frac{1}{4}$ per cent. higher; Virginias have declined $\frac{1}{2}$; Tennessee, $\frac{1}{4}$. City and County Bonds are again but slightly dealt in. Sales have been made of St. Louis County Bonds at previous prices, as well as some Cincinnati 6 per cent., and Milwaukee 7 per cent. Railroad Bonds have been sold in limited amounts, with the exception of Illinois Central, at $\frac{1}{2}$ decline. Erie, 1871, has fallen off $\frac{1}{4}$; Hudson River 1st Mort-

gage, $1\frac{1}{2}$ do.; 8d Mortgage, $\frac{1}{2}$; Terre Haute & Alton, 3; New York Central 6 per cent. has advanced $\frac{1}{2}$; some Galena and Chicago 1st Mortgage Bonds have changed hands at a decline in previous quotations.

Railroad Shares.—The decline has been general and very great with a very active business. Erie had declined $1\frac{1}{2}$; Reading, $\frac{3}{4}$; New York Central, $\frac{1}{2}$; Panama, $2\frac{3}{4}$; Michigan Central, $2\frac{3}{4}$; Michigan Southern, $3\frac{3}{4}$; Illinois Central, 1; Cleveland and Toledo, $3\frac{1}{2}$; Chicago and Rock Island, $1\frac{1}{2}$; Galena and Chicago, $2\frac{1}{2}$; Cleveland, Columbus and Cincinnati, 3; Cleveland and Pittsburgh, 3; Hudson River, $1\frac{1}{4}$; La Crosse and Milwaukee, 12. Money is in very lively demand. Loans on call are in request at 7 per cent. First class paper, 10a12; second class, 12a16. In Exchanges, the business has been moderate mostly with accommodations to buyers. Sterling, 109 $\frac{1}{2}$ a109 $\frac{3}{4}$; Paris, 5.20a5.17 $\frac{1}{2}$; Continental Exchanges, all lower without exception.

MARIE & KANZ.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 5th Inst.

[TRANSLATED.]

NEW YORK, Monday, Nov. 3, 1856.

The export of Specie during the week has been very large, amounting to 1,891,724. The efforts of the Bank of France to turn the current of specie towards its vaults by forced and abnormal means, and the restrictive measures which the Bank of England was obliged to adopt to neutralize these movements, have produced their natural effects in this place, and there is some fear that analogous operations here may induce the continuation of a large export of the precious metals. As a means of prudence, rendered necessary, our banks are operating a rapid contraction of their loans and discounts; money has become scarcer, and the want of it is being strongly felt by our commerce, as well as by the stock operators. A general decline has been experienced on our Stock Exchange. The movement in some of the railroad shares lately, most actively speculated in, has amounted almost to a panic, and the fall has been heavy, as may be seen from the annexed table of daily quotations. The low prices, however, begin to attract the serious attention of capitalists, and upon the more favorable news from Liverpool to Oct. 22, which reach us at the last moment, there is a decided sudden reaction upwards, and much activity in the Stock Market.

State Stocks.—There have been some rather considerable transactions in Tennessee 6s, at $1\frac{3}{4}$, and in Virginia 6s, at $\frac{3}{4}$ decline; also in Missouri 6s, at $\frac{1}{2}$ per cent. decline. Purchases to supply short sales have in part caused the rise on the latter.

City and County Bonds.—Some New York 6s, 1859, have been done at 97 $\frac{1}{2}$; also some St. Louis County's, San Francisco 6s, and Milwaukee 7s—the latter at a reduction of rate.

Railroad Bonds.—Transactions in these securities, as well as the Stock Exchange, as outside, have been very limited. The only ones of any importance have been in Illinois Central Construction, at a decline of $\frac{3}{4}$. Some Galena and Chicago 1st mortgage, and Hudson 1st and 3d mortgages, have also been done in small amounts, the latter at a fall of 1, and some New York Central 6s, at steady rates.

Railroad Shares.—The decline is without exception, and heavy on these securities, with decided activity in the following: Erie closing at $1\frac{1}{2}$ decline; Reading at $4\frac{1}{2}$; Michigan Southern at $4\frac{1}{2}$; Cleveland and Toledo at $2\frac{3}{4}$; New York Central at 1; and Illinois Central at 1 per cent. With moderate transactions Michigan Central have fallen $1\frac{1}{2}$; Panama, $2\frac{3}{4}$; Chicago and Rock Island, $1\frac{1}{2}$; and Cleveland and Pittsburgh, $2\frac{3}{4}$ per cent. There is considerable contraction of money, which is eagerly sought for at 7 for loans on call. The rates at which stocks are carried are equivalent to 15a18 per cent. Paper more abundant, at

10a12 for first class, and even higher, for less known signatures. DE COPPET & CO.

American Railroad Journal.

Saturday, November 3, 1856.

The Commercial Value of the Telegraph.

Knowledge is said to be power, but it is not so often reckoned as money. That it is equivalent to money, and to a great deal of money is well illustrated by the use of the *Electric Telegraph* in the management of railroads. The use of a telegraphic line, erected at a cost of a few hundred dollars per mile, effects the saving of very large sums in the cost of transportation and in freedom from accidents, by informing the Superintendent as to the condition of the track and the position of each train upon it. A road with a line of telegraph can do twice, or thrice the business of one without. In this way it is equivalent to a double track, the necessity for the construction of which is saved. The value of telegraphic information can hardly be counted. It is one of the most efficient means for facilitating the movement of persons and property, and is one of the most important agencies used for the creation of capital. It is a proper accompaniment and a most efficient coadjutor of the railway. Without the former the railway can never be efficiently nor safely used. The telegraph has the additional cause for commendation, that while the advantages resulting from its use are so great, the expense of using it, as well as its original cost is very trifling.

Grand Trunk Railway.

The division of this great work between Montreal and Toronto has been completed and is now in active use. The great event is to be suitably celebrated by a grand excursion and appropriate ceremonies at Montreal, the coming week.

The completion of this central link forms a great line from Detroit to a point on the St. Lawrence river, some distance below Quebec, a total distance of 800 miles, exclusive of the Portland branch. It is in fact the largest line in the world owned and managed by one company. To Canada it must prove of inestimable advantage. It lies for its whole length upon the great route of commerce for the Province, connecting its more important towns. For travel it must be chiefly used in preference to any mode of conveyance at all seasons of the year. Even in the season of navigation, its traffic must be considerable, while in the winter it must be very large, particularly upon that portion of it lying west of Montreal. The completion of this link must exert a very favorable influence over the earnings of the whole line. It will also, we are confident, prove the most productive part of it. We see no reason why all that portion of the road lying upon the north shore of Lake Ontario should not prove productive upon its cost. It traverses a succession of large and prosperous towns, between which there is a great deal of intercourse. In fact, the whole line between Montreal and Toronto must yield a good return upon its cost.

It may be proper to state in this connection, that one of the reasons why the earnings of the road, particularly the Portland Branch, have not come up to expectation, has been owing to the unprecedentedly low prices for lumber which have

prevailed throughout the United States for several seasons past. With an active demand for this article, which must soon come round again, the Portland Branch could not fail of a very large income. Ten years will not exhaust the source of this supply. By that time other business will be developed which will more than compensate for the falling off of the lumber trade.

Railroad Earnings.

The receipts of the Hudson River Railroad have been:

October, 1856.....	\$155,814 14
Do. 1855.....	133,766 65

Increase.....\$22,047 49

The receipts of the Covington and Lexington railroad for the month of October were:

For Passengers and Mail ..	\$20,749 43
For Freight.....	27,923 89

For October, 1855.....\$48,673 32

For October, 1855.....39,153 71

Increase.....\$9,519 61

The receipts for the year ending 31st October, 1856, have been.....\$400,767 44

For the year ending 31st Oct., 1855.. 264,973 71

Increase.....\$135,793 73

The receipts of the Morris Canal have been:

Total to Oct. 25, 1856.....	\$267,892 52
Week ending Nov. 1, 1856.....	9,186 24

Total to Oct. 27, 1855...\$277,078 76

Week ending Nov. 3, '55. 7,972 72

Increase in 1856.....\$254,495 92

Kings Mountain Railroad.

We have received the sixth annual report of the President of this company, from which we learn that the receipts of the road for the present year ending June 30th, were—

From Freight.....	\$10,833 49
" Passengers.....	7,257 50
" Mails, &c.....	2,150 58

And the expenses of operating road for same time.....\$20,241 57

Leaving a net profit of.....\$10,851 85

To which add balance in Treasury... 6,897 69

Amount due by company July 1, 1856.....\$17,749 54

Leaving a balance in Treasury of....\$14,817 67

after paying all liabilities.

The cost of road and equipments, real estate, materials, &c., to July 1, '56, was.....\$221,502 85

Capital stock.....203,200 00

Amount over and above capital stock.....\$18,302 85

No dividend was declared in July last, from the fact that the assets consisted principally of good interest bearing stocks and bonds, which the Board thought advisable to retain as a reserve fund for any contingencies that might arise. The road is nevertheless in good condition—the value of the company's property exceeding the original capital stock by about \$18,000, with a surplus in the Treasury of over \$14,000. It is able, therefore, besides paying all its expenses, ordinary and extraordinary, to pay to its stockholders, out of its net profits, a reasonable dividend upon the capital invested.

with the previous payment, and if they permitted a subscription to be made without such payment, the contract was void, and the company could not after their incorporation recover the amount of the subscription (8 S. & R. 219).

A contract to take stock in any corporation as evidenced by a subscription to its articles is binding then even though the corporation be not in being: it is an obligation that cannot be annulled save by the waiver of the company and forfeiture of the stock or by such an alteration of the charter of the company as brings additional risk to the stockholder. It must be a material alteration, no change of the formal words of the charter will release the subscriber from his subscription. The rights of corporation are peculiarly favored by the laws and statutes affecting them liberally interpreted by the judges. They have at common law the rights of individuals, and charters and statutes have invested them with peculiar privileges.

Robert Benson & Co.'s London Circular,
received per "Asla."

London, Oct. 17th, 1856.

Our money market continues in a very unsettled state, chiefly owing to the continuous drain of gold compelling the Bank of England to adopt very stringent measures. The Directors yesterday resolved to make no advances on any description of Government Security, except Exchequer Bills, and on these only for seven days. The announcement of this produced a reaction in prices, which had improved in consequence of the accounts of higher prices in France. Consols which we last quoted $91\frac{3}{4}$ for money, and $92\frac{1}{2}$ for 6th November, have fluctuated between 91 and 92 for money, and $91\frac{1}{4}$ and $92\frac{3}{8}$ for the account; and are to day $91\frac{1}{4}$ for money, and $91\frac{1}{2}$ for 6th November.

The transactions in American Securities have been chiefly in sales, with a consequent lowering of price. United States 6 per cents have been sold at 104, 105, and $105\frac{1}{4}$. In Railway Securities the chief movements are Illinois Central Construction Bonds at 80; Freeland Bonds, $94\frac{1}{2}$ and $98\frac{1}{2}$; Pennsylvania 2d Mortgage Bonds at 92 ex coupon; Michigan Southern Bonds at 76; Erie 1862 Bonds at $81\frac{1}{2}$.

Business in Manchester has been more restricted than last week, without any nominal change in prices. Spinners are sustained by the full rates asked for cotton.

The cotton sales in Liverpool for the week will be about 73,000 bales; middling qualities are quoted 1-16th d. advance, and the market is steady with a fair demand.

The corn market is unsteady. Inferior parcels have sold lower, and corn generally is flatter, while Indian corn has been more in demand.

Rails may be quoted £7.5s. for cash, and £7 10s. six months credit. Yours truly

ROBERT BENSON & CO.

Warrenton and Macon Railroad.

The subject of a railroad from Charleston to Macon is being strongly agitated in the former city. A survey of the entire route, from Warrenton to Macon, has been made by Col. Bonner. The distance is seventy-one miles, and his estimate of cost is \$1,500,000. According to his calculation, if but 50,000 bales of "through cotton" go over it, at fifty cents per bale, it will pay on the investment over ten per cent.

By an examination of the map of Georgia, it will be seen that this road supplies a link in the line of communication between the far South and the North. When the traveler from New Orleans, Mobile, etc., reaches Macon; on his way to Charleston, he must go either by the way of Sa-

vannah, or by Atlanta, or by Waynesboro' and Augusta. The latter is the nearest; but the proposed road shortens that distance forty-four miles. To fill up this link this road ought to be built.

Alleghany Valley Railroad.

The interest on the bonds issued by the city of Pittsburgh to the Alleghany Valley Railroad Co. has not been met,—no provision being made for the same by the city or company; by the city for want of legal authority in the matter; and by the company for want of funds. The following statement from the *Penn. North American* will explain more fully the reason for non-payment by the city:—

The failure of this company to pay the interest due on their bonds on the 3d of November, having been rendered certain, the company notified the authorities at Pittsburgh, which corporation has largely invested in the work. A meeting of the Councils has been held, at which the subject was taken into consideration. A committee was appointed to investigate the condition of the railway company and the city finances. From the report of this committee we learn that an act of the Legislature forbids the corporation of Pittsburgh to increase the city debt by loans beyond the sum of \$1,150,000, and this limit had already been reached. By the terms of the city charter the corporation is restrained from levying a tax of more than five mills on the dollar, and that being the amount of the present city levy, no further tax can be legally laid. When the burthen of paying the interest of the Steubenville bonds fell on the city, the Legislature refused to grant the Councils' authority to levy a tax sufficient to meet it, and the money was raised by pledging the gas stock. That resource has been exhausted, and there is no other to fall back upon. The ordinary revenue of the city, derived from the five mill tax, &c., is barely sufficient to meet expenditures, and this year it will fall short, so that the deficit will be about \$10,000. The condition of the city finances may therefore be stated thus:

Deficit of ordinary revenue for 1856.....	\$10,000
Interest on Steubenville bonds for 1856....	33,000
Do. Alleghany Val. do. do.	12,000
Deficit on December 31, 1856.....	\$55,000
To which is to be added—	
Interest on Steubenville bonds in 1857....	33,000
Do. Alleghany Val. do. do.	24,000
Probable deficit on city revenue.....	10,900
	\$122,000

The Councils have resolved to apply to the Legislature for power to levy additional taxes to meet this deficiency. As regards the assets of the railway corporation, they are as follows:

44 miles of road and 8 miles siding.....	\$1,623,581
Engines, cars, real estate, &c.....	145,919
Armstrong Co. and Jefferson Co. bonds.....	240,000
	\$2,009,500

During the eleven and a-half months that the road has been in operation, its earnings have been \$54,505 98, and its expenditures \$62,819, of which latter sum \$46,515 11 was for actual running expenses. There is a mortgage of \$400,000 upon the road, the interest of which is \$28,000 per annum. The *Pittsburg Journal* says:

"The city subscription to the work is \$400,000, that of the county, \$750,000; together, \$1,150,000. Individual subscriptions amount to but \$144,150 paid, whilst contractors have taken in payment of estimates for work, \$193,350."

The City Council have voted to apply to the Legislature for the necessary authority to pay the interest on the bonds. As the Legislature will meet on the 1st of January next, we presume such authority will be reasonably obtained for the

interest next falling due. There is no disposition to avoid the liability which exists.

The Cliff Mine.

The Pittsburgh and Boston Mining Company (Cliff Mine) have published their annual report for 1856. The amount of mineral raised from the mine during the year terminating Nov. 30, 1855, was 1,481,199 lbs.—2000 tons—a monthly average yield of $123\frac{3}{4}$ tons against a monthly average of $97\frac{1}{4}$ tons in 1854—an increase of $25\frac{1}{2}$ per cent. The product in the pure copper was 1,574,197 lbs.; equal to 6256-100 per cent. and producing in money \$475,911.26, after deducting cost of smelting and refining. The amount of expenditures for the year was \$258,916.11, leaving a profit for the year 1855 of \$216,995.15 which added to the surplus of \$38,125.74, makes a total of \$255,120.89. From this the directors have declared and paid two dividends—one of \$10 per share in February and one of \$20 per share in August last—making a total of \$180,000 dividend from the product of 1855. Beside this the company paid for a new furnace, warehouse, dock, &c., \$22177.15, leaving a balance or surplus Dec. 1st, 1855, of \$52,043.74. The product of the mine in three years were as follows:

Mineral produced.	Yield per cent.	Value realized
1853.. \$2,263,182 lb	\$47 33-100	\$292,647 05
1854.. 2,332,614 lb	55 85 100	320,173 01
1855.. 2,995,837 lb	62 56-100	475,911.16

For the year 1856 the accounts are even more satisfactory. The mine continues to present, as operations are extended, a seemingly inexhaustible supply of copper. The product of the first nine months is 1,299 1,645-200 tons, or 136 1,294-2,000 tons per month, against an average product of 124 775-2,000 tons per month for the corresponding period of last year. Extensive improvements and measures for increasing the facilities for getting mineral are in progress.

Kenosha and Beloit Railroad.

We learn from W. H. Noble, Esq., Chief Engineer of Kenosha and Beloit Railroad, that this work is progressing finely. Two hundred men are at work on the first fifteen miles—a force sufficient to complete the grading during the present season. Six miles are now ready for the track layers. Ties are being delivered every day, and everything is going on prosperously. Five hundred feet of dock have been built for the road, and the iron for twelve miles of the track and two locomotives have been purchased and are on the way. They are to commence laying track the present week.

We learn also that it is proposed to extend the road from Beloit to Rockford, a line having been already surveyed for that purpose. The stock is now being subscribed, and everything looks favorable for the success of the enterprise. *Chicago Free Press.*

Liabilities of Connecting Railroad for Accidents.

RAILROAD CASE DECIDED.—A Board of Referees, consisting of Judge Gilchrist, of the United States Court of Claims, Hon. A. S. Woods, late Chief Justice, and Hon. Ira A. Eastman, one of the Judges of the Supreme Court of New Hampshire, decided two cases at Concord on Thursday, where in the Boston and Maine Railroad sought to recover of the Concord road, and Boston Concord, and Montreal Railroad, either or both, about \$7000 damages, costs and interest, caused by an injury to one Erni Crockett's boy five years of age, who came from Sanbornton N. H., on a ticket to Lawrence, and then passed on to the Maine road as a passenger to Bradford, Mass., on which route he received the injury. The defence of the Concord road was that they sold no ticket in the case. That of the Boston, Concord and Montreal—1st, that at the time there existed no contract of indemnity between the Corporations; 2nd, had there been a contract, the adult in the party had tickets to Lawrence only; and on passing that point became plaintiff's passenger; 3rd, that the

boy injured passed over the road without payment of fare—as a dead head—and each road was therefore responsible on its own iron. The referees decided in favor of the defendants in both cases.

Nashville and Chattanooga Railroad.

We are glad to learn that the Directors of the Nashville and Chattanooga Railroad have declared a dividend of three per cent. for the last six months, after reserving fifty per cent. of their earnings for the purchase of additional rolling stock and machinery.

This is not only gratifying, as showing the prosperous condition of the road, but as adding 15,000 to the resources of our city government—being the amount of dividend on the half million subscribed on its behalf.

We have never lost our faith in this road, and its final triumph over the difficulties that beset its first period has not surprised us.

There is no railroad in the country that has a surer foundation for ultimate success than this.

The whole rich and teeming region of Middle Tennessee finds in this road its proper outlet to the Atlantic market. It also finds a great and necessary source of social connection with the Atlantic States; and by opening this channel of communication, Nashville becomes a centre, having very wide connections immediately, and opening to herself a future of boundless promise.

The difficulty of the Nashville Railroad has not sprung from bad management. The exigencies of their route compelled them to make some bold cuts through the hills of the Cumberland range, and the caving in of brows of these cuts from excessive rains, entailed an expense upon the Company that swallowed up their earnings. The track is now clear, and we have reason to believe that the Nashville Railroad has become one of the safe investments of the Southern country.—*Charleston Mercury.*

Baltimore and Ohio Railroad

We gave last week the Report of the President of this Company. Below will be found some interesting extracts from the Report of the Superintendent, W. S. Woodside, Esq.

TRANSPORTATION OF TONNAGE.

The number of tons transported in both directions during the year, has amounted to 833,938, or equivalent to 194,019,210 tons carried one mile. The amount of revenue derived from freight during the year is \$3,712,962.31, and showing an increase over the previous fiscal year of \$609,794.46, or 16½ per cent.—The increase of the previous year over its preceding year was \$26,636, or less than one per cent. This highly gratifying result is attributed mainly to the large expansion in the flour, through live stock and provision trades, eastwardly; and especially in the heavy increase of the thorough merchandise westwardly.

General merchandise.—The policy instituted by the board of peculiar inducements and advantages to the general merchandise trade of Baltimore to ship by this road to the West has proved beneficial to the revenues of the company in the large increase presented since its adoption. The business in coffee, sugars, and other prominent articles for which the Baltimore market has become so well known, has been already much extended under this arrangement. The past six months have been nearly as large in the aggregate, as for any twelve consecutive months preceding which presents a nearer approach to an equality of business, in both directions, with fewer empty cars returned to the Ohio river than ever before. The proportion of empty cars sent westward for return loads of produce has thus been reduced from about six-ninths in the previous year to four-ninths for the year just closed. These satisfactory results are owing in a great measure to the arrangements made by the general freight agent, whose previously much needed office was established in January last.

It must be remembered, however, that this road has enjoyed unusual advantages, for the last three or four months of the year particularly, in

its efficient and direct and efficient connection with the railroad systems of the central and southern States of the West. The greatly improved condition of the Central Ohio Road, uniting this road by so short a line with Columbus, Cincinnati, Indianapolis, and Louisville—to say nothing of the great flour and live stock regions of Ohio through which it passes—has secured to this road a constant and available channel of communication, which no untoward state or river navigation could effect. By this line, therefore, a regular, most desirable and profitable freighting business has been maintained throughout the entire summer, and contrary to previous expectations, an average revenue of more than \$400,000 per month has been earned for the last three or four months, during which the Ohio has been almost dry.

It may not be out of place to refer to the very promising advantage to be enjoyed by this company in its freighting business, by the North Western Virginia or Parkersburg road, now within a few weeks of its completion to the Ohio river. With this highly favorable line in operation, the heavy river trade from Cincinnati and beyond must be secured in a large degree to the Baltimore and Ohio road, and combined with the present direct and advantageous lines of railroad converging at Benwood and Wheeling, will doubtless afford this company a still more ample trade throughout the year.

The very satisfactory increase and aggregate of revenue above noted have been realized notwithstanding that during the months of January and February last, and also during the greater part of March, this road, in common with other lines, was deprived of a large amount of trade by the unusual occurrence of a long close of the harbor of Baltimore and the Ohio river, from the unprecedented severity of the weather. For January and February the entire revenue from freight amounted to but \$126,600 per month, or but about one-third of the average monthly receipts from that source.

The Coal Trade.—The coal transportation for the past year is shown by the following tables:

STATEMENT
Exhibiting the quantity of coal transported during the fiscal year ending 30th Sept., 1866.

Points of Departure.	Delivered at Locust Point.	Delivered in the City.	Delivered at Way Stations.	For Company's use.
Cumberland	157,267	35,427	5,511	3,720
Piedmont	189,570	30,022	10,964	60,223
Fairmount	9,470	24,973	2,605	11,651
Totals	356,307	90,623	19,082	75,596
		Total	Total delivered from each region one mile.	
Cumberland		201,927	35,333,739	
Piedmont		290,081	50,415,622	
Fairmount		48,701	11,782,256	
Totals		541,680	97,530,617	

The quantity of coal hauled, upon which freight was paid, is 466,013 tons, against 471,927 tons for the previous year, being a decrease of 5,914 tons. The revenue from coal during the year, has been \$1,198,000, some \$25,000 less than the previous year, owing to general decrease noted above, and the relatively large decrease in the quantity from the Fairmount region, on transportation than from the nearer mines of Cumberland or Piedmont.

The quantity of coal delivered in the city of Baltimore during the year has been 90,623.15 tons, against 70,421.11 for the previous year, showing an increase of 20,202.04 tons. This return does not represent the consumption of bituminous coal in Baltimore, inasmuch as about 30,000 tons were sent through the city for Havre de Grace, Newport, Wilmington, and even Philadelphia, by the

Philadelphia, Wilmington and Baltimore Railroad; and some 8,000 tons to the Northern Central Railroad, leaving about 52,000 tons for consumption in Baltimore, including 22,371 tons for the Gas Company's supply.

But for impediments caused by the extraordinary winter already adverted to, the coal tonnage would have been heavier than for any preceding year. The obstructions offered by the snow upon the lateral roads and upon the mine tracks generally, besides the then bad condition of this company's cars and engines, arising from the same cause, resulted in and almost total suspension of the business for several weeks. In January, February and March, (three months,) the entire coal tonnage was but 42,000. The average monthly business for the remaining nine months was about the same quantity—say 42,000 tons.

The Flour Trade.—Perhaps there is no feature of the Company's operations during the past year that presents more gratifying results than this important and valuable trade. By the following statement it will be seen that the flour brought by the Baltimore and Ohio road into the city of Baltimore for the twelve month reached the enormous quantity of 934,083 barrels.

Quantity of Flour transported during the fiscal year ending 30th September, 1866, viz: wheeling, 229,624½; Benwood, 143,128; Moundsville, 76,946; Martinsburg and Cumberland, 26,381; Harper's Ferry, 110,258½; Frederick, 96,125½; Ellicott's Mills, 54,392½.

Total from the above points... 786,855 barrels.
" " all other points. 173,741 "

Grand total from Main Stem. 910,596 "
Received from Washington Branch 23,487 "

Total from both roads..... 934,083 "

Of this 910,596 barrels are from the Main Stem, being an increase over the previous year of 377,276 barrels. Of the 910,596 barrels transported upon the Main Stem, 449,797½ barrels were brought over the entire line of the road as "through business" from Wheeling, Benwood and Moundsville. Last year the quantity from these points was 194,796 barrels, the increase being 304,821½ barrels, or 200 per cent.

Of the entire 934,083 barrels brought into Baltimore from all points, but 171,972 barrels were shipped to Eastern ports under original assignment, as will appear by the following statement in detail:

	For N. York.	For Boston.	For Providence, &c.	For Phila.
October, 1855..	6,845	3,433	—	6,155
Nov'r., " ..	8,795	6,283	1,529	7,122
Decem'r., " ..	3,940	4,617	2,980	4,680
January, 1856..	724	353	80	1,460
Feb'y., " ..	320	380	240	924
March, " ..	2,157	498	235	106
April, " ..	26,100	4,999	1,960	1,802
May, " ..	17,233	1,678	3,885	3,891
June, " ..	9,671	3,040	1,990	1,974
July, " ..	6,908	649	1,815	2,038
August, " ..	989	320	955	2,322
Sept., " ..	10,804	160	1,495	2,344
Total	93,696	26,401	17,183	34,642

RECAPITULATION.

To New York	93,696
To Boston	26,401
To Providence	17,183
To Philadelphia	34,642

Total

This, deducted from the aggregate, will show that the extraordinary quantity of 762,161 barrels of flour was brought into the Baltimore market during the year by this road, as its contribution, in that single article, to the trade of the city.

Ogdensburg Railroad.

The Ogdensburg Railroad was sold by auction at Malone, New York, on Tuesday last, for the sum of \$3,000,000, to 2nd mortgage trustees, who already had possession of the property. The sale,

it is understood was subject to all the rights of the first mortgage.

Pittsburgh City Bonds.

We regret to state that a default has been made in the payment of the interest falling due on the bonds (\$400,000) issued by the City of Pittsburgh to the Alleghany Valley Railroad. An explanation will be found elsewhere in our paper. Admitting it to be sufficient, and to imply no lack of good faith, still we think it very discreditable to the public spirit of the leading citizens of Pittsburgh, that for a few thousand dollars, they should allow their city to be disgraced by failure to meet its undisputed obligations. There is no pretence that the requisite authority could not be soon obtained from the State Legislature. All that was necessary was that some person should step forward and protect the credit of the city by a short loan. That no one has done so in the present case is a very black mark against the public spirit of its citizens.

Minnesota and Western Railroad.

The St. Paul Democrat says that the Minnesota and Northwestern Railroad Company is now engaged in forming surveying parties to complete the survey of the route from Superior to the Iowa line. One party starts from Superior; another from St. Paul to meet the first, and the third will continue the line south from the terminus of last year's survey. The parties will be in the field within a week, and with force enough to complete a survey of the entire route this fall.

New Albany and Sandusky Railroad.

The following gentlemen have been chosen Directors of the New Albany and Sandusky Railroad for the ensuing year: James Montgomery, John S. Davis, John S. McDonald, Thos. L. Smith, William M. Weir, William B. Lent, J. D. Rodgers, James Pierce, Victor A. Pepia, John B. Winstandley, J. K. Woodward, Joseph A. Moffett, J. E. Noyes. The Directors subsequently elected John B. Winstandley, President of the Board, and re-elected Mr. Allen, Secretary.

Pork for Jermal Boxes.

Why is it not used? We have asked fifty railroad men within so many days if they were not aware of its success. They all answered in the affirmative, and spoke of it as a very important item in railroad economy. If it is proved to fail anywhere, we solicit the communication of the fact, that we may tell many others who are about attempting the experiment what the trouble is.

On the Housatonic Road a year ago a car was packed with slices of fresh pork. It was once or twice opened and found all right, and is to-day, as far as it is possible to judge, as good as it was a year ago. The car has been run regular since November last. The wheels are perfectly clean, and run easy, and the pork, during warm weather, emitted no disagreeable smell. The cost per box for pork-packing that will stand at least one year will not exceed 30 cents.

Northern Central Railway.

We learn that the new link in this road extending from Bridgeport, opposite Harrisburg, a distance of twenty-six miles, is now completed and ready for delivery by the contractors to the company. A locomotive and cars have passed successfully over the track between the points named. This at once makes a clear opening to the Lykens valley Anthracite coal region, and we may soon expect supplies thence of coal. The work, we learn, is progressing rapidly towards Trevorton, and will speedily be opened to that region.—*Baltimore Patriot*.

Important Telegraph Improvement.

The Pennsylvania Railroad Company has carried out a telegraphic improvement which, we think, is of the first importance to Philadelphia, Pittsburgh, and the railroad corporation itself. They have completed an independent telegraph line throughout the route of their great road with thirty distinct offices and operators. The Morse instruments are used, affording the finest facilities for the speedy and accurate transmission of information. Every great railroad corporation should have a telegraph operating in connection with it, not only on account of the additional security for travel thus afforded, but of the importance of joining the two great mechanical means for intercourse between the extreme sections of States.

Financial Condition of Texas.

The receipts for the two years, including the means on hand in October 1853, \$4,522,000, and the expenditures \$2,907,000, leaving a balance in the Treasury of \$1,615,000. The amount of Special School Fund is \$2,241,000, and of General School Fund \$46,000. The Comptroller recommends that the balance of the "Revenue Debt" be discharged; when, he says: "We would then present a condition, as regards our finances, which few States of the Union could exhibit—a Government out of debt, with a surplus of over a million dollars in the Treasury—a permanent 5 per cent. School Fund of ten millions of dollars—an unappropriated public domain, estimated at one hundred million of acres, which, if judiciously used, would subserve all the purposes of internal improvements required by the State, and a tax lighter than is imposed on any other people, and which is adequate to all the wants of the Government."

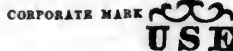
The aggregate amount of taxable property is very nearly \$150,000,000, being an increase of \$22,500,000 over the previous year.

The present financial condition of the State is highly satisfactory, and is calculated to inspire confidence in its ability to carry out the grand schemes of internal improvement to which the aid of the State is pledged.

STEEL FILES, &c. R. GROVES & SONS, SHEFFIELD, ENGLAND.

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.



CHAS. CONGREVE & SON, Agents,
18 Cliff street, N. Y.

allroad Iron.

THE undersigned, Agents for leading Manufacturers in Staffordshire and Wales, are prepared to contract for delivery on board ship at Liverpool, or Welsh port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

Railroad Iron.

900 TONS BEST QUALITY WELSH RAILS, T pattern, 56 lbs. per yard, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.
No. 9 South William st., N. Y.

October, 18, 1856.

Railroad Iron.

1,000 TONS best quality Welsh RAILS, "Erie" pattern, 58 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Railroad Iron.

500 TONS best quality Welsh RAILS, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

August 30th, 1856.

Railroad Iron

AT NEW ORLEANS.

1,000 TONS RAILS, "Erie" pattern, 58 lbs. best Welsh make, for sale at New Orleans.
VOSE, LIVINGSTON & CO.,
9 South William st., N. Y.

1m44

Railroad Iron.

1,000 TONS BEST QUALITY WELSH RAILS, "Erie" pattern, 58 lbs. per yard, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.

Railroad Iron.

1,000 TONS best quality Welsh RAILS "Erie" pattern, 58 lbs. per yard, now due at New Orleans, for sale by
VOSE, LIVINGSTON & CO.,
No. 9 South William st., N. Y.

October 18, 1856.

Railroad Iron.

1,000 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard, now on the way from English shipping port. For sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.

Oct. 23d.

1m43

Railroad Iron.

500 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard. In port, and for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
NEW YORK.

Oct. 23d.

1m43

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 58 lbs. per yard, of Messrs. Guest & Co. and BAILEY BROS. & Co.'s make, shipping from England during the present month for New York. For sale by
J. BOORMAN, JOHNSTON & CO.,
90 Broadway,
NEW YORK.

Sept. 25th, 1856.

2m

Railroad Iron.

WE are prepared to contract to deliver RAILS at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., the office of the AM. RAILROAD JOURNAL.
NEW YORK, July 21st, 1856.

Notice to Contractors.

QUINCY & EASTERN RAILROAD.

PROPOSALS for the Grading, Masonry and Bridging of this road, about 37 miles in length, including a bridge with a draw over the Illinois river, will be received at the office of the General Contractor at Quincy, until the 25th of November, 1856.

The work will be let in parts or as a whole, at the discretion of the General Contractor, and he reserves the right to reject all bids not considered, in view of all the circumstances, as favorable. Maps and profiles made from the experimental surveys, subject to the corrections of location, also specifications will be exhibited at the office of the General Contractor, in Quincy, after the 15th of November. Cross-ties may also be bid for—about 85,000 in all—deliverable on the road in manner and time for use.

The Quincy and Eastern Railroad begins at Camp Point, on the Northern Cross Railroad, about 22 miles from the terminus of that road, on the Mississippi river at Quincy, and extends thence eastward to and across the Illinois river, forming a connecting line with the Great Western Railroad of Illinois, which last extends still eastward to the State Line of Indiana, and there connects with the Toledo and Wabash Railroad, by which a continuous line is formed from the Mississippi at Quincy to the western extremity of Lake Erie at Toledo, about 475 miles in length, for the working of which as one road, arrangements have been consummated.

The country in which the work now advertised for letting lies, is well settled and cultivated, healthy and fertile, much of it being prairie, but with timber abundant for all purposes of construction.—It is moreover accessible from any direction by both railroad and river, one end of the work joining the Northern Cross Railroad, the other the Great Western—the Illinois river being also at one end, the Mississippi near the other,—and possesses every advantage to make railroad work desirable.

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245

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A. Oakley Hall, District Attorney, of New York City; Henry
L. Pierson; D. Randolph Martin, President Ocean Bank.

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VERMONT.—T. W. Bruce, Middlebury.
MASSACHUSETTS.—Hardley Williams, Worcester; W. H.
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HUDSON RIVER BRIDGE. Notice to Contractors.

OFFICE OF THE HUDSON RIVER BRIDGE CO., AT ALBANY,
September 26th, 1856.PLANS and Specifications for the Superstructure of the
Bridge to be erected by this Company across the Hudson
river, at Albany, will be received by the Directors at any time
within sixty days from the date hereof, at their office in the
Exchange, in the city of Albany. The plans may be for a
Superstructure of either Wood or Iron.By the terms of the charter, the Bridge is to be constructed
with a draw of sufficient width to admit the free passage of
the largest vessels navigating the river, and at least two hun-
dred feet in width; or two draws of at least one hundred and
fifty feet each.Information may be obtained at the office of the Company,
as to the location of the Bridge; and all the particulars neces-
sary to be understood by those who may wish to submit plans
and specifications.The Plans must be in detail, accompanied with an estimate
of the cost of all the items.The Company reserve the right to reject all the plans, or to
adopt portions of any of those which may be submitted.A Premium of Five Hundred Dollars will be paid for the
plan which may be accepted by the Directors, or if portions of
different plans be adopted, the premium will be divided in such
manner as the Directors may deem proper.

By order of the Board.

6140

G. L. WILSON, Secretary.

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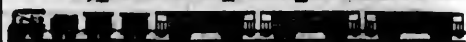
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Chinese R. & Black and Blue Stamping Inks.—MOUNTING GLVS.Envelopes.—Buff, Gold, White, and Blue, of French,
Engl. and Amer. manufacture; also, Cloth Lined, of all sizes.
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Racks, Ivory Holders, Rulers, FINEST Pencils, all grades,
FABER'S Red and Blue Chalk, MONROE'S Pencils, Notarial
and other Wafers, Stamps.Cutlery.—Pen, Pocket, Razing, and Desk Knives, Ban-
kers' Shears and Scissors.Cancelling Hammers, Bankers' Cases, Travelling Cases, and
Desks, Writing Desks in Mahogany, Rosewood and Paper
Mache, Cash, Twelve, Date, Bank Notice, Envelope, Post
Office, Bill Head and Steamer Boxes.Lawyers' Blanks of every description. Seals, Seal Papers,
Bleed Paper, Indexes, Wax Matches, Red Tape, Custom House
Blanks, Bills of Lading, Ship Receipts, Bills of Exchange,
Notes, Drafts and Checks, Interest and Exchange Books.Gillott's French, Phineas, Perry's, Hinks, Wells & Co.'s
Steel Pens, and a great variety of Gold Pens and Pencil Cases.
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ington, Decatur, Springfield, Jacksonville, St. Louis,
Cairo, &c.; at Galesburg with Northern Cross R.R.
for Quincy, &c.; and at Burlington with Burlington
and Missouri River R.R. and with Packets for
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LINGTON AND QUINCY.THROUGH TICKETS can be procured at all the principal
eastern railroad offices and in Chicago at the Depot and at the
Michigan Central R. R. office, corner of Lake and Dearborn
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New York and Erie R. R.

On and after Monday, November 3, 1856, and until further notice,

PASSENGER TRAINS
will leave Pier foot of Duane street,
as follows, viz:—BUFFALO EXPRESS, at 6 1/2 a.m., for Buffalo.
DUNKIRK EXPRESS, at 6 1/2 a.m. for Dunkirk.MAIL, at 6 1/2 a.m. for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

CHICAGO EXPRESS, at 12 m. for Dunkirk.

ROCKLAND PASSENGER, at 3 p.m., (from foot of Cham-
bers st.) via Piermont, for Suffern's and intermediate stations.WAY PASSENGER, at 4 p.m., for Newburgh and Middle-
town and intermediate stations.NIGHT EXPRESS, at 4 1/2 p.m. for Dunkirk and Buffalo;
EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and inter-
mediate stations.

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These Express Trains connect at Elmira, with the Elmira,
Canadawaga and Niagara Falls Railroad, for Niagara Falls; at
Binghamton with the Syracuse and Binghamton Railroad, for
Syracuse; at Corning with Buffalo, Corning and New York
Railroad, for Rochester; at Great Bend with Delaware, Lacka-
wanna and Western Railroad, for Scranton; at Buffalo and
Dunkirk with the Lake Shore Railroad for Cleveland, Cincin-
nati, Toledo, Detroit, Chicago, etc.,
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SOUTH AND WEST.Trains will leave the Southern and Western Station, corner o
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From New York to Cincinnati	\$17 00
do do Louisville	19 00
From New York to Indianapolis	19 00
From Philadelphia to Cincinnati	16 00
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An extra charge will be made for meals and state rooms on
board the boat.

GEORGE A. PARKER Sup't.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HAY-
SHAW, Civ. Engineer, of the practical organization of the
New York and Erie Railroad. It shows in detail its entire
physique in every department of the road. Such information
in regard to one of the greatest railroads in the world must be
deeply interesting to all connected with the management of
such concerns. The impressions are on fine paper 31x45 inches.
Price \$1 for thick or map paper and \$1.75 mounted on rollers.
Those on map paper can be sent by mail.

Address JAMES W. HILTON,

Jersey City, N. J.

July 24th, 1856.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 46.]

SATURDAY, NOVEMBER 15, 1856.

[WHOLE No. 1,074, VOL. XXIX.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, November 15, 1856.

Annual Report of the Railroad Commissioners for the State of New York.

(Continued from p. 707.)

It is refreshing to turn from the gloomy picture of the errors of past management to the movements which are being made in a few cases to correct them. Among these none are more deserving of commendation than those which have been exhibited in one branch of the operations of the New York and Erie railroad.

In 1853 this company published a very full report of their condition, business, earnings and expenses.

As one of the members of the Board was one of the Directors at the time, and the author of that report, no further reference will be made to it than to make the following extracts:

"Two subjects have engaged the particular attention of the Directors during the past summer—the reduction of the expenses of operating the road, and the increase of its receipts.

"It was deemed that the first of these could be effected by the establishment of a system, by which the managers could ascertain the value received for all the expenditures made; by exacting a rigid accountability therefor, and by imposing a check on improvidence, in the requirement of estimates in advance for all proposed expenditures.

"The value received can be ascertained, by comparisons of the expenses of the various operations with those of other similar roads, and with the several divisions of the road itself; and the expenses of the different conductors, engine men, &c. with each other.

"Such comparisons would naturally lead to an examination of any increased cost, in any particular operation, upon any division of the road, or on the part of any operative; and the cause being known, the remedy is easily applied. The effect of such investigations, is to incite the officers and subordinates to greater watchfulness and economy, to obtain from them suggestive remedies, and to create an emulation, among those of the same class, to so conduct the affairs entrusted to their charge, as to secure the approbation of their superior officers, who, they know, have the means of determining with accuracy their relative merits.

"By requiring estimates in advance of proposed expenditures, the heads of departments are compelled to exercise their discretion, in authorizing every expenditure, and this they do, with the knowledge, that this discretion will also pass under the review of, and be commented upon, by their superiors, and that the estimates will be compared with the actual cost.

"To carry out the above views, the Executive Committee, in August last, passed the following resolution:

"The Chief Engineer must present to the President, quarterly, the expense of constructing, maintaining, and operating the road, as compared with other similar roads.

"The Superintendent must present to the President, monthly, the comparative expense of maintaining and operating each division of the road, and for each class of service, and the same in detail quarterly.

"The Division Superintendents must report monthly, through the Superintendent, to the President, the comparative expense of running the different trains, by different conductors and engine men, of fuel, oil, &c. Also the service performed by the engines, the actual running and loss of time, and the cost of repairs thereon.

"The Auditor must report monthly, to the President, the amount of receipts from the different sources, and quarterly, the amount of receipts from each important station, of each service."

The credit of carrying out the principles of management which has been indicated in the preceding extract is due to the present Superintendent of that road, Mr. McCALLUM.

This gentleman prepares and publishes a monthly statement, showing on each division of the road the number of miles run by each engine, the amount of wages, the quantity of fuel, oil, &c., and the cost of repairs of the machinery; the cost of each of these items per mile run by the engine, and the number of tons of paying and non-paying weight hauled one mile by each engine.

These reports also show the names of those whose operations have been the most satisfactory

and economical in a conspicuous manner, and are distributed among all the employees of the company, as incentives to greater economy. They are preserved by those of the men whose names are printed with commendation, as the best certificates which they could present when applying for employment elsewhere.

From the station agents daily reports are required of the number of cars of each class which have arrived, left and remain, and whether full or partly loaded or empty. The substance of this report is communicated to the General Superintendent by telegraph at midday, and the full report in writing by the next train.

The superintendent is thus placed in direct and almost constant communication with the whole line of the road, and has always spread before him the amount of tonnage ready for shipment at each station, and the number and capacity of the engines and cars available for its transport.

With this are the incidental advantages of knowing the capacity of each of the engines on each section of the road, and the strictness with which each station master, conductor or engine man is daily performing his several duties.

The labor of arranging the information thus collected involves the necessity of a considerable amount of clerical force which is vastly more than compensated for in the certainty of a faithful performance of duty by all employed.

For the safety of passengers and the preservation of property it is important in an emergency to be able to arrest the trains within the shortest distance possible.

As now arranged, one brakeman is generally stationed between two cars, and is required to apply the brakes of both at a signal from the engine.

If any derangement occurs in the train, some moments are lost in communicating the signal to the engine, and from thence to the brakemen.

If an obstruction is observed on the track by the engineman, he must communicate by signal with the brakemen, by which some moments are unavoidably lost, even if they are all at their post, and more time is again lost before they can reach the brakes of the second car after winding up those of the first car.

At Light, and in cold or stormy weather, if not closely watched, the brakemen are probably inside the car, and more time is again lost before they can reach the brakes.

The incalculable value of these moments of delay can hardly be appreciated. When a train is moving at the rate of forty miles an hour, nearly sixty feet is passed over every second; an obstacle an eighth of a mile distant is reached in eleven seconds, and in such an emergency these delays are sufficient to render the brakes, as now arranged, entirely useless.

If the brakes were arranged to be operated from the inside of the cars, the men would be less exposed, and would perform their duties more promptly.

It is desirable that an arrangement should be made, by means of which, in an emergency, the engineman could instantly apply all the brakes in the train, without the delay which is unavoidable in communicating with other persons.

The Commissioners have examined two different plans which have been devised to accomplish this purpose. In the first of these the power of the engine was applied by means of a chain passing under the cars, and attached to each set of brakes.

On the first trial of this plan it failed, in consequence of the breakage of the chain on the application of such immense power.

The second expedient was arranged with a powerful spring attached to each brake, which being wound up at leisure by the brakeman, could be brought into instant use upon the brakes by the engineman, conductor or brakeman by means of a cord passing the train.

Several other expedients of the same nature have been suggested, and further improvements and experience will doubtless develop a plan which will accomplish this purpose at a moderate expense.

One of the most fruitful sources of accident are the great number of crossings of street, highway and farm roads at the level of grade. The total number of these is over eight thousand, and there is an average of more than three to each mile of road in operation, and more than one public road or street-crossing to each mile. It is believed that nearly ten per cent. of all the accidents by which persons were killed or injured is due to this cause.

The expense of maintaining watchmen at many of these crossings, and the damages to the property of the companies by collisions caused by them, render them costly.

The policy of reducing the number of those at grade is generally conceded, and it is recommended that authority be given to change road-crossings which are at the level of grade whenever it can be done without much detriment to the travel, so as to have two or more roads use one crossing, and in all cases, when it can be done at a reasonable expense, to require them to be carried over or under the railroads.

Authority should be given by law to the railroad companies to place gates at all public roads which cross at the level of grade, which shall remain closed across the highway during the passage of every train.

The number of switches which open from the main track exceed two thousand, one-half of which are without permanent tenders. These are also frequently the cause of serious accidents.

The fencing on several roads is not complete, and on nearly all there are many places where it is in very bad condition, so that unruly cattle very easily break through and get upon the track.

This is the case even on some of the oldest and most important roads in the State. In some cases this arises from the practice which was generally adopted when the earlier roads were built, of purchasing the lands and right of way with the condition that the person selling should maintain the fences, under a mistaken supposition that he would always have the greatest interest in keeping them in good condition, for the protection of his own crops and cattle. Experience has shown, that the owner of the land adjoining the track is not the proper person to maintain the fences, because the railroad company always suffers the greatest injury when cattle are run over; and the land owner knowing this, hopes to force the company to keep up the fences to protect themselves, and to accomplish this, is indifferent about their condition.

Authority should be given to the company, in all such cases, to construct and maintain the fences, and to make the expense thus incurred a lien upon the land.

Another frequent source of accidents arises from the practice of placing along side of the track long piles of wood, behind which stray cattle are very apt to get, who, alarmed by the approach of the train, spring suddenly upon the track before its speed can be checked, and produce the most serious results.

Doubts having been expressed as to the safety of some of the important bridges, the Board appointed James Laurie, Esq., a Civil Engineer of high standing and experience, to examine the Cascade bridge on the New York and Erie railroad; the Mohawk bridge, near Schenectady, on the Central; the Mohawk bridges, near Cohoes, on the Albany, Northern, and Rensselaer and Saratoga, and the iron bridges on the former, and those on the Black river and Utica railroad.

Mr. Laurie's report of his examination of all of these bridges, will be found in the appendix; it shows that the wooden bridges may be safely used; but he expresses his fears that those of iron are inadequate to the stress to which they would be subjected under the velocity and weight of trains, with which the law specifies they shall be tested.

In these opinions the Board concurs.

A magnetic telegraph, owned and operated exclusively by the company, is a necessary adjunct for every railroad; and besides the great safety which it affords to the traveller, the economy which it effects in the cost of running trains, should commend it to the favorable consideration of every railroad manager.

The practical working of this adjunct, is exhibited upon the New York and Erie railroad, where it has been in use since 1852. By the concurrent testimony of all of the superintendents of that road, it has saved more than its cost every year. The mode of using it there, will therefore be described as exemplifying its universal applicability.

An operator is employed at every station on the line, and at the most important ones there are day and night operators.

These men placed so as to have a fair view of the track, are required to note the exact time of the arrival, departure or passage of every train, and to transmit the same by telegraph to the proper officer.

On each division (of about one hundred miles) there is an officer who is called a "train dispatcher," whose duty is to constantly keep before him a memorandum of the position of every train upon his division, as ascertained by the telegraphic reports from the several stations.

The trains are run upon this road, in the same manner as upon all other roads, by printed time tables and regulations. When they become deranged, the telegraph is then also used to disentangle and then move them forward.

When trains upon any part of the road are delayed, the fact is immediately communicated to the nearest station, and from thence by telegraph to every station on the road.

Approaching trains are thus warned of the danger, and accidents from this cause are prevented.

When one or more of the trains, from any general cause like that of snow, storms, etc., have been retarded, and are likely to produce delays in the other trains, the train dispatcher is authorized to move them forward by telegraph, under certain rules which have been arranged for that purpose.

Having before him a schedule of the time of the passage of each train at its last station, he can determine its position at any desired moment with sufficient accuracy for his present purpose, and can adopt the best means of extricating the delayed trains, and of regulating the movement of all as to avoid any danger of collision or further entanglement.

He then telegraphs to such stations as are necessary, giving orders to some trains to lay by for a certain period or until certain trains have passed, and to others to proceed to certain stations and there await further orders.

To prevent any error or misunderstanding be-

tween the dispatcher and the conductors of the trains, he is required to write his order in the telegraph operator's book; the operator who receives the message is required to enter it upon his book, and to fill up two printed copies, one of which he hands to the conductor of the train and the other to the engineman. The dispatcher then transmits a message to the conductor, asking him the question, "How do you understand my message?" to which the conductor is required to reply, repeating the substance of the message, but in other words, to detect any error which may have been made by the operators. When the dispatcher has received this reply, he returns the message "All right, go ahead;" and until this final message is received, no train can be moved on the road by telegraph.

Although from this description of the process of directing the movements of a train by telegraph it appears to occupy considerable time, yet in practice it takes but a few minutes, by using abbreviations, such as substituting certain letters and numbers for the names of stations, trains and the ordinary questions and answers.

In this way, if a passenger train is delayed an hour or more, all of the freight trains which would be held by it at the several stations under the general rules, are moved forward to such other passing place as they are certain to reach before the delayed train would overtake them; and thus it frequently happens that, in a single day, the trains, which would otherwise be delayed, are moved forward by telegraph a distance equivalent to the use of two or three engines and trains.

It is admitted by all railroad managers that the increased cost of maintaining the present high rate of speed in the passenger trains, is a serious drawback upon the net income of the roads. It has been stated that the cost of transportation was about in the proportion of the rate of speed.

The following table, based upon the assumption of a charge of two cents per mile for a speed of twenty miles per hour, shows, in the opinion of the Board, the corresponding rates which should be charged as the speed of the trains is increased:

At 20 miles per hour, a charge of 2 cents per mile.
At 25 miles per hour, a charge of 2½ cents per mile.
At 30 miles per hour, a charge of 2¾ cents per mile.
At 35 miles per hour, a charge of 3 cents per mile.
At 40 miles per hour, a charge of 3½ cents per mile.

The varying circumstances under which freight is offered for shipment, prevents the construction of a similar general table, but the board are of the opinion that, with a speed of twelve miles per hour, two cents per ton per mile is the lowest rate at which any description of mixed freight can be carried and afford a fair profit.

The Board are of the opinion that all of the present restrictions imposed by law for transport on railroads, should be abolished.

That all persons who are employed to manage the affairs of others, should be required to make stated reports of their proceedings, and of the condition and prospects of the business, seems to be so self-evident, that we can find no one hardy enough to directly advocate the withholding of such information.

Our public officers are required by law to make such reports to the Legislature and to the public, and it is rare to find any one averse to the performance of this duty.

In private corporations, the officers still recognizing the necessity of this duty, are called upon for reports which, by general custom, are printed and circulated to some extent among the public.

Corporations which are of a public character, have always acted upon this principle as a matter of just right to those who have a pecuniary interest in their affairs as well as to the public at large, by the surrender of whose rights they have acquired their corporate powers.

In all of the above cases, individuals are to be

found who, for some reasons, deem it proper to withhold information from those whose affairs they have been selected to manage.

These reasons, in the case of managing the business of an individual, are rarely given, but the practise is rather to omit, conceal, or misrepresent their acts and administration. In the case of public officers, the reasons assigned are, that "the public interest may suffer."

In the case of the officers of a public corporation, we find the greatest number of those who are unwilling to lay before the owners and the public full reports of the condition and prospects of the work, and of their administrative acts.

All of the prominent cases of frauds which have, of late years, so startled the community, have been accompanied, if not actually incited by an unfortunate confidence in the officers who have committed them.

The restraints which ordinary prudence would have thrown were neglected, and thus the facility, if not the suggestion, for a misapplication of the funds and interest entrusted in their custody may be directly traced.

Under such circumstances it would also seem that nothing but infatuation would have permitted the withholding of full reports on the part of their officers.

These discovered cases of fraud which have been published, probably form but a small portion of those numerous other cases which have been concealed from the public eye, as well as those which has never been discovered.

To these are to be added another class of injuries to the stockholder which is less tangible, but which it is to be feared are still more numerous than the first class spoken of, and which are in the aggregate quite as detrimental to the interests of the owners of the property.

Allusion is now made to the prostitution of the business of the corporation, to the promotion of the individual interests of the managers and their employees.

The custody of the moneys and securities of the company, and the purchase and sale of the stock and bonds by the officers are always regarded with suspicion by the public.

The superior advantages for obtaining information in regard to the prospects of the work possessed by the managers, enable them, when so disposed, to traffic in them to a great personal advantage, and whether they sell or buy, they are able by ingenious reports to raise or depreciate the value almost at will, and often to the serious prejudice of the interests of the other stock or bond holders.

But little reflection is necessary, to perceive the great advantage to every interest connected with railroads, (except that of speculating officers) of having, at frequent stated intervals, full, detailed and circumstantial reports, properly arranged, and their accuracy vouched for, embracing an exposition of the condition of the financial and operating departments, the extent and nature of the business done, and the expense and profit of each portion of such business.

To the Legislature, such reports are indispensable, to enable it to determine, with justice to all parties, on those many questions of conflict, which cannot fail to occur between the people and the management of an interest, with which the concerns of the whole community are so intimately connected.

To the public, they are satisfactory and interesting, because they exhibit the necessity of charges for transport, and reasons for arrangements in running trains, and the manner of doing other business, without which they would condemn such acts unjustly.

To the stock and bond holders, they are especially interesting and necessary, to enable them to determine the value of their property, and the fidelity and judgment with which it is managed.

To the managers, such reports are very valuable, as evidences to all parties interested, of their desire to perform their duties faithfully, and besides calling their attention more particularly

to such portion of their business, as are of questionable profit or benefit, they afford an opportunity of comparing the economy and other advantages, of the management of each class of their own business, with that of other companies, and thus each may profit by the best management of all.

It is not to be denied, that however faithful and skillful an agent may be, he will become more devoted to his duty, and be more desirous to improve his management, if he is aware that there is always over him a watchful interest, with the means of testing his integrity and ability, with a certain reliable standard, and that the results will be compared, with those of many others acting under the same influences, and that his merits will become known and appreciated not only by those who employ him, but also by a large class of gentlemen who control appointments on similar works.

It has been said that all this may be, and has been done without the interference of Legislative authority, and that as the great interests of corporations of this class, are chiefly those of individuals, it is an invasion of their rights, to establish over their interests, a public inquisitorial power.

It is true that a few railroad corporations in this country present annual statements of their affairs in a very full manner, and that others sometimes do so, but the number of those who refuse to furnish any but the most meagre reports of their condition and business, and of those who use such reports as the vehicle for serious misrepresentations far exceeds those who make either honest or full ones. But even in the fullest reports which have been furnished, those interested find many omissions of importance, which prevent a thorough understanding or value of the work or of the skill with which it is managed. And the fact that some companies do now furnish such reports is an admission of the benefit of the rule, and only the more strongly shows that it should be imposed upon all.

It is alleged that the interests of a company sometimes require the withholding from the public of matters of information affecting pending arrangements. These cases are so rare, and when thoroughly examined so often prove to be erroneous, that they should not be permitted to block the operations of a rule which, when universally applied, will prove so wholesome, and of such large direct pecuniary benefit to the whole railroad interest. This argument is to frequently used by managers to prevent too close enquiry into such of their acts as are of a questionable character.

It is an acknowledged part of the contract between the people of the State and the corporators that such reports should be furnished for the information of the Legislature and of the people.

An attempt to evade or escape this condition is a repudiation of the contract on the part of the corporations, which is a dangerous principle for for them to maintain.

The public, however, have a deep direct interest in obtaining this information, and it should not be denied to them.

The stocks and bonds of the railroad corporations are very widely distributed among the people.

If the whole cost of the railroads in the United States* was equally distributed among the people, it would average thirty dollars to each man, woman and child, or one hundred and fifty dollars to each family. Perhaps an amount equal to one-third of this capital is held abroad, and large masses of it are accumulate in the hand of individuals, yet this statement is sufficient to confirm the belief generally entertained, that no other pecuniary interest is so much distributed among the people.

A considerable number of the holders of these stocks and bonds are widows and children, and a large amount of both is held by men whose purses do not afford them the opportunity necessary to enable them to judge of the fidelity or judgment

with which the affairs of a railroad corporation are managed, without the aids furnished by full reports and comparisons made with the cost and operations of similar roads.

It has been the practice of all governments to legislate for the protection of such classes of persons, and the popular will, in this country, will always demand such protection.

Legislation is always slow in its action upon new and untried subjects, and the railroad interests have grown with such amazing rapidity that they have entirely outstripped all the legal enactments for their safe and profitable management.

The law under which this Board was organized is calculated to meet the deficiencies of past legislation, and if its objects and requirements are faithfully carried out by the members, it will not only furnish the stockholders and the public with more full and reliable reports, but it will furnish the Legislature with such additional information on the subject as will enable it, in its wisdom to modify the present law with a full knowledge of its effects.

The members of the Board believe that changes in the present law are required, but the experience of its operations for the past year has been too limited to enable them to unite in a recommendation to that effect in the present report.

(To be continued.)

Terre Haute and Alton Railroad.

The Terre Haute and Alton Railroad Company and the Belleville and Illinoistown Railroad Company have been consolidated, under the title of the Terre Haute, Alton and St. Louis Railroad Company, of which Charles Craft of Terre Haute has been elected President; Levi Davis of Alton, Secretary; C. Murdock of New York, Treasurer; and L. R. Sargent of St. Louis, Superintendent. The Belleville road is practically an extension of the Terre Haute from the junction of the two at Wood river to St. Louis, a distance of twenty miles. It also connects St. Louis with Belleville, a thriving place of some 10,000 inhabitants, distant about sixteen miles.

Cairo and Fulton Railroad.

Several of the officers of the Cairo and Fulton railroad were at Cairo on the 20th Oct., for the purpose of making arrangements for the early prosecution of this great work, among whom was Judge Cross of Arkansas, the General Agent of the road; Col. Bartlett, the President of the Missouri division, and several Directors.

Col. R. B. Mason, of the Illinois Central, was there, and was appointed Consulting Engineer for the whole road, and Wm. H. Burrall, Chief Engineer of the Missouri division. Mason Brayman, Esq., formerly Attorney for the Illinois Central Company, was chosen Land Commissioner for the whole road.

This road is now in the most commanding position, having a grant of land equal to that of the Illinois Central for its entire length in the States of Missouri and Arkansas, in addition to which a large amount of swamp land has been donated in Missouri by the counties through which it passes.

Mr. Brayman will proceed at once to organize the Land Department, and make arrangements for the prosecution of the work on the Missouri division, as soon as the necessary engineering has been completed.

Mr. Burrall will probably commence the location of the road next week, and contracts for the entire Missouri division will be ready for letting, it is hoped, at an early day. It will be seen in another column that bids are solicited for the clearing of a portion of the road on the 25th of October.

This great national route, besides opening up the most fertile and richest country of Arkansas and Missouri, will be of importance as a great connecting link between the North and South, in connection with the Illinois Central road, by which their principal articles of commerce may be ex-

* East of the Mississippi.

changed to mutual benefit—and the names of such men as Col. Mason give a warrant for the soundness of the enterprise.—*Chicago Times.*

Catawissa, Williamsport and Erie R. R.

At a meeting of the managers of the above company held at their office in Philadelphia, on the 28th ult., the President, THOS. KIMBER, JR., Esq., submitted a report of the condition and prospects of the company, from which we learn that the road is in excellent working order, and the credit of the company amply sufficient for the purchase of all needful machinery and material, and for the economical management of its business.

Its debts along the line of the road have all been promptly discharged, and the pay-rolls brought up in cash, to the first of the present month. The past indebtedness of the company has been funded with the exception of about sixty thousand dollars, which is not required to be paid for a year, and for which there are bonds in the hands of the Treasurer amply sufficient to liquidate the amount at its maturity. The coupons and other obligations of the company are all now promptly met, and the present trade of the road ensures beyond a doubt their punctual payment for the future. The receipts of last month were over thirty thousand dollars, besides the proportion due to connecting roads leased by the Catawissa Company, and there is every reason to believe that the average monthly income, for the ensuing year, will considerably exceed that sum. It will be seen by the statement presented below, that even at this rate, the net earning of the company will pay the interest on all its outstanding bonds, leaving a surplus to the stockholders; and with the calculated increase in the trade of the road, which the machinery and furniture, contracted for, will admit of, the stock of this company ought in a year's time to take its place among the regular dividend paying investments of the country.

Owing to the enormous sacrifices and losses incurred by the first projectors and contractors of the road, the present stockholders have more than an adequate representation of the par value of their securities, as the actual cost of the work was greater than the whole stock and bonds of the company.

The bonds were all taken at par by the contractors, and negotiated at very little sacrifice, several years ago, through leading capitalists to New York.

Finally, although the parties who purchased the old road obtained it for a mere nominal consideration, after the expenditure in cash of nearly a million and a-half of dollars by the first projectors of the enterprise, yet they have all suffered heavy losses in its subsequent construction.

In order to explain and establish the above statements the President gives an outline of the history of the road from its commencement, the original objects of its projectors, and the various changes which have resulted in its present completion and prosperity.

In the year 1827, the Legislature of Pennsylvania authorized the survey of a railroad to connect Philadelphia with the waters of the North Branch of the Susquehanna, the public mind not having then grasped the grand idea of its extension to those vast inland seas which are now the main channel of the commerce of the far West.

Yet, from the report of the engineer appointed to make this survey, he appears to have fully realized the magnitude and importance of the local trade which the Catawissa route would command; and for this reason he selected the site of the present road as the most eligible location for this connecting link between the Susquehanna and Delaware rivers.

No action appears to have been taken upon this

report until the year 1831, when an act passed the Legislature, incorporating "The Little Schuylkill and Susquehanna Railroad Company," with a capital of six thousand shares, the requisite portion of which was soon subscribed. The work was, however, delayed until the year 1836, when the funds were freely supplied by the Bank of the United States for its effective prosecution.

From this time the original idea of the Little Schuylkill and Susquehanna road being a mere connection between the northern and eastern canals of Pennsylvania, had grown into the magnificent project now realized, though destined to long delays and difficulties before the accomplishment, of uniting the great lakes with the Atlantic at this point.

The work of construction was pushed vigorously forward with funds provided by the Bank of the United States, until its failure in 1851, when it was found that over \$800,000 had been obtained from this institution alone, and \$600,000 from other sources. In this way nearly a million and a half was expended. Owing to the low rates of labor at that time, more work was done by the expenditure of this sum, than could now be accomplished for two millions of dollars.

While this great work was thus rapidly progressing towards the north, another enterprise, even yet more bold in its projection, and more unfortunate in its earlier career—the New York and Erie Railroad—was stretching its slow length along the upper waters of the Delaware and Susquehanna, in order to meet the Pennsylvania connection at Elmira, and proceed from there in one continuous line to the Lakes.

The financial embarrassments which followed the expansion and speculation of 1836, and which swept over the land like a whirlwind, leaving on every side its wrecks, even to this day, prostrated for years the New York and Erie Company, and, had it not been for the powerful aid of the Bank of the United States, would have entirely prevented the efficient progress of the Little Schuylkill and Susquehanna road.

Even this support failed with the final fall of that great institution, and for years the whole enterprise seemed buried in the ruin and desolation which followed.

In the year 1852, however, a vigorous and successful effort was made to revive it, under the name of the Catawissa, Williamsport and Erie Railroad Company, and a strong party was formed principally in New York, who subscribed two hundred thousand dollars more of the stock, and negotiated one million and a half of bonds at about their par value. This is the first and only mortgage on the real estate of the company, and covers in the fullest manner the franchises and charter of the road; the mortgage being drawn with extraordinary caution and strictness, in order to invite English capital, which has, to a considerable extent, been invested in the bonds.

With these funds the road was completed, but as if some fatality hung over the enterprise, it was only finished by the universal loss of the contractors. Believing that a large fortune might be realized in its resuscitation, the attempt was made by too small a number; and before their success could introduce favorably the securities of the Company to the public, the pressure of 1853 and '54 again prostrated those engaged in the work.—The stronger parties furnishing the capital, determined to hold on to their securities, and will doubtless ere long realize their investment; but those who were not able to do so, have lost heavily, many ruinously, by their contracts. The road is, however, now completed, and with a wider basis of operation, and a strong accession of new parties, it is believed to be placed beyond the reach of any future contingency.

A large amount of money has recently been permanently invested in the securities of the company, and as its real condition becomes more generally known, and the fact realized that all its bonds and stock are more than represented in the

property, these securities must, ere long, rise to their level in the market.

From this statement of the history and condition of the Catawissa Road, it will be seen that, so far as its cost and construction are concerned, it compares favorably with any similar road in the country; and it only remains to establish the advantages of its locality and its prospects for trade and travel.

The original object of its construction, the junction of the Northern and Eastern Canals of Pennsylvania, is now forgotten, and the idea of Nicholas Biddle fully realized, in the perfect connection of Philadelphia with the Lakes and the Northwest. If, in his day, this was thought to be a grand and remunerating enterprise, in our time, when the trade of the Lakes surpasses every month their whole yearly traffic then, it surely cannot now be esteemed a less important thing to tap this vast inland commerce, and bear at least a small proportion and capital it builds up, which is thronging the streets of New York, and crowding its piers with vessels from every port in the world.—Nor is there any apparent termination to its increase.

The great cities and States, which are growing up in the far West, all find their cheapest outlet to the seaboard by the channel of the Lakes. Peopled, as they are now being, with a rapidity which has no parallel, these new States are fast rivaling in wealth and importance the older communities of the eastern frontier, and are drawing from them rapidly and steadily, the capital and vitality which were once all their own. It is a remarkable fact, that while for the last three years the wealth of the New England States, for instance, including their commercial, manufacturing and industrial classes, has not, according to the best authorities, increased one dollar, the wealth, property and commerce of the States bordering on Lake Michigan, have all more than doubled in that time. Railroads have been constructed and are still in progress to every point on the Mississippi, and to all points beyond, which are likely to command the produce and commerce of the Interior; so that Iowa, Minnesota and Missouri have become tributary to the Lake ports. The result is seen in the magical increase of their trade.

The mighty commercial current has flowed hitherto almost exclusively to New York, and her railroads and canals may be said to have monopolized it entirely. The city of Philadelphia is now as near to inland distance to Buffalo as New York is, and freights from either city to that port are precisely the same. It needs but a slight effort on the part of our merchants to share in that commerce, and the advantages of returning trade and capital it brings in its train. To some extent even now we are realizing the benefits of the northwest connection, but not to a tithe that its facilities afford.

The Catawissa Road, however, has a local trade of its own, which would abundantly support it when fairly organized, were all the through trade and travel withdrawn. Passing directly through the iron district of Pennsylvania the furnaces and rolling mills afford it a rich and increasing freight, while its proximity to the coal regions bring back from the agricultural districts, in constant and increasing supplies, the provisions for the large communities dependent on the collieries for the means of support.

The lumber mills of Williamsport are among the finest in the world. The timber floated down from the rich pine regions of the West Branch of the Susquehanna, and its tributaries, is here received and prepared for market in larger quantities than at any other place in the country. Over forty millions of feet are annually produced in this neighborhood, and contracts have already been made for securing as much of this freight as the present facilities of the road will admit of. This one product of the forest furnishes a large share of the revenue of the New York and Erie Road, and will of itself constitute an important and remunerating business to the Catawissa Road here.

after. About nine miles east of Catawissa and three of the road, the Columbia Coal and Iron Company, owning the vast deposits of the McCauley Mountain, are vigorously at work in the opening of their collieries, and the completion of the connecting road. They estimate that in one year from that event, they will be able to furnish three hundred thousand tons of coal to the iron works of Bloomsburg and Danville, and the northern market, to which they are equally accessible with the Shamokin district.

The property of the Catawissa Company comprises 1200 acres of coal lands, estimated to contain over two millions of tons, which it is very desirable to place, at an early date, in the way of development.

The Quakake Branch, extending from the Catawissa Summit to the Beaver Meadow Railroad, a distance of twelve miles, and already graded for the track, passes directly through this coal property, and, on this account, as well as in view of the vast importance of a New York connection, deserves immediate attention.

Were any mode devised for the early completion of this short branch, Elmira and the Lakes themselves would be brought by easier grades within ten miles of their distance to New York by the Erie Road; and the Pennsylvania chain of railroads would then share in the trade of that city to the great West, besides bearing the iron, coal, and lumber of our State directly to the New York market.

Another most important feeder will be the Sunbury and Erie Railroad, on its completion to the harbor of Erie, and the lines connecting with it westward of Ridgway, by Venango in Pennsylvania and Warren in Ohio. It is impossible to estimate the vast trade and travel that will then form the shortest and best connections between the West and the Atlantic markets.

The condition of the Catawissa Road from its commencement above Tamaqua, to its termination at Milton, I believe unsurpassed by any in the country. The road bed, from its long exposure, has become perfectly hardened, and the tunnels and all the structures are of substantial character.

The bridges I have given orders to have decked and painted as recommended in the report of Major Morell, and they are all under contract, one of them being nearly completed. A careful watchman is stationed at each bridge and every precaution used to guard against fire or accident: the speed of the trains when crossing the bridges, has been reduced to eight miles per hour.

The business of the road is steadily and largely increasing, and promises to continue to do so through the winter.

Owing to the fact that the funds for the construction of this road had really never been fully furnished, a debt of about two hundred dollars hung over the Company, which damaged its credit and much embarrassed the economical working of the road. Through the exertions of its late able President, William D. Lewis, whose long and faithful services and unwavering devotion to the interests of the Company in its darkest hours cannot be too highly appreciated, this debt was in great measure funded, by the creation of a Chattel Mortgage Loan of that amount by express legislation for the purpose.

The bonds of this loan not taken (about \$60,000) are still on hand, and will gradually be absorbed in the payment of the debt as required.

In order to meet the August interest, which had been unprovided for in the previous loan, and also to place a large amount of machinery on the road for its immediate wants, the former board of managers authorized a further issue of ten per cent. bonds to the extent of \$150,000, \$70,000 of which were at once subscribed in cash at par, and \$20,000 since negotiated at the same rate, in the purchase of rolling stock, not yet delivered. When the balance of this loan is taken, the Company will be entirely out of debt, or as nearly so as any corporation can well be while continuing active operations.

The economical working of the road having

been much interfered with by the imperfect character of a portion of its machinery, I have ordered every engine, not in complete repair, to be overhauled and thoroughly refitted. The estimated expense of this renovation (about eighteen thousand dollars) has been charged off in the settlement of the old transportation account, and a special credit opened for this purpose.

The financial position of the company, on the 30th of August, may be thus stated:

	Dr.	
Construction account, including Quakake Branch, coal lands, and the entire depots, water stations, engine houses, and all real estate of the company, with all balance of interest, and expenses to that date.....	\$3,483,471 54	
Locomotive engines and tenders.....	123,980 25	
Freight cars.....	86,777 50	
Passenger and baggage cars.....	22,787 58	
Telegraph stock.....	5,000 00	
	\$3,722,016 87	
	Cr.	
By stock, 84,000 shares, at \$50....	\$1,700,000 00	
First mortgage 7 per cent bonds....	1,500,000 00	
Income bonds 7 per cent.....	221,500 00	
Ten per cent. loan, (chattel mortgage, \$122,000; ten per ct. bonds, \$70,000,).....	192,500 00	
Balance of bills payable, and all outstanding debts, less cash and other assets on hand.....	108,016 87	
	\$3,722,016 87	

It will be thus seen that the entire net floating debt of the company, on the 30th of August, including all outstanding coupons to that date, was only \$108,016 87. To meet this they hold of their chattel mortgage,—

Ten per cent. loan.....	\$77,500
Ten per cent. bonds, on hand.....	80,000
	\$157,500

Of the above \$108,016 87, \$60,000 is provided for the year by special credit, which enable the company to carry the amount, at less than it would cost them if funded in their ten per cent. bonds, and at the present rate of absorption of these bonds it is believed that the debt will be extinguished before the expiration of that time.

The annual liabilities of the company may be thus stated, viz:

Interest at 7 per cent. on 1st mortgage bonds.....	\$1,500,000	\$105,000
Interest at 7 per cent. on Income bonds.....	221,500	15,505
Interest at 10 per cent. on bonds subscribed.....	192,500	19,250
Interest on floating debt, say 10 per cent., as if funded..	108,016	10,802
		\$150,557
The present business of the road may fairly be taken at \$30,000 per month, though it is believed that it will average through the ensuing year considerably over that sum.....	360,000	
Operating expenses 50 per cent.	180,000	
		\$180,000

Such is the result of our present actual business. But the road is absolutely in its infancy; owing to its financial embarrassments, it has hitherto had no opportunity to develop its powers, and the organizations of its trade and travel have all yet to be accomplished. The opening of the Bloomsburg and Lackawanna road will pour into it a new and large revenue; and a New York connection, either by the Quakake road or from the neighborhood of Tamaqua or Port Clinton, will certainly be completed at no distant day, which will almost double the business of the Catawissa road.

Wisconsin Railroads.

A well informed gentleman who has been at Madison during the last session of the Wisconsin Legislature, has kindly furnished us with the following facts in relation to the disposition of the lands granted to that State by the last Congress for railroad purposes.

On the east side of the State they were given to a new company authorized and required to construct a first-class road from Fond du Lac, the present terminus of the Chicago, St. Paul and Fond du Lac Railroad to Superior, at the west end of Lake Superior, touching the Michigan line, and giving a connection to the Michigan roads from Marquette and Ontonagon. On the west side of the State they were granted to the La Crosse and Milwaukee Railroad from Madison to Hudson and Superior. The La Crosse and Milwaukee Railroad Company last week consummated an arrangement by which all the lands granted by Congress lying north of Hudson to Superior and Bayfield were transferred to the St. Croix and Lake Superior Railroad Company, and this company did on the 28th of this month close a contract for the construction of the road complete. The road from Hudson to Superior is to be commenced within sixty days and completed by July, 1859.

Supplies are now being purchased in Chicago to commence and prosecute the work vigorously, and will be shipped by Spencer & Co's line to Superior.

The contractors are men of wealth, large experience in building roads, and great energy, and are well known in Pennsylvania. The firm's name is Dillon, Jackman, Jannett & Co.

Thus the St. Croix and Lake Superior Railroad is to be the pioneer railroad from Lake Superior to the valley of the Mississippi River. Well may Chicago say we are the meeting point of the extremes of the business men of the Union.

Our correspondent, who is a citizen of Superior, hails this result as an earnest of their future success. Communications were opened two years since, and previous to that not a person had passed between the waters of Superior and the Mississippi, except on foot. Next year Superior will have two good wagon roads, one in Wisconsin to Hudson, and one via Military road to St. Paul, with branches to Crow Wing.

We rejoice that our sister State Wisconsin is to have railroads through both her eastern and western borders. They will cause a substantial progress which will soon secure for her a proud position among her sister States.—Chicago Press.

Chicago.

In 1851, this city had but 98 miles of railroad leading into her streets; and the amount of grain exported was only four and three quarter millions bushels. Now, the railroad system of Illinois, with which she is connected, extends 2,400 miles, and her population has increased from 31,000 to 110,000, and the State of Illinois from 875,000 to 1,500,000. The export grain trade of Chicago has swelled steadily, year by year, until it equalled 15,750,000 bushels last year, and promises to reach 50,000,000 bushels in 1856. The import trade in lumber has increased in a corresponding ratio, and was equal to 526,000,000 feet in 1855, and gives every indication of touching 450,000,000 for the year 1856. There were also received at this port, in 1855—Butter, 2,473,982 lbs.; Lard, between 5,000,000 and 6,000,000 lbs.; dressed hogs, 27,955,007 lbs.; packed beef, 16,082,138 lbs.; Wool, 2,158,426 lbs.; Coal, 10,930,259 lbs., and Iron 11,120,000 pounds.

Service Presentation.

At Bloomington, a few evenings since at the Pike House, a beautiful service of plate was presented to Col. R. P. Morgan, Jr., late Superintendent of the Chicago, Alton and St. Louis Railroad, by the officers and employees of the road, and a number of citizens of Bloomington, not connected with the company. A supper, toasts and speeches followed, and the company had a good time generally.—Free Press.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence.	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	800,000	800,000	550,000	In progr.	---	---	---	---
Androscog. & Kennebec.	55	539,042	1,622,906	2,210,947	209,475	110,247	10	10	South Western.	92	1,097,490	465,500	1,624,920	253,506	141,168	8	---	---
Kennebec & Portland.	56	1,114,725	1,661,236	2,470,960	---	---	---	---	Tennessee and Alabama.	30	244,486	---	779,900	In progr.	---	---	---	---
Portl., Saco, & Portsmouth.	51	1,367,600	119,257	1,486,857	270,214	112,491	6	85 1/2	Tennessee and Missouri.	217	170,981	---	175,540	In progr.	---	---	---	---
Boston, Concord & Montreal.	93	1,808,093	1,059,512	2,771,310	233,234	120,834	---	---	Memphis and Charleston.	153	2,178,440	2,127,002	4,028,736	311,631	159,572	---	---	---
Cheshire.	68	2,085,925	899,318	3,179,887	330,221	143,565	2	13	Mobile and Ohio.	183	2,648,555	1,902,921	4,536,412	160,932	109,236	---	---	---
Concord.	35	1,500,000	5,242	1,412,678	835,919	338,454	6	74 1/2	Miss. Central.	188	642,534	---	628,303	In progr.	---	---	---	---
Northern, N. H.	82	2,768,400	---	3,016,633	370,529	138,299	2	89 1/2	N. O., Opelousa & G. W.	56	2,830,425	671,645	2,657,568	In progr.	---	---	---	---
Conn't & Passumpsic Riv.	61	1,048,145	787,608	1,780,062	162,647	56,178	none	4	Vicksburg, Shreveport & Tex.	111	1,117,750	---	1,077,896	In progr.	---	---	---	---
Rutland & Burlington.	120	2,253,576	2,662,996	5,278,428	394,971	---	---	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---	---
Vermont Central.	117	6,000,000	8,560,236	14,560,236	620,119	214,793	none	1 1/2	East Tennessee and Va.	16	625,425	888,593	1,038,781	In progr.	---	---	---	---
Boston and Lowell.	27	1,830,000	325,635	2,188,595	489,754	140,377	6	52	Nash. and Chattanooga.	151	2,319,330	1,497,081	3,843,694	816,090	112,177	none	---	---
Boston and Maine.	83	4,076,974	150,000	4,179,635	854,426	339,060	6	76 1/2	Covington & Lexington.	96	1,802,804	2,235,939	4,038,743	264,978	138,694	18	---	---
Boston and N. Y. Central.	74	2,240,300	1,618,671	3,463,181	60,917	8,740	none	7	Lexington and Frankfort.	29	430,055	158,099	687,071	93,263	43,685	6	---	---
Boston and Providence.	66	3,600,000	559,428	4,965,428	1,008,004	404,461	6 1/2	83 1/2	Lexington and Danville.	65	694,444	52,734	747,178	In progr.	---	---	---	---
Boston and Worcester.	68	4,681,690	280,593	997,252	119,221	65,527	3	49 1/2	Louisville and Frankfort.	65	698,236	669,061	1,889,696	244,014	96,902	6	---	---
Cape Cod.	47	1,691,110	273,241	1,802,244	286,653	108,787	5 1/2	40	Atlantic & Gt. Western.	254	866,839	77,294	613,231	In progr.	---	---	---	---
Connecticut River.	60	2,683,400	2,947,737	4,021,016	647,281	305,998	---	---	Bellevue and Ind.	118	1,881,635	2,025,952	2,852,652	298,293	140,823	none	---	---
Farmington, Mass.	67	3,540,000	153,700	3,765,968	681,163	225,071	73	73	Olev, Col. and Cincin.	141	4,547,020	1,222,857	4,013,722	1,290,296	732,056	9	101	---
Fitchburg.	30	800,222	255,535	968,621	In progr.	---	---	---	Cleveland and Toledo.	200	2,676,425	2,689,301	5,194,629	738,272	396,986	10	69 1/2	---
North Eastern.	21	500,000	none	533,953	198,421	56,533	5 1/2	---	Clev. and Mahoning.	103	---	---	928,633	In progr.	---	---	---	---
N. Bedford and Taunton.	57	3,015,100	292,650	3,362,049	663,499	205,738	6	83	Clev. and Pittsburg.	133	2,780,744	3,043,912	6,637,466	681,877	309,618	---	---	---
Old Colony and Fall River.	77	2,232,541	1,033,670	3,209,727	268,726	87,313	none	6 1/2	East Tennessee and Va.	60	2,153,900	1,321,213	2,987,757	508,271	278,012	---	---	---
Vermont and Mass.	155	5,150,000	5,068,420	10,495,000	1,869,673	638,013	7	91	Cin., Hamilt'n & Dayton.	131	1,120,450	1,311,266	2,326,499	In progr.	---	---	---	---
Western, Mass.	46	1,141,000	205,565	1,511,271	294,786	75,760	2	42	Cin., Wilm. & Zanesville.	53	1,454,550	149,000	1,481,733	356,366	137,518	10	82	---
Worcester and Nashua.	43	1,510,020	335,461	1,806,696	311,430	138,057	---	70	Columbus and Xenia.	63	437,838	422,658	860,496	In progr.	---	---	---	---
Providence and Worcester.	72	2,359,000	939,000	3,318,932	730,012	352,799	10	118	Dayton, Xen. & Belpr.	140	1,076,602	393,011	1,185,826	In progr.	---	---	---	---
Hartford and N. Haven.	122	2,008,110	2,080,635	4,088,869	268,685	119,611	none	---	Dayton and Michigan.	36	310,000	500,000	738,739	In progr.	---	---	---	---
Hartford, Prov. and Fishkill.	110	2,000,000	414,240	2,481,773	339,196	71,427	none	---	Dayton and Western.	42	454,690	904,489	1,156,135	171,929	65,000	20	---	---
Housatonic.	57	1,031,800	624,244	1,580,723	220,459	93,768	---	---	Easton and Hamilton.	42	2,963,921	1,171,786	3,648,172	681,562	836,708	---	---	---
Naugatuck.	62	3,000,000	2,876,808	5,376,808	884,306	338,877	none	25	Little Miami.	205	2,451,650	2,572,932	4,446,661	In progr.	---	---	---	---
N. York and N. Haven.	50	738,258	735,165	1,450,318	88,007	30,318	none	---	Mad River and L. Erie.	138	1,520,927	4,858,078	4,288,443	Recently opened.	---	---	---	---
N. Haven and N. London.	68	509,200	1,073,673	1,694,353	124,044	66,430	---	---	Central Ohio.	187	2,451,700	3,219,000	6,670,700	1,111,626	662,117	9	50	---
N. London, W. & Palmer.	66	2,122,300	873,489	2,997,133	304,236	88,458	2 1/2	25	Ohio and Penn.	137	3,712,500	3,100,000	6,812,500	In progr.	---	---	---	---
Norwich and Worcester.	32	439,005	1,625,098	1,840,695	117,716	9,904	---	---	Pittsburg, Mayview & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---	---
Albany Northern & Utica.	35	433,330	317,859	974,323	In progr.	---	---	---	Sandry, Mans. & Newk.	127	1,350,000	2,206,357	3,552,357	328,958	164,479	none	---	---
Black River and Utica.	100	1,487,871	1,601,183	2,819,096	172,476	66,333	none	---	Scioto & Hocking Valley.	135	403,975	509,050	888,868	In progr.	---	---	---	---
Buffalo, Conn. and N. Y.	69	789,439	2,637,849	3,401,868	288,262	31,896	none	---	Springf., Mt. Vernon & P.	113	1,000,000	950,000	1,950,000	In progr.	---	---	---	---
Buffalo and N. Y. City.	49	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---	Tol., Wabash & St. Louis.	242	2,500,000	4,530,000	7,030,000	In progr.	---	---	---	---
Buffalo and St. Line.	67	434,111	922,393	1,275,706	174,089	69,506	---	---	Cin., Log. & Chicago.	255	4,196,679	1,000,125	2,080,433	In progr.	---	---	---	---
Canandaigua and Elmira.	49	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---	Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	61,552	---	---	---
Canandaigua & Niagara Falls.	35	1,315,000	2,279,854	3,495,832	---	---	---	---	Ind. and Cincinnati.	88	1,213,723	1,442,859	2,178,481	358,012	193,142	7	60	---
Cayuga & Susquehanna.	38	687,000	506,689	1,187,562	135,433	48,619	none	---	Indiana Central.	66	611,400	1,261,179	1,907,911	350,178	134,375	---	---	---
Hudson River.	144	3,758,466	9,250,362	12,737,898	1,812,087	603,946	none	27 1/2	Ind., Olev. & Pittsburg.	83	826,825	1,099,400	1,531,225	226,058	98,010	none	---	---
Long Island.	95	1,875,148	688,949	2,655,986	301,793	116,462	none	29	Jeffersonville.	87	1,014,252	694,000	---	206,544	94,318	none	---	---
New York Central.	434	24,154,891	14,462,742	35,623,913	5,683,581	3,162,126	8	85 1/2	Madison and Indianapolis.	66	1,447,700	1,336,810	1,205,000	286,146	112,880	none	---	---
New York and Erie.	404	10,023,968	25,126,669	35,430,431	5,488,993	2,627,118	none	30	New Albany and Salem.	238	2,635,121	5,281,948	6,613,189	645,927	371,402	none	---	---
New York and Harlem.	134	5,717,100	4,096,769	8,785,203	1,355,577	234,126	none	1	Peru and Indianapolis.	73	588,314	---	150,000	90,000	none	16 1/2	---	---
Northern, N. Y.	119	1,363,022	4,406,874	5,470,714	520,153	136,754	none	30	Terre Haute and Ind.	73	974,800	604,355	1,502,166	257,512	139,702	10	---	---
Oswego and Syracuse.	35	399,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and Rock Isl'd.	182	3,141,600	2,387,155	5,214,162	In progr.	---	---	---	---
Potsdam and Watertown.	29	467,200	204,159	749,683	In progr.	---	---	---	Chicago and St. Louis.	220	---	---	1,077,312	In progr.	---	---	---	---
Rensselaer & Saratoga.	25	610,000	140,000	806,423	241,149	82,600	7	---	Chicago, Burl. and Quincy.	51	1,539,100	1,684,736	2,584,622	722,590	379,821	20	---	---
Saratoga and Whitehall.	45	500,000	395,600	719,009	21,059	none	---	---	Central Military Tract.	88	1,202,500	2,133,050	2,920,241	471,399	219,588	---	---	---
Saratoga & Bingham'n.	80	768,369	1,578,804	2,272,777	159,484	22,503	none	---	Chio., St. Paul & F'd du Lac.	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---	---
Syracuse and Boston.	27	437,830	737,079	1,109,422	156,363	55,184	---	---	Galena and Chicago.	259	5,441,500	3,318,039	7,742,614	2,315,766	1,192,042	22	111	---
Watertown and Rome.	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	75	Illinois Central.	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	---	---	---
Belvidere Delaware.	64	1,000,000	1,619,000	2,619,000	161,355	75,534	none	---	Peoria and Oklawaha.	98	569,889	818,464	1,388,342	In progr.	---	---	---	---
Camden and Amboy.	94	8,090,000	11,407,200	8,896,523	2,017,127	961,941	12	124	Ohio & Miss. (Wst. Div.).	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---	---
Camden and Atlantic.	60	369,320	1,522,131	1,729,642	122,417	60,080	none	---	Terre Haute and Alton.	178	2,281,420	1,256,000	3,537,424	In progr.	---	---	---	---
New Jersey Central.	30	8,442,850	690,000	4,310,011	801,514	500,747	10	119	Detroit and Milwaukee.	185	838,000	1,128,964	1,966,969	In progr.	---	---	---	---
Morris and Essex.	63	1,167,895	375,000	1,636,560	229,341	96,267	6	---	Mich. Central.	282	6,032,444	5,990,013	10,668,155	2,215,283	879,656	10	93 1/2	---
Albany Valley.	44	1,367,387	342,564	1,988,317	Recently opened.	---	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,446,205	2,410,000	875,000	10	85	---
Catskill, Wm. & Bri.	56	1,090,500	1,940,000	3,840,000	219,253	52,430	---	---	Green Bay, M.E. & Ch.	155	764,074	442,726	1,193,768	In progr.	---	---	---	---
Umbagog Valley.	50	1,709,700	12,211	1,911,833	146,381	66,994	---											

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	85 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85 1/2	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866	85 1/2	
Central Ohio	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1866	85 1/2	
Do. do.	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	80	82 1/2
Cincinnati, Hamilton, and Dayton	500,000	2d do. inconvertible	7	March, Sept.	"	1865	80 1/2	
Do. do.	465,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	
Cincinnati and Marietta	2,500,000	2d do. do.	7	May, Novemb.	"	1860	80	84
Cincinnati, Wilmington, and Zanesville	1,300,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72 1/2	
Cleveland, Painesville, and Ashtabula	600,000	Do. convertible	7	May, Novemb.	"	1862	90	
Cleveland and Pittsburgh	800,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Do. do.	1,200,000	Do. convertible	7	Feb'y, August	"	1860	93	
Cleveland and Toledo	525,000	Do. on Branches	7	March, Sept.	"	1873	77 1/2	
Chicago and Mississippi	800,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	
Do. do.	1,200,000	Do. conv. till 1857	7	April, October	"	1862-72	75	75
Covington and Lexington	400,000	Do. inconvertible	7	April, October	"	1862-72	75	75
Do. do.	1,000,000	Do. do.	7	April, October	"	1867	75	75
Delaware, Lackawanna, and Western	1,500,000	2d mortgage, convertible	7	March, Sept.	"	1868	64	66
Fort Wayne and Chicago	1,250,000	1st mortgage, do.	7	April, October	"	1875	90	93
Galeta and Chicago	2,000,000	Do. conv. till 1863	7	Jan'y, July	"	1873	91	92
Do. do.	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	85 1/2	85 1/2
Great Western (Illinois)	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	85 1/2
Green Bay, Milwaukee, and Chicago	1,000,000	Do. do.	10	April, October	"	1868	90	90
Jeffersonville	800,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	94
Indiana Central	600,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indianapolis and Bellefontaine	450,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Cincinnati	500,000	Do. do.	7	Jan'y, July	"	1860-61	78	81
Indiana & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	86	87 1/2
Lake Erie, Wabash, and St. Louis	2,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	72 1/2
Little Miami	1,500,000	Do. inconv.	6 1/2	2 May, 2 Nov.	"	1853	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat	1860	100	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	94	94
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	85 1/2	85 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	85 1/2	85 1/2
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	72 1/2	72 1/2
Do. do.	2,325,000	Do. oth. sec. conv. till 1868	8	May, Novemb.	"	1864-75	75	75
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	94	94
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-68	92 1/2	92 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	72 1/2	77 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1850	97	98
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	78	82 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	97	98
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	78	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	69	71

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82 1/2	
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	86	87 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	90 1/2	91 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	101 1/2	
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95 1/2	96
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94	94
Do. do.	4,000,000	Not conv. Sink Fund \$420,000	7	Feb'y, August	"	1875	90	91
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	85	85 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	85	85
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	97	97 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	83	84 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	63	63 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90 1/2	90 1/2
Do. (Free Land)	3,000,000	Mortgage 345,000 acrs. priv. 7 shars	7	March, Sept.	"	1860	100	100
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	88	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1891-72	77 1/2	79
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	79	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	91
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	81 1/2	82
New York Central	8,257,000	No mortgage, do.	6	May, Novemb.	"	1863	85 1/2	86
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101 1/2	101 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	90	90
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	99	99
Reading, issued 1848	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	80	80
Do. do. 1844, '48, '49	1,500,000	Do. convertible	6	Jan'y, July	"	1860	80	80
Do. do. 1849	3,400,000	Do. inconvertible	6	April, October	"	1870	82	82 1/2

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York 7 per ct. ....1857	{ Feb'y, May, August, and November,	100	102	Milwaukee, 7 per ct. coup. X	Divers -----	75	82 1/2
Do. 5 do. ....1858-60		93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	72	76
Do. 5 do. ....1870-75		89	91 1/2	N. Orleans, 6 per ct. ep. municip. X	Jan'y, July,	78	81
Do. 5 do. ....1880		98	91 1/2	Philadelphia, 6 per ct. ....1876-98	Jan'y, July,	39 1/2	40 1/2
Albany, 6 per ct. coup. ....1871-81 X	Feb'y, August.	98	101	Pittsburgh, 6 per ct. coup.	X Divers -----	75	75
Allegheny, 6 per ct. coup. ....X	Jan'y, July	98	101	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July,	75	78
Baltimore, 6 per ct. ....1879-90	Quarterly	95	97 1/2	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	85	86
Boston, 5 per ct. coup. ....1870-75 X	April, October.	95	98	Rochester, 6 per cent. coup.	X Divers -----	95	96 1/2
Brooklyn, 6 per ct. coup. ....Long X	Jan'y, July	99 1/2	100 1/2	St. Louis, 6 per ct. coup. ....Long X	Do.	77 1/2	78
Clev'nd, 7 per ct. ep. W.W. 1879 X	Do. do.	101	101	Do. Do. Municipal X	Do.	79 1/2	82 1/2
Cincinnati, 6 per ct. coup. ....X	Divers -----	88	90	Sacramento, 10 p. ct. ep. 1862-74 X	Do.	72 1/2	75
Chicago, 6 per ct. coup. ....1873-77 X	Jan'y, July	88 1/2	89 1/2	S.F. & P., 10 p. ct. ep. 1865, pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup. ....1880 X	Jan'y, July	100	100	Do. Do. 10 p. ct. ep. ....1871 X	Do. do.	92 1/2	92 1/2
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August ..	100	102 1/2	Do. Do. 10 do. pay. N.Y. ....X	Jan'y, July	83	86
Memphis, 8 per ct. ep. ....Long X	March, Sept.	101	101 1/2	Do. Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	87 1/2	87 1/2
New York City, 6 p. ct. ep. W.W. 1877 X	Jan'y, July	91	91	Wheeling, 6 per ct. coup. ....X	Divers -----	80	81 1/2
Louisville, 6 per ct. ep. ....1880-83 X	Divers -----	80	80	Do. Do. 6 p. ct. ep. Mun. ....1874 X	March, Sept.	80	81 1/2
Memphis, 6 per ct. coup. ....1882 X	Jan'y, July	63	63	Zanesville, 7 do. ....X	April, October ..	95	100

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending November 5, 1856.

BONDS.	
\$5,000 Hillsboro' & Cin., 7 per cent. 1st Mortg.	47
1,000 Ohio and Miss. 7 per cent. 1st Mortgage	70
1,000 Indianap. & Cin. 7 per ct. Dividend	70
9,000 Little Miami, 6 per ct. 1st Mortg.	80
4,000 Cin. and Chic. 10 per ct. Real Estate	25
6,000 Cov. & Lex., 7 per cent. 2d Mortg.	66
2,000 Town of Peirburg, Wood county, Ohio, 7 per cent.	55
1,000 Indiana Central, 10 per ct. Inc. due in '58	90
3,000 Covington & Lex., 6 per cent. 1st Mortg.	70
110 Little Miami, Dividend Scrip. June, 1855	81
600 Marietta & Cin., 7 per ct. Domestic	35
5,500 Cov. & Lex., 6 per cent. Income	40
STOCKS.	
238 Shares Ohio and Mississippi	6
400 " Do. do. 90d.	6 1/2
100 " Cincinnati and Chicago, 50 d.	8 1/2
101 " Indianapolis & Cincinnati, 60d.	70
100 " " " "	68
40 " " " "	68 1/2
25 " " " "	69
26 " Cin., Ham. and Dayton, 60d.	67
33 " " " "	65
20 " Hillsborough and Cincinnati	14
200 " Penn and Indianapolis	9 1/2
15 " Little Miami	91 1/2
50 " Columbus and Xenia	86
100 " Fort Wayne and Southern	5
40 " Junction (Ind.)	7 1/2

By KIRK & CHEEVER.

For the week ending November 4, 1856.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.		80
Covington & Lexington, 2nd Mort. 7 per ct.		65
Ohio & Mississippi, 2nd Mort. 7 per ct. (Eastern Division)		50
Indianap. & Cin., 2nd Mort. 7 per ct.		60
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.		64
Hillsboro' & Cin., 7 per cent. 1st Mortg.		46
Covington & Lexington, 10 per ct. Income		65
Indianapolis and Cincinnati Dividend		72
Columbus and Xenia Dividend, due Jan'y 1, 1861		88
Do. do. due July 1, 1861		85
Little Miami, Dividend Scrip. issued June, 1856		80 1/2
STOCKS.		
Bellefontaine and Indiana, 25.-Cin., Ham. and Dayton, 60.		
-Col. and Xenia, 85.-Cincinnati, and Chic., 3 1/2.-Covington & Lexington, 16.-Dayton & Western, 17.-Eaton and Hamilton, 21.-Indiana Central, 48.-Indianapolis and Cincinnati, 69.-Little Miami, 60.-Mad River & Lake Erie, 16.-Marietta and Cincinnati, 13.-Ohio and Mississippi, 5 1/2.-Hillsboro' & Cincinnati, 13.-Peirburg and Indianapolis, 12.-Cincinnati, Wilmington and Zanesville, 12.		

Extract from De Copet & Co.'s Money Circular for the European Steamer of the 12th Inst.

[TRANSLATED.]

NEW YORK, Tuesday, Nov. 11, 1856.

The past week has been characterized by a great activity in Stocks and the amount of transactions at the Stock Exchange have reached a figure but seldom attained before. The business was increased by the demand from those who had to supply Stock sold short to deliver. In our last advices we already noticed, at the closing hour, a rise; since then the tendency upward has gained considerable ground, favored by the better news from Liverpool of 25th October, transmitted by telegraph on the 7th inst. Notwithstanding the less favorable details in the letters subsequently received and the last news from Liverpool steamer of 29th October, at hand yesterday, of a less encouraging nature, especially from France, our Stock Market has shown no weakness, but, on the contrary, shows a fair degree of firmness. The unexpected steadiness of the Stock market is explained by the confidence given by the increase of specie in our Banks, (notwithstanding the heavy exports of the week,) occasioned by disbursements of the Sub-Treasury, and by the current of domestic exchange, which has caused gold to flow towards New York. The fact, also, of the decline of exchanges on Europe lessen the prospect of an exportation beyond our regular California supply. Our Money Market, withal, has not yet experienced any material relief, and Money continues tight. State Stocks—There have been large sales of Tennessee 6s. and Virginia 6s., at 1 1/2 and 1 per cent. advance; and of Missouri 6s. at 1/4 per cent. decline City and County Bonds—There have been transactions of St. Louis 6s, City and County, of some magnitude at well maintained prices, and Milwaukee City 7s issued to the Milwaukee and Mississippi Railroad at an advance. Railroad

Bonds—There has been a large business done in Illinois Central Construction, they close at 3½ advance on last week's prices; otherwise, transactions at the Stock Exchange in other Bonds have been moderate. At private sale, transactions of some importance have taken place in Lacrosse and Milwaukee First Mortgage and in Milwaukee and Mississippi First Mortgage, third section, the latter at some reduction of price; about sixty of the latter were absorbed for account of the sinking fund. Railroad Stocks have been very active; the rise is considerable and without exception. The most active were the following, at an advance in Erie of 2½ per cent., Reading 4, New-York Central 3½, Cleveland and Toledo 3½, Michigan Southern 3½. The following Stocks, with less activity, have advanced: Michigan Central, 2½; Chicago and Rock Island 4½; Galena and Chicago 4½; Illinois Central, 1½; Cleveland and Pittsburgh, 2½; and Panama, 4. Money continues scarce, though a little easier for loans on call. Business paper, 10 at 12 for first class, 12 at 15 for other good paper.

P. S.—Since the first Stock Board wide and downward fluctuations have been occasioned by rumors which appear, at the last moment, to have been without real foundation. The fluctuations which we indicate for the week are based upon the closing prices.

DE COPPET & CO.

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 12th inst.

New York, Tuesday, November 11, 1856.

The fluctuations in the Stock market during the past fortnight, have been important, particularly in railroad shares, which, continuing to monopolize, to a great extent, the attention of operators, have been very active, while other classes of securities have been comparatively neglected. Under the effect of further unfavorable financial advices from London and Paris, and an increasing stringency in money matters, the downward tendency noticed in our last report of 27th ult. continued until 3d inst. For two or three days the depreciation, in some instances, was rapid, the difficulty of obtaining loans forcing a considerable amount of cash stock upon the market.

The low prices touched on the 3d inst., in connection with a partial restoration of confidence produced by the more encouraging accounts from Europe, received by telegraph via Quebec, caused a sudden and material change in the tone of the market. The demand for Stocks became animated, and the disposition to sell being checked, an upward tendency of prices was established, which obtained an additional impetus from the later advices received via Halifax on the 6th inst., included a reported large gain of specie by the Bank of England, and an improvement in Consols and cotton. The advance thus realized has generally been well maintained, although money continues scarce, and the details of the news per "Canada," and further advices per "Baltic," which have since come to hand, show a continued stringency in the London money market, and that in place of the reported gain the Bank of England had experienced another loss of bullion. This firmness is attributable to the hope that the drain of specie will be stopped without additional restrictive measures by the Banks of England and France, and that if the next accounts from these institutions are satisfactory, a further contraction by the banks in this city will not be considered necessary. To-day, however, the market again shows symptoms of weakness, railroad stocks having declined 1a2 per cent., and closing rather heavy. For State Stock the market has been comparatively steady. We have to notice considerable sales of Virginia 6s at 91½a91¾, of Missouri 6s, at 89½a89¾a89½, of Tennessee 6s, at 92a91a91½, and small sales of Indiana 5s, at 81½a81a83, North Carolina 6s, at 94, Georgia 6s, at 98a96, and California 7s, 1875, at 70, and 1870s at 73. The closing quotations show merely fractional changes from those given in our last list.

In City and County Bonds business continues limited. Of New York City Stocks there have been sales at 97½a98 for 6s of 1859, 95 for 5s of 1855, and 89 for a small amount of 5s of 1870. In consequence of the failure of the Alleghany Valley railroad, the coupons due 1st inst., on the bonds of the city of Pittsburgh, issued to that company, have not been paid. The railroad company have heretofore paid these coupons, and for want of a legislative authority to levy a tax or borrow money for that purpose, the city is unable, at present, to meet them. The coupons on the bonds of Alleghany county, issued to same company, are paid by the county. Of Railroad Bonds the sales, generally, have not been large; but Illinois Central Railroad Construction Bonds have been active, without participating to any material extent, in the downward tendency of the market. During the last three days they have been in considerable demand, and advanced to 91½, closing at 91½, an improvement of three per cent. on our last quotations. New York Central 6s have sold at 87a86 ex coupons, an advance of 1 per cent., and 7s at 101½a100¾. There have also been sales of Erie Sinking Fund Bonds at 90a91, a decline of 1½ per cent. 1871s at 84a85½a85; 2d mortgage at 95½; and Lake Erie, Wabash and St. Louis 1st mortgage at 70.

Of Railroad Stocks the sales have been very large. The following list will show the fluctuations in the leading descriptions during the fortnight:—

	Oct. 27.	Nov. 8.	Nov. 10.
New York Central	82	80¾	86
Erie	58¾	56½	61½
Reading	71¾	79	79
Cleveland and Toledo	69¾	64	70½
Illinois Central	115	114	116
Galena and Chicago	109	106½	111
Michigan Southern and Northern Indiana	86	80	86½
Michigan Central	92	90¾	93½
Panama	89¾	87	91

The demand for money has been very active throughout the fortnight, and the supply rather limited. Rates of interest, however, have not advanced, call loans continuing at 7 per cent., and discount on first class paper at 8a10 per cent. The bank returns, for the last two weeks, show a considerable reduction of loans, and moderate increase of specie, as follows:

	Oct. 25.	Nov. 1.	Nov. 8.
Loans ...	\$104,106,483	\$103,142,093	\$102,568,639
Specie ...	10,580,795	11,067,675	11,516,420

The total reduction in the former item, since 4th October, is \$4,688,753, and the increase in the latter \$601,236. The shipments in specie, since 26th ult., amount to \$2,523,021 direct, and via Boston about \$700,000, and the receipts of gold from California to \$1,681,967. The gain of specie by the banks proceeds from payments by the Sub-Treasury, and remittances from the interior, the export of gold having exceeded the California receipts. Foreign Exchanges are lower. There is a full supply of bills, and the market is heavy. Very respectfully,

CAMMANN & CO.

Missouri Railroad Liabilities.

The entire amount of liabilities, assumed and to be assumed by the State of Missouri in aid of railroads, is \$19,250,000, distributed as follows:

Pacific—main trunk	\$6,000,000
South-west Branch	3,000,000
Hannibal and St. Joseph	3,000,000
North Missouri	4,000,000
St. Louis and Iron Mountain	3,000,000
Cairo and Fulton	250,000

Of these sums, the amounts expended by the several roads stand nearly as follows:

Pacific—main stem	\$3,500,000
South-west Branch	250,000
Hannibal and St. Joseph	1,500,000
North Missouri	2,000,000
St. Louis and Iron Mountain	1,000,000

This leaves about eleven millions of dollars as the sum of liabilities still to be assumed in aid of the railroads.—*St. Louis Int.*

American Railroad Journal.

Saturday, November 15, 1856.

Financial Condition of the United States.

The demand for capital in this country, for useful objects, far exceeding the supply, leads us to be borrowers of that of other nations with whom it is less valuable than with us for want of similar opportunities or means for investment. The condition of our money market, therefore, is always more or less affected by those with whom we deal, placing us in a sort of dependence upon them, although we may be much richer and have vastly greater resources at command. The amount of capital of which we may be borrowers, may be, and is at the present time, insignificant in itself, but as every curtailment of means interferes with the plans of our people, and with enterprises which are only taken up and prosecuted with a clear sky at home and abroad, the influence of an untoward state of affairs in any of the leading commercial countries of the old world is quite disproportioned to the real importance which should be attached to it. We certainly cannot be under any considerable indebtedness to France, yet the unsatisfactory state of affairs there is seriously affecting our money markets and consequently the progress of works, and the price of securities, in our own country. Instead of receiving capital from abroad, we may be subjected to heavy drafts ourselves to meet any indebtedness which may be immediately due, or we may for a time become lenders, if for no other object than to sustain houses having commercial relations in this country. We are, therefore, constantly more or less affected by the condition of affairs in Europe, though our financial condition may be entirely sound. It was never more so than at the present instant. A foreign demand exists for our leading staples at prices entirely satisfactory, and which forbid the idea of any heavy balance against us arising out of ordinary commercial transactions. We have in addition our gold product, of which we can well spare more than enough to meet any balance against us. Our financial position is, therefore, the strongest possible, and really warrants us in acting for the future more in reference to our means and strength than the state of affairs in any of the old countries, which does not, as at the present instance, weaken our resources, by checking the exportation, or lessening the prices of any of our leading staples.

In considering the influence of the state of commercial affairs of nations with whom we deal, we must keep in mind the fact that they are likely to become more and more subject to disturbing causes, while we are becoming less and less so from any disturbing element among ourselves. The wants of their governments are daily and rapidly increasing, and in much greater ratio, probably, than the productive capacity of their people. The greater part of the means required for their support, as far as reproduction is concerned, are wasted. The expenses of the Government of Great Britain since the time that our people have been engaged in the construction of

railroads, has probably exceeded the entire amount annually expended by our people for the support both of State and national Governments, and the whole amount annually expended upon our public works. In the one case, the whole amount expended (excepting, perhaps, the interest on the national debt,) may, as far as any practical result is concerned, be set down as wasted, while the same money with us has been expended upon our railroads and canals, and has added many times their cost to the value of the property of the country. In these particulars we possess decided advantages over the commercial countries of the old world. To maintain the French army and navy, 600,000 men, at least, are drawn off from the various industrial pursuits. The labor of such a vast number of men is not only valueless for reproduction, but must be supported at an immense outlay. Could the army and navy of France be dispensed with to the extent that it is with us, 500,000 men would be restored to the various departments of labor from which they are now drawn, which would save to the country the cost of their maintenance equal, probably, to \$150,000,000 per year, while the net profits of their labor would, at least, be equal to as large a sum. We can readily see by this mode of reasoning, that the accumulations of our people must annually be several hundred millions greater than those of France—other things being equal. Our figures may not be exactly correct, but they are sufficiently so for our purpose, which is to show that we have elements of strength possessed by no leading European power, which must in the end establish our superiority in wealth and resources. Money may still remain more valuable here from the better opportunities for investment, and for the additional reason that, being exempt from heavy burdens for the support of Government, it is more productive. But our people are steadily growing stronger and less dependent upon others. A much greater steadiness must soon characterize the commercial operations of this, than of other countries. The disturbing causes to which we shall be subject will only be such as are inherent in all business affairs. To all these, Europeans will be subject in an equal degree with ourselves, and in addition, to the disturbing action of their governments which cannot be controlled, but which may be paramount to all others.

There is no doubt that the present condition of things in this country compared with others, fully justifies what we have said. Considering the opportunities for investment, money is easier in New York than in any of the great foreign centres. The financial condition of no other people is so sound. There are none whose resources compare with our own. Of one great staple, cotton, we have the monopoly of production for the world. We have very great advantages over most other countries in the production of cereals of all kinds. In addition to our unrivalled capacities for the production of the above staples, we can export \$40,000,000 of gold annually without inconvenience. We have also in our facilities for internal commerce, a source of strength much greater than all our foreign commerce. In addition to at least, 50,000 miles of navigable water courses, we have 24,000 miles of railway all in active operation, affording means for the domestic

interchange of our products such as is possessed by no other country on the globe. The wealth and strength of a country must depend mainly upon the extent of its internal commerce. The domestic commerce of a people with a variety of pursuits like ourselves, must exceed twenty fold its foreign commerce. The relative importance of the two may be reckoned pretty much in the same ratio. There is no country in the world in which such an active internal commerce exists, for the reason that none possesses such a variety of products that enter into consumption, and none such means for their distribution.

We think the present financial condition of our people is not only stronger than that of any other, but in five years it will be vastly stronger than it is now. Our railroads are built. Most of them are getting their finances into easy condition. The cost of their construction will soon cease to be a burden upon the country. In a few years they will reproduce their cost and add an equal amount to the active capital of the country. If our people have been able to carry through, without a financial crisis, a system of internal improvements, embracing a greater length of line of railroad than all others can show, how immensely must their strength be increased, when the roads, instead of being a drain upon their means, will be the most efficient instrument in the creation of capital. They must place our country in a condition superior to all others in available capital, as well as in all the means for its production.

The Reading Railroad.

The resignation of John Tucker, Esq., President of the Reading Railroad, was on Wednesday last accepted by the Board of Directors, and Mr. Cullen, the Vice President, was selected to fill the vacancy. The latter has been connected with the road for several years, and being intimately acquainted with all the minutia of the practical management of this great coal supplying road, his untiring efforts will doubtless enable its future prosperity to be all that its stockholders can desire. Mr. Tucker is to assume a position in a new field of usefulness, which his experience of railroad management and the true interests of the coal operators cannot fail to be mutually advantageous.

Georgia and Florida Railroad.

We understand, says the Albany Patriot of the 23d, that the superstructure is laid to Sumter City. The depot at that point will be finished in three weeks, at which time it is expected the cars will run down that far for freight and passengers.

Railroad Earnings.

The earnings of the Cincinnati, Hamilton and Dayton Railroad for the month of

October, 1856, were.....	\$46,519.50
October, 1855,.....	41,632.67

Increase, 12 per cent..... \$4,886.83

The earnings of the Cleveland and Pittsburgh road are \$89,375.63, being a large increase over October, 1855. The Wheeling extension will be opened on the 10th November, when the Cleveland and Pittsburgh road will be complete.

The earnings of the Illinois Central road for October were \$292,947, and they would have been much larger if the company had had equipage sufficient to do the business offering.

The earnings of the Little Miami Railroad for the month of

October, 1856, were.....	\$119,066.65
October, 1855,.....	93,753.87

Increase, 27 per cent..... \$25,298.33

The earnings of the Cleveland and Toledo Railroad are as follows:

	1855.	1856.
Passengers.....	\$81,553	\$89,908
Freight.....	15,778	30,058

Total.....\$97,286 \$119,161

Increase in 1856.....\$22,675

The earnings of the Michigan Central Railroad for the month of October, 1856, were:

	Pass'gers.	Freight.	Miscel's.	Total.
1856.....	\$215,034	\$185,255	\$3,273	\$403,562
1855.....	204,286	116,032	10,431	330,749

Inc.... \$10,748 \$69,222..... \$72,813

Dec..... \$7,158.....

The earnings of the Chicago, St. Paul and Fond du Lac Railroad for the month of October were:

Passengers.....	\$17,813.08
Freight.....	31,778.84
Mails, Express, and Miscellaneous....	851.41

Total.....\$50,443.32

The receipts of the New York and Harlem Railroad for

October, 1856, were.....	\$101,537.21
October, 1855,.....	93,760.01

Increase.....\$7,767.20

The earnings of the Stonington Railroad in

October, 1856, were.....	\$22,992.77
October, 1855,.....	22,299.82

Increase.....\$692.96

The October earnings of the La Crosse and Milwaukee Railroad are as follows:

Main Line.....	\$85,673.75
Watertown Division.....	15,000.00

Total.....\$100,673.75

The earnings of the Chicago and Burlington Railroad line have been:

	Freight.	Passengers.	Miscellaneous	Total.
Oct. '56.	\$200,030	\$76,364	\$1,607	\$278,000
Oct. '55.	129,044	71,988	1,389	212,421

Gain in '56.\$60,986 \$4,375 \$217.72 \$65,579

The proportions of earnings for October by each Road composing the line are follows:

	Freight.	Passengers.	Miscellaneous	Total
G. & C. Union	\$27,230	\$6,283	\$25	\$33,538
Chic. B. & Q.	162,535	59,788	1,251	223,574
Peoria & O'q'a.	10,265	10,292	331	20,888

Totals...\$200,020 \$76,364 \$1,607 \$278,009

The length of Chicago, Burlington and Quincy Railroad is 138 miles:

Earnings per mile in 1856.....	\$1,620.10
Earnings per mile in 1855.....	1,182.66

Gain per mile in 1856..... 437.44

The earnings of the Milwaukee and Mississippi Railroad for the month of October last, were.....\$120,166

For corresponding month of last year... 112,162

Increase.....\$8,004

The earnings of the Macon and Western Railroad for

October, 1856, were.....	\$36,908.19
October, 1855,.....	38,181.29

Decrease.....\$1,273.10

The receipts of the Pennsylvania Railroad for October, were:

Receipts month ending October 31.....\$428,148
Same month last year..... 374,134

Decrease \$45,986

Receipts from Jan. 1, '56, to Nov. 1, '56, \$4,060,077
Same period last year..... 3,469,924

Increase..... \$590,153

Journal of Railroad Law.

TRANSFER OF STOCK.

The validity of the transfer of stock as between the parties, although not registered in the transfer book of the corporation, is not affected by a statutory provision that no transfer shall be valid unless so registered, the evidence of the right of stock not being within the view of the statute. Such a provision of the charter is evidently for the protection of the corporation in the payment of dividends, for the ascertaining of legal voters at its election and finally as would seem from a comparison of the charter with the general regulations of moneyed corporations for preventing in case of corporate bankruptcy the escape from liability to contribute to the deficiency. Such a provision does not interfere with the rights of ownership as between the person in whose name the stock may stand and his vendee or pledgee. The title might be perfect as between them and yet not valid as to any other liability or right which was meant to be protected by this legal evidence of transfer on the books. Such legal evidence it is made the duty of the corporation by the operation of law, as well as by its own express understanding in its certificates, to furnish to the person entitled to the possession, whenever he has complied with the conditions prescribed to show that right; and these conditions are to be evidenced by the stock certificate.

But if the charter or an authorized by-law of the corporation provides that no transfer or assignment of stock shall be valid, unless made on the books of the company, an individual obtaining an assignment of stock from the apparent owner, but which assignment is not intimated on the books of the company, takes it subject to all the equitable rights of the company against the real owner. A purchaser of stock in this case without a transfer on the books takes the stock subject to any equitable claim which may exist against it either in favor of the corporation or of any other person. And yet if the officers of the corporation knowingly permit the transfer of the stock to a mere nominal holder, and issue the scrip in his name, it seems that a *bona fide* purchaser of the stock from such apparent owner, even without a transfer on the books of the company, will be entitled to relief against the lien of the company for a debt due to the real owner.

The holder's writing his name and affixing his seal to a certificate of stock is a valid transfer of the stock, and any holder may write over them an assignment and a power to transfer. This convenience shows the power of custom not to contradict and change the law, but to explain the meaning and intent of parties in contracts, and custom may be brought in to show what was the understanding and design of the original holder. Originally it was held that if a man write his name and affix his seal to a blank paper and give direction to another to write a deed over it and

such other write such a deed, it is nevertheless no deed. But on the foundation of more recent cases in England and the uniform ruling in this country the courts are settled in the above rule.

Thus (in 4 Johns. R., 54,) it was held that a deed might be altered in a material part by consent of parties, and more recently by our Supreme Court that bonds executed in blank with parol authority to fill up and deliver them were valid. So (in 13 Wendell, 587) the instrument was signed and sealed by the party, and the authority given was to make certain material alterations on it; this was held valid. Those familiar with the business of our custom houses well know that the usage of executing bonds in blank is of daily occurrence there, and this is unquestionably done with the sanction of the legal advisers of the United States, nor is the validity of such bonds questioned. Thus in like manner the writing of a power to transfer with a verbal or implied authority to do so above a seal or signature on the back of a stock certificate where nothing else could be written, is a far smaller excuse for delegated authority than where the name of the party is inserted or still more the sum for which he is to become bound. There the responsibility that the agent may confer upon his principal is unlimited. Here it is confined to the number of shares of stock which the certificate guarantees with the latitude of inserting one name or another as the vendee, pledgee, or attorney.

A corporation is liable in damages for refusing to permit a transfer of stock upon its books, and the measure of damages is the full value of the stock at its highest price at any time between the refusal and the commencement of the suit. It is even doubted and as yet undecided whether it would not be the highest value of the stock up till the day of trial. The true measure of the damages is that which will indemnify the plaintiff for the breach. If he without unreasonable delay prosecute the suit, it is but just that the fluctuations in price be exclusively at the hazard of the defendant,—the plaintiff having done everything in his power to have the contract settled and which is prevented only by the default of the defendant. This is the rule that applies primarily to contracts of sale, but the reasons apply with equal force to, and have always governed actions in any form where compensation in damages is claimed for refusal or illegal conversion of any thing to the property or possession of which the plaintiff is lawfully entitled.

The right of a stockholder in a corporation to sell and transfer his stock, and to pass the legal title of such stock to the purchaser ceases upon the dissolution of the corporation. The dissolution of a corporation puts an end immediately to the transferable nature of the stock. And it thus reduces the interests of the stockholders to mere equitable rights to their several distributive shares of the corporate funds upon principles of equal justice and equality among all the stockholders after paying all the debts and expenses. The stockholders are then, in this respect, in the same situation as the distributees of the estate of a deceased parent or relative. There the executors or administrators are bound to give to each distributee his share of the deceased's property, but if any of the distributees are indebted to the estate, whether such debts are due and payable immedi-

ately, the debts must first be applied towards or in part payment of their distributive shares of the estate, and the balance alone can be recovered by them from the personal representatives of the deceased, and this right to a distributive share of the estate being a mere chose in action, the owner thereof cannot assign it to a third person so as to give the latter any greater or other interest there-in than the assignor himself. Where a stockholder assigns his interest in the stock of a corporation, after such corporation is dissolved, the assignee takes the interest of the assignor in the effects of the corporation subject to all claims against the latter in favor of the corporation.

Pennsylvania Railroad.

The freight business of this road continues to increase, notwithstanding the falling off in the October trade of Philadelphia and Pittsburg, consequent upon the excitement usually attending a Presidential contest; the remarkably low stage of water in the Ohio river, and other causes, that would have a tendency to seriously operate against the real interests of the company. The increase in the tonnage of the road for the ten months of this year, as compared with the same period in 1855, is 85,569 tons, and 162,291 tons over 1854. In the passenger travel there is also a gratifying excess over former years—so much that with the increased revenue from this and other sources, the company has been enabled to declare a dividend of four per cent. out of the earnings of the past six months.

The following statement exhibits the tonnage of the Pennsylvania Railroad for the month of October, for three years:

	1856.	1855.	1854.
Through tonnage, East ..	5,068	17,337	1,455
" " West..	5,536	7,267	3,844
Local " East ..	22,033	9,676	8,846
" " West..	10,409	8,050	9,420
Total October	43,016	42,330	28,574
September	38,881	39,054	17,915
August	39,469	37,432	21,523
July	34,627	29,275	11,011
June	35,880	28,406	14,185
May	43,786	25,233	15,158
April	45,044	24,288	23,347
March	27,407	24,886	29,463
February	26,886	12,096	22,075
January	26,921	22,348	21,375

From Jan. 1 to Oct. 31.. 860,917 285,348 198,626
—Phila. Shipping List.

The Tehuantepec Route.

We have had occasion before to speak of this proposed route to California, in connection with the departure of W. S. SMITH and Wm. MILLER, of this city and others, to actual operations on the roadway. The enterprise, we learn, is, in spite of the general incredulity as to its accomplishment, being successfully carried on. Mr. SMITH and associates left here last February for New York, to perfect the contract with the Tehuantepec Company for making the carriage-way. Various obstacles prevented his undertaking it then, and much time elapsed before he was actually upon the ground and at work. From HENRY S. STEVENS, of this city, who has just returned from New York, where he has entered into a contract with the Company to transport the mails, baggage, passengers and freight over the land portion of the route, we learn that the carriage-way is expected to be completed by the 5th of February next. The steamers will be ready then upon both the Atlantic and Pacific side, and the route opened to the public.

This arrangement is, however, but temporary, as the Company intends and will complete a railroad from Minatitlan to Ventosa as soon as they can. The country is said to be particularly favorable to the construction of a railroad, being

healthy, presenting no elevation over 750 feet, and containing a thriving (for Mexico) population of about 70,000 people. Upon the Atlantic side, calculating from New York, the distance is not much shorter than by the other routes, but upon the Pacific side it is 1200 miles shorter than the Panama, and 700 or 800 less than the Nicaragua, and the time saved, seven or eight days.

The eastern terminus of the route is the town of Mina-titlan, twenty miles above the mouth of the River Coatزالcos, which empties into the most south-western indentation of the Gulf of Mexico, a little more than one hundred miles southerly from Vera Cruz. At this point passengers leave the ocean steamship for the river steamboat, which conveys them up the river Coatزالcos to the town of Suchil, a distance of seventy miles.

Here they debark and are conveyed in "Concord coaches" a distance of one hundred and nine miles over a fine road, to the safe and commodious roadstead of Ventosa upon the Pacific coast, accomplishing the entire route from steamship to steamship, one hundred and ninety-nine miles, in thirty-six hours.

Mr. STEVENS and his associates, by the term of the contract have the exclusive use of the road, and are to convey the entire consignment of freight and passengers from Suchil to Ventosa, until the completion of the railroad. It is hardly necessary in this community to say that the contract is in good hands, so far as Mr. STEVENS is concerned—he is the only one we know—and that the undertaking will be prosecuted with vigor. His connection with the establishment and complete success of the Omnibus Company here, fully shows his indomitable and never resting energy and business promptness.—*Clev. Herald.*

St. Louis and Iron Mountain Railroad.

The following is a complete summary of the report of the President and Directors of the above road, which was presented at the annual meeting of the company recently held in St. Louis.

It commences by a retrospective glance at the organization and progress of the company. The act, or renewal of an act passed in 1837, was approved in 1851. The company organized in 1852 and work commenced in the fall, under Holmes, Shanahan and Green, who contracted for a portion of the work immediately below St. Louis.

In February, 1854, nearly the whole line from the terminus of the Holmes contract, was let to W. M. Watts & Co., and subsequently that firm became the responsible contractors for the whole line, with the exception of the Maramec section, and sections fifty-nine to sixty-two at the Iron Mountain. This contract included everything for the completion of the road, except the furnishing of rails, chairs and spikes. These gentlemen carried on the work in an unsatisfactory manner, and in several instances subcontractors abandoned the work, because the prices paid by Watts & Co. were actually twenty per cent. lower than the prices which they themselves received.

The Reporting Board finding this to militate against the interests of the company, succeeded in annulling the contract with Watts & Co., and procured a transfer of their subcontracts direct to the company; they raised the subcontractors' prices to paying rates, although the new schedule still left a fair margin between the prices paid and that which obtained between the former Board and Watts & Co., and the work progressed and continued to progress rapidly.

The total value of work done up to the expiration of the last fiscal year, was \$662,805 68, including the reserved per centage. The total amount of disbursements, was \$759,123 65. The expenditure under the present Board, for the current fiscal year, is \$1,505,633 56. There has been, therefore, \$746,509 91 more expended this year than in the three years preceding. The whole expenditure up to the termination of the current is \$2,264,757 21.

The report then goes into an argument as to the merits of the plan adopted by the Directors in

compressing the amount of work done into a shorter space than heretofore. With reference to funds the company effected a negotiation with a New York house, by which they procured an ample supply, realized from the proceeds of sales of the company's securities, or by advances upon them when the condition of the stock market would not justify a sale, paying at the rate of 7 per cent. per annum only for the amounts advanced.

It goes on to say that the rails are all purchased under contract made with Wood, Morrall & Co., of Johnstown, Pennsylvania. Nine thousand tons, the necessary quantity, has been provided. Four thousand tons have been received, and the residue will be delivered when the navigation of the Ohio permits its shipment. No delay in the delivery of the rails need be apprehended.

There are two locomotives on the road in daily use, and one other in the shop in a forward state of completion. There are also upon the road two passenger cars, four horse, eight flat and six gravel cars, all furnished from the work shops of St. Louis.

The onerous conditions which were attached to the first grant by Congress for the right of way through the Government grounds at the Arsenal, Marine Hospital and Jefferson Barracks tracts, have been removed and a grant obtained, acceptable to the company and to the public interest.

The whole line is under contract. The rails are now laid for twelve miles southwardly from St. Louis. By the first of December it is calculated the road will be finished to the Maramec river, and during the month of January the superstructure across that river, and the track, down as far as Dunklin's, will be ready for the locomotive, a distance of twenty-five miles from St. Louis. On the next sixteen miles, to Fletcher's mill, the work is progressing towards completion, and with the exception of two or three points, can be made ready for the rail by the time the track-layers reach them. Beyond this point is found the heaviest portion of work, lightening up as it approaches the St. Francis. Thence to the Pilot Knob, a distance of about ten miles, the road is ready for the rail.

THE ENGINEER'S REPORT

remarks on the important change in the affairs, owing to the cancellation of contracts with Wm. M. Watts & Co., former contractors for nearly the whole of the road. Since their retirement, the company had made sectional contracts, and the work progresses vigorously. These sections average $1\frac{1}{4}$ miles in length. The following is given as a revised estimate of the probable cost of the road:

Graduation and masonry.....	\$1,983,539
Superstructure and bridging.....	157,000
Track.....	823,100
Fencing, cattle-guards, &c.....	38,500
Depots and shops.....	175,000
Rolling stock.....	300,000
Land damages.....	75,000
Engineering, superintending, office expenses, &c.....	175,000
Interest on securities to time of completion.....	200,000

Total.....\$3,927,139
—being less than the original estimate \$161,837.

A diminution in the expense of opening the road for the first year's business, is likewise estimated at \$223,500; work not immediately necessary, being for depots and shops, rolling stock, fencing, &c., making a less estimate to open the road of \$385,337—the original estimate being \$4,088,976.

The sacrifice on the State, city and county bonds has thus far been greater than was anticipated, and the prospect is that the margin of the estimate will only about cover the discount.

The graduation and masonry is three-fourths finished from St. Louis to Maramec river, 168.10 miles; and the contractors will be finally settled with in December. Track is laid on about eleven

miles of this and it is expected that the masonry over the Maramec river will be completed about December 1, and ready for the track in January. The foundations are all in and the masonry about low water mark. The North abutment is completed and the North pier nearly so. A considerable outlay will be required to secure the foundation by protecting the bed of the river against washing out by floods.

Between the Maramec and Dunklin, 8.4 miles, it is expected the track will be completed in January. From section 22 to 36 at Big river, 16 miles, the work is so advanced that no obstacle will be placed in the way of track-laying. Section 36 will be finished in February, and thence to 41 the work is forward, this 41, however, being behind, will not be completed before March, thence the work is proceeding rapidly with some few exceptions.

THE TREASURER'S STATEMENT

gives the amount of resources at \$3,498,600. Receipts to 31st of October, 1856, from stock subscriptions \$1,326,527 93; State Bonds, \$1,044,000; Interest, \$61,332 09; Bills payable, outstanding, \$105,215. Total, \$2,537,757 02, leaving on hand, State Bonds, \$51,000; County of St. Louis, \$91,000; Bills receivable, \$4,120; Carondelet Bonds, \$50,000; Iron Mountain Company Bonds, \$25,000. Cash, \$51,197 81.

Louisville and Nashville Railroad.

We give below an abstract of the late annual report of this company under date of October 1st, 1856.

The whole length of this road will be 185 miles. There are now in use $31\frac{1}{2}$ miles of continuous road, extending from Louisville south to Rolling Fork, and $1\frac{1}{4}$ mile of sidings. Of the remainder of the distance, 134 miles, embracing the whole line from the Rolling Fork to Nashville, have been placed under contract—leaving but $21\frac{1}{4}$ miles, extending from the crossing of the Louisville and Nashville Turnpike to the Warren Co. line, yet to be disposed of.

The location of the road is considered as perfect as the nature of the country between its termini will admit of. Its departure at certain points from the general direction of an air line is owing to the numerous topographical difficulties presented by the country it traverses—but its general course between these points is very direct. Less than one-fourth of its entire length is composed of curvature. The radii of these curves fall below one-half mile on two miles only. The grade is level on 45 miles, while on 100 miles of the remaining 140, the inclines do not exceed 50 feet per mile. There are upon this 134 miles, 27 bridges, ranging in size from single spans of 10 feet to five spans of 200 feet each, involving 28,845 cubic yards of masonry, and 4,350 lineal feet of wooden superstructure. The work under contract embraces the entire formation of the road-bed, with the exception of the bridge superstructures. These are estimated to cost \$151,850, which, with the aggregate cost of grading and masonry \$1,398,261, will make the total cost of preparing the 134 miles under contract for the rails \$1,550,111, being an average of \$11,568 per mile. Of this amount the contractors are to receive in payment \$306,000 of Louisville city and county bonds, at their par value—rating these bonds at 80 cents, the cash value of the work will be reduced to \$1,488,911. The whole amount expended for work done to Sept. 25th was \$191,781; of which \$81,697 was paid in Warren and Simpson Counties—\$72,000 in Sumner and Davidson Counties. The value of work done in September was

\$50,000—being an advance of \$11,000 on the previous month. The month of October was expected to show an increase equally great; while the succeeding month can be made to reach \$70,000, if the means of the company will permit. At this rate the road bed can be completed in about 21 months. The company have on hand iron rails, chains, spikes and cross-ties sufficient for one additional mile. The superintendent recommends that there be delivered by next May, at Louisville, 300 tons of rails, at Bowling Green, 2,500 tons, and at Nashville, 2,000 tons, with a suitable supply of spikes and chairs, together with an engine and train of platform cars at the two last named places.

The following is the estimated cost of the road from the Lebanon Branch Junction to Nashville: Grading, Masonry, and Bridging.....\$1,900,000 Superstructure, 153 miles of main track, with 10 miles of sidings..... 1,630,000 Water Stations..... 30,000 Passenger, freight, and Car trains..... 60,000 Work Shop and Machinery..... 40,000 Engine houses and Turn tables..... 35,000 Engine and Cars..... 325,000 Land damages..... 30,000 Engineering and Office expenses..... 150,000

Expenditures of all kinds to Sept. 1st
\$5,614,815

The Engineer is of opinion, however, that four millions will be sufficient to bring the road into use. The Lebanon Branch, it was expected, would have been completed by midsummer of the present year. The first 15 miles were ready to receive the track in May last. The few sections remaining could have been completed by the time the rail laying reached them. But to the date of the report, the quantity of iron received has been sufficient only to complete 2½ miles, while the present condition of the Ohio forbids the indulgence of any hope of the track extending beyond the village of Boston, five miles from the junction, during the present season. The total cost of the branch will be \$602,452 in Cash, and \$39,500 in Stock. Length, 37½ miles.

Surveys have also been made for a branch between some point on the main stem, south of Bowling Green, and the terminus of the Clarksville road at the Tennessee state line near Hodenville in Todd Co. The result of the surveys had not yet been submitted to the board.

STATEMENT
Showing the expenditures, assets, liabilities, &c., of the Louisville and Nashville Railroad Co., Oct. 1st, 1856.

Expenditures.
To the Bowling Green and Tennessee and Portago Railroads.....\$19,295 73
Memphis Branch..... 4,132 81
Water stations, engine house, buildings and turn-tables on depot grounds..... 8,879 17
Graduation, masonry, railway superstructure, iron, construction and fencing..... 979,475 82
Locomotives, rolling stock, &c..... 104,655 00
Engineering and instruments..... 126,616 83
Contingencies, agency, court and office expenses..... 51,419 08
Interest on Stock Bonds..... 62,958 90
Lands for road and stations and depot grounds..... 109,826 92
\$1,467,260 26

Assets.	
County Bonds on hand.....	\$898,600 00
City of Louisville Bonds, on hand.....	385,000 00
Individual Notes.....	25,299 00
Interest due from counties on Bonds received.....	56,037 21
Sundry Notes in suit and individual accounts.....	10,812 00
Edgefield and Kentucky R. R. Co.....	17,829 38
Balance 115 City Bonds sold, due Oct. and Nov.....	26,763 20
Due from Lebanon Branch.....	42,271 64
Cash on hand.....	70,911 11

	1,533,523 54
	\$3,000,783 80
By Capital stock, (stock issued).....	\$1,400,730 00
Interest Scrip stock.....	60,858 90
City of Louisville, (taxes not converted into stock).....	207,695 42
Collections from individual stock subscriptions upon which stock has not been issued.....	61,606 60
County subscriptions upon which stock has not been paid.....	1,032,000 00
	\$2,762,890 92

Sumner and Hardin counties pre-payment of interest.....	\$4,260 00
Sundry reserved accounts of contractors.....	25,432 57
Interest and discount.....	91,926 10
Profit and Loss account.....	6,676 73
	128,295 40
Bills payable.....	\$107,075 03
Sundry open accounts.....	2,522 45
	109,597 48
	\$3,000,783 80

NOTE.—The sum of \$37,506 71 of Bills Payable account, was created for the Lebanon Branch, and its assets are pledged for its payment, say City of Louisville and Marion County Bonds.

Amount of assets as above.....	\$1,533,523 54
Due from Hardin co., 3d instalment of bonds.....	\$100,000
Due from Hart co., 3d instalment of Bonds.....	34,000
Due from Simpson co., 3d instalment of Bonds.....	34,000
Due from Sumner co., 3d instalment of Bonds.....	100,000
Interest on above to Oct. 1, 1856.....	15,000
	288,000 00
Due from City of Louisville balance of her subscription of \$1,000,000, say October 1, 1856.....	\$250,000
April 1, 1857.....	250,000
	500,000 00
Balance on individual subscriptions.....	106,211 58
Total available assets exclusive of mortgage bonds and aid from State of Tennessee.....	\$2,422,735 12

Railroad Iron.

500 TONS best quality Welsh Rails, approved T pattern, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

Railroad Iron.

THE undersigned, Agents for leading Manufacturers in Staffordshire and Wales, are prepared to contract for delivery on board ship at Liverpool, or Welsh port.
C. CONGREVE & SON,
13 Cliff st., N. Y.

Railroad Iron

AT NEW ORLEANS.
1,000 TONS Rails, "Erie" pattern, 56 lbs., best Welsh make, for sale at New Orleans.
VOSE, LIVINGSTON & CO.,
9 South William st.,
1m44 New York.

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern, 56 lbs. per yard, now due at New Orleans, for sale by
VOSE, LIVINGSTON, & CO.,
No. 9 South William st., N. Y.
October 18, 1856.

Railroad Iron.

1,000 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard, now on the way from English shipping port. For sale by
THEODORE DEHON,
10 Wall st., near Broadway,
Oct. 23d. 1m43 New York.

Railroad Iron.

500 TONS T pattern, best English make, weighing 57 to 58 lbs. per linear yard. In port, and for sale by
THEODORE DEHON,
10 Wall st., near Broadway,
Oct. 23d. 1m43 New York.

Railroad Iron.

2,500 TONS T Railway Iron, Erie pattern, weighing about 58 lbs. per yard, of Messrs. Guest & Co. and BAILEY BROS. & Co.'s make, shipping from England during the present month for New York. For sale by
J. BOORMAN, JOHNSTON & CO.,
90 Broadway,
Sept. 25th, 1856. 2m New York.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

To Railroad Companies

A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M., the office of the AM. RAILROAD JOURNAL.
New York, July 21st, 1856.

To Railroad Contractors.

KNOXVILLE & KENTUCKY R. R.
PROPOSALS will be received at the office of the Company, in Knoxville, Tenn., until Saturday, the 15th day of November, for the Grading and Masonry of the first division, extending from Knoxville to the Base of the Cumberland Mountains, a distance of thirty miles.
This Division covers a large amount of very heavy work. It will include a Tunnel of 1,050 feet in length, 16,000 cubic yards of masonry of all kinds, and nearly 1,500,000 cubic yards of earth and rock excavation.
The Company have good stock subscriptions, and loan from the State of Tennessee, amounting to nearly \$800,000 applicable to the Construction of this Division.
The country through which the road passes, is rich and productive, and abundantly able to furnish the necessary supplies to contractors. The work will be divided into sections of about one mile each.
The Company claim the right of reserving the light sections at this time, unless included in the same contract with one or more heavy sections, the object being to secure the completion of the entire work as nearly as practicable at the same time; the right is also reserved, to reject any proposals that are not satisfactory.
Bidders will be required to give security, or satisfactory evidence of their ability, for the due performance of any work that may be awarded them.
Plans, profiles and specifications may be seen and other information obtained at the office of the Chief Engineer in Knoxville.
M. E. PRICHARD, Chief Eng'r,
4142 Knoxville & Kentucky R. R.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILA DELPHIA, Penna. 327

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In addition to their usual business, this Company is prepared to take Fire Risks upon
Railroad Property of all Descriptions,

AS FOLLOWS:

1. They will name a premium at a low rate upon a policy to cover ALL the perishable property of any Railroad Corporation.
New York, August 27th, 1886.

The Railroad Companies desiring insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2. This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

Notice to Contractors.

QUINCY & EASTERN RAILROAD.

PROPOSALS for the Grading, Masonry and Bridging of this road, about 37 miles in length, including a bridge with a draw over the Illinois river, will be received at the office of the General Contractor at Quincy, until the 26th of November, 1886.

The work will be let in parts or as a whole, at the discretion of the General Contractor, and he reserves the right to reject all bids not considered, in view of all the circumstances, as favorable. Maps and profiles made from the experimental surveys, subject to the corrections of location, also specifications will be exhibited at the office of the General Contractor, in Quincy, after the 15th of November. Cross-ties may also be bid for—about 85,000 in all—deliverable on the road in manner and time for use.

The Quincy and Eastern Railroad begins at Camp Point, on the Northern Cross Railroad, about 22 miles from the terminus of that road, on the Mississippi river at Quincy, and extends thence eastward to and across the Illinois river, forming a connecting line with the Great Western Railroad of Illinois, which last extends still eastward to the State Line of Indiana, and there connects with the Toledo and Wabash Railroad, by which a continuous line is formed from the Mississippi at Quincy to the western extremity of Lake Erie at Toledo, about 475 miles in length, for the working of which as one road, arrangements have been consummated.

The country in which the work now advertised for letting lies, is well settled and cultivated, healthy and fertile, much of it being prairie, but with timber abundant for all purposes of construction—it is moreover accessible from any direction by both railroad and river, one end of the work joining the Northern Cross Railroad, the other the Great Western—the Illinois river being also at one end, the Mississippi near the other, and possesses every advantage to make railroad work desirable.

Proposals by mail or other communication, will be received if addressed to

November 24, 1886.

J. W. SINGLETON,
General Contractor, Quincy Ill.
246

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MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

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THE subscribers have formed a Co-Partnership under the name of DRAKE & CARTER, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Loaning Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be JAMES M. DRAKE and GALEN A. CARTER. EDWARD B. LITTLE Esq. has contributed Fifty Thousand Dollars as special partner.

D. & C. will occupy the Offices No 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)

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REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1y18

Lord & Wright,

Counselors at Law, Cincinnati, Ohio. 166

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streets, opposite the Tremont House.

SAM'L POWELL,

Gen. Ticket Agent.

C. G. HAMMOND,
Gen. Supt.

New York and Erie R. R.

On and after Monday, November 8, 1886, and until further notice,

PASSENGER TRAINS
will leave Pier foot of Duane street,
as follows, viz:—

BUFFALO EXPRESS, at 6 1/2 a.m., for Buffalo.

DUNKIRK EXPRESS, at 6 1/2 a.m., for Dunkirk.

MAIL, at 8 1/2 a.m. for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

CHICAGO EXPRESS, at 12 m. for Dunkirk.

ROCKLAND PASSENGER, at 3 p.m., (from foot of Cham-
bers st.) via Plimout, for Suffern's and intermediate stations.WAT PASSENGER, at 4 p.m., for Newburgh and Middl-
town and intermediate stations.

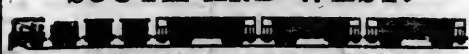
NIOT EXPRESS, at 4 1/2 p.m. for Dunkirk and Buffalo;

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and inter-
mediate stations.

The above trains run daily, Sundays excepted.

These Express Trains connect at Elmira, with the Elmira,
Canandaigua and Niagara Falls Railroad, for Niagara Falls;
at Binghamton with the Syracuse and Binghamton Railroad, for
Syracuse; at Corning with Buffalo, Corning and New York
Railroad, for Rochester; at Great Bend with Delaware, Lacka-
wanna and Western Railroad, for Scranton; at Buffalo and
Dunkirk with the Lake Shore Railroad for Cleveland, Cincin-
nati, Toledo, Detroit, Chicago, etc.,

D. C. McCALLUM, General Supt.

Philadelphia, Wilmington &
Baltimore Railroad.UNITED STATES MAIL ROUTE TO THE
SOUTH AND WEST.Trains will leave the Southern and Western Station, corner o
Broad and Prime streets, Philadelphia, at 8 30 am. 12 45, 8 and
11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	5 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on
board the boat.

GEORGE A. PARKER Supt.

INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HAN-
SEAW, Civ. Engineer, of the practical organization of the
New York and Erie Railroad. It shows in detail its entire
physique in every department of the road. Such information
in regard to one of the greatest railroads in the world must be
deeply interesting to all connected with the management of
such concerns. The impressions are on fine paper 31x45 inches.
Price \$1 for thick or map paper and \$1.75 mounted on rollers.
Those on map paper can be sent by mail.

Address

JAMES W. HILTON,
Jersey City, N. J.

July 24th, 1886.

Sm

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, November 22, 1886.

Annual Report of the Railroad Commissioners for the State of New York.

(Continued from p. 723.)

As stated in their communication of the 9th of February, the Board prepared a form for the annual reports of the several railroad companies, which the Legislature requires to be furnished by this Board.

These reports embrace a large amount of information in regard to every railroad corporation, which has never before been published, and much which had never been compiled even on the books of many of the companies.

It was intended that these reports should show all of the money which had been received from the stock and bondholders, and for what purposes it had been expended; the cost and present value in detail of the grading, superstructure, equipment and other works of the company; the characteristics of the road and all of the structures; the amount of each class of business done during the year and its cost.

Some of the reports exhibit all of these required statements with much minuteness and apparent accuracy, and the officers of these companies deserve commendation for their efforts to second the objects of the Board. In some cases, however, it was apparent that the books of the company had not been kept with sufficient accuracy to furnish many of the most important matters of information called for; in others the books had not been kept in such a manner as to enable the information to be given without considerable labor, and in others the officers were apparently

unwilling that the information should be made public.

Two of the members of the Board at different periods have had the duty of presenting to the Legislature these annual reports of the railroad companies, and the tables of deductions therefrom, somewhat similar to those now furnished, and they are able to say that the present reports are generally much more reliable than those previously furnished; at the same time the Board are compelled to add, that much greater accuracy is required before such reports can be fully relied upon.

These abstracts and deductions are a valuable addition to the mass of information which has been collected on the nature of the business performed by railroads, and the expense of performing it, and as the reports of each year will furnish comparisons with those of previous ones, by which errors may be corrected, they will annually become more valuable.

The following analysis of the reports will present some of their most interesting features, and some of the most striking comparisons between the more important roads.

The whole cost of all the railroads in the State is represented by capital stock 47 per cent., Funded Debts 49 per cent., and floating debts 4 per cent.

The reports as furnished show that nearly five millions of dollars in capital stock has been issued, instead of cash, for payment for work done, materials furnished, etc., which is 30 per cent. of the whole cost of the roads which have issued such stock. It is known, however, that large amounts of stock have been issued for this purpose which have not been stated in the reports.

Funded Debts are 68 per cent. of the whole cost of the roads reporting such debts.

The bonds which have been issued have been sold at an average depreciation of twelve per cent. below their par value.

The several classes of bonds which have been issued have been sold an average depreciation below their par value as follows:*

- Bonds convertible into stock, 8 per cent.
- Bonds secured by income or sinking fund, 7 per cent.
- Bonds having no collateral security, 12 per cent.
- Bonds secured by first mortgage, 12 per cent.

* This table does not show the relative value of the several classes of bonds of the same companies, but only the aggregate losses of all the companies which have issued such bonds. Some of the companies have issued their third mortgage bonds at a less depreciation than other companies have issued their second mortgage bonds, and hence the average depreciation on the latter exceeds that of the former in the above table.

Bonds secured by second mortgage, 21 per cent.
Bonds secured by third mortgage, 12 per cent.
Bonds issued in payment for work done, etc., 8 per cent.

The amount of bonds issued in payment for work done, materials furnished, etc., as far as reported, is nearly five millions of dollars, which is 12 per cent. of the whole cost of the roads which have issued bonds for such purposes.

The floating debts at the last day of the year amounted to nearly six and a half millions of dollars, a sum equal to nearly one-third of the gross earnings of the same roads during the year.

The expenditure which has been made for the year, and charged to construction for improvements and additions to those roads which were in operation in 1884, is.....\$3,945,668.15
And for constructing and extending

new roads, is.....1,161,228.65
Nearly one-third of the expenditure on the old roads occurred on the Central, and nearly one-tenth each, on the Hudson River and Erie railroads.

The present estimated value of those roads which furnished such an estimate, is about five and a-half millions of dollars less than their original cost, which shows a depreciation of 11 per cent., but many of these present valuations are too high. The reports which are regarded as the most reliable in these estimates, show from 10 to 30 per cent. depreciation from their original cost.

From this imperfect basis, it may be assumed as a general rule that the depreciation in value of the new roads after they have been in operation for two years, is from ten to twenty per cent., and of those which have been in operation for several years, is equal to 3 per cent. per annum.

The earnings for the transport of through passengers is 40 per cent. of the whole earnings from passengers, and 14 per cent. of the earnings from all sources.

The earnings from through freight is 48 per cent. of the whole earnings from freight, and 23 per cent. of the earnings from all sources.

The expenses are about 59 per cent. of the earnings both for the transportation of passengers and of freight.

The amount of interest paid on the Funded Debts is \$4,220,592 19, according to the reports. This sum is nearly a million of dollars less than the annual interest on the whole Funded Debts of the several companies.

After allowing for those cases where payments of interest have probably been made and not reported, there remains more than three-fourths of a million of dollars of interest on the Funded Debts, the payment of which has been deferred.

The dividends which have been paid, are equal to an average of 4.8 per cent. on the capital stock of all the completed roads, but excluding the

Central railroad, they are equal to an average of only 1 per cent.

The amount of dividends paid, is equal to an average of 5 per cent. on the capital stock of all the roads which have made dividends.

The double track laid is equal to nearly one-fourth of the whole length of the roads, and the sidings to one-eighth.

The broad gauge (six feet) forms nearly two-fifths of the length of the whole roads in operation.

Three-fourths of the whole length of the roads is either ballasted, or is placed upon natural soil, which is good ballasting.

The sum of the ascents overcome going towards tide-water, is 14,707 feet, and going from tide-water, is 17,588 feet.*

Nearly 80 per cent. of the whole length of the roads is curved lines, and the whole amount of the curvature is equal to 137 complete circles.

There is an average of one bridge for every two miles of road, and 71 lineal feet of bridging to each mile of road.

There is an average of nearly two culverts to each mile of road.

There is an average of nearly two farm crossings, and one road or street crossing, at the level of grade, to each mile of road.

There is an average of nearly one switch (from the main track) to each mile of road, and one-half of these are without permanent tenders.

The whole number of buildings of all kinds used for railroad purposes, is 1,291, of which 191 are of brick and stone.

The number of locomotive engine is 735, but many of these are in bad repair, and others are too light for the present traffic, and a considerable number are in the shops undergoing repairs, so that the effective force may be considered as equal to a supply of 500 engines of full size for constant use, 125 surplus engines undergoing slight, and 75 undergoing heavy repairs.

Which is equal to a stock of one engine for each $3\frac{1}{2}$ miles of road, or to one engine in constant use for each $5\frac{1}{2}$ miles of road.

There is one engine house for every 7 engines, and one stall for nearly every engine.

The average distance run during the year by each of the engines in actual use is 22,823 miles, or taking the estimated number of available engines, it is equal to 16,802 miles to each.

The number of effective passenger cars in constant use is 650, and of baggage, mail, and express cars is 246, which is equal to one passenger car to every four miles of road, and one baggage, mail or express car to every eleven miles of road.

The average distance run during the year by each passenger car is 45,126 miles.

The number of effective freight cars in constant use is 7,600, and the average distance run by each during the year, is 11,970 miles.

The total number of cars of all kinds is 11,063. If all the engines, tenders and cars, were placed in a continuous line, they would extend nearly 100 miles.

The whole number of persons employed on the roads in operation is 18,012, which is an average of 7.8 persons to each mile of road.

The number of first class through passengers going from tide-water is nine per cent. greater than of those going towards tide-water; and of way passengers is nearly eight per cent. greater; while the mileage of both classes is nearly 20 per cent. greater from, than towards tide-water.†

This excess is chiefly due to the emigration of this class from the Eastern to the Western States.

The number of through passengers is 18 per cent., and their mileage is 35 per cent., of the whole number transported.

* The report of the New York Central does not show the gradients and alignments of that road, and the amounts of ascents, descents and curvature, above stated, is exclusive of those on the Central.

† Exclusive of the New York Central.

The average distance traveled by each passenger as shown by the reports, is $47\frac{3}{4}$ miles, but the same passenger is frequently counted on two or more roads. If a proper allowance is made for this, it would probably increase the distance to about 55 miles.

The number of second class passengers is 40,156, and their average mileage is 80 miles; the number of emigrant passengers is 214,556, and their average mileage is 187 miles. The emigrant passengers are all moved from tide-water, and added to the excess of first class passengers going from tide-water, would show an annual westward emigration of 408,759 souls, of which probably one-half are natives of the United States.

The number of passengers carried in the city cars is 23,824,663, and of all others is 12,621,656.

The proportion between the way and through tonnage, and the movement of the several classes of freight, are as follows:*

The products of the forest, except on a few short roads, is almost wholly way business, and is generally moved from 25 to 30 miles.†

The products of animals, except on the New York and Erie and Northern railroads, is almost wholly through business, and upon those roads it is more than one-half through.

About one-fourth of the tonnage of vegetable food is way business, and is generally moved from 20 to 25 miles.†

From one-half to two-thirds of the tonnage of manufactures, is way business, and is generally moved from 25 to 30 miles.‡

From one-fourth to one-third of the tonnage of merchandise is way business, and is generally moved about thirty miles||

Of all other classes of freight the way tonnage forms nine-tenths of the whole, except on the Northern and a few small roads, where it forms but one-tenth.

Taking all classes of freight together, the way tonnage is about one-sixth on the Buffalo and State Line, and a few short roads; it is about one-third on the Northern, and a few roads of small business; it is about one-half on the New York and Erie, New York Central, and a few roads of small business, and it is about two-thirds on the Watertown and Rome railroad. The average movement of the way freight of all classes taken together, is generally from 20 to 30 miles, except on the New York and Erie, where it is moved 118 miles, on the New York Central, where it is moved 103 miles, and on the Watertown and Rome, and the Northern railroads, where it is moved 64 miles.

The proportion which each class of freight transported forms of the whole tonnage and mileage is as follows:

	Of the whole tonnage. Per cent.	Of the whole mileage. Per cent.
Products of the forest.....	12.2	12.7
Products of animals.....	15.7	25.5
Vegetable food.....	23.7	25.4
Other agricultural products..	2.1	1.4
Manufactures.....	10.1	9.8
Merchandise.....	13.5	16.5
Unenumerated articles.....	22.8	8.7

The mileage of the products of the forest, of animals, and of vegetable food, carried towards tide-water, were each 95 per cent. of the whole

* All of the details of the different classes of freight are not furnished in the report of the New York Central Railroad Company, and are not included in these statements, except when especially mentioned.

† On the New York and Erie it is moved 241 miles.

‡ On the New York and Erie it is moved 101 miles; on the Northern 88 miles.

§ On the New York and Erie it is moved 105 miles; on the Northern 62 miles; on the Buffalo and State Line 41 miles.

|| On the New York and Erie it is moved 116 miles; on the Northern 65 miles.

mileage of each class respectively; of manufactures, it was 43 per cent.; of merchandise, it was 13 per cent.; and of all classes taken together, the mileage of freight carried towards tide-water was 70 per cent. of the whole mileage.

The average distance which each class of freight was moved, is as follows:

	Miles.
Products of the forest.....	102
Products of animals.....	164
Vegetable food.....	107
Other agricultural products.....	64
Manufactures.....	96
Merchandise.....	126
Unenumerated articles.....	89
Aggregate of all classes.....	102

The average distance which the way freight was carried was 86 miles.

The tonnage of through freight shipped was 48 per cent. of the whole tonnage, but its mileage was 56 per cent. of the whole.*

The proportion which the mileage of each class of freight on each road, bears to the whole mileage on each road, is as follows:

Of the products of the forest, less than 10 per cent on the Central, Oswego, State Line, Harlem, Hudson River, and Troy and Saratoga; from 10 to 20 per cent on the Erie, Cayuga, West Stockbridge, Long Island and Ogdensburg, and 43 per cent on the Watertown and Rome.

Of the product of animals, less than 10 per cent on the Buffalo and Corning, Cayuga, Syracuse and Binghamton, Oswego, New Haven, West Stockbridge, Troy to Whitehall, Long Island and Ogdensburg; 20 per cent on the Central; 26 per cent on the Hudson River; 32 per cent on the Erie and Canandaigua and Elmira, and 56 per cent on the State Line and Harlem.

Of vegetable food, from 10 to 20 per cent on the Erie, Syracuse and Binghamton, Watertown and Rome, State Line, Harlem, Hudson River, Troy to Whitehall, and Long Island; about 40 per cent on the Central, Buffalo and Corning, Canandaigua and Elmira, West Stockbridge and Ogdensburg.

Of other agricultural products, less than 5 per cent on all the roads.

Of manufactures, 10 per cent and less on all the roads except the Watertown and Rome, Oswego, West Stockbridge and Hudson River, which are less than 3 per cent, and the State Line, which is 39 per cent.

Of merchandise, 16 to 20 per cent on the Erie, Central, Hudson River, Troy to Whitehall, and Long Island; and about 28 per cent on the State Line and Ogdensburg.

Of all unenumerated articles, less than 10 per cent on the Erie, Central, Buffalo and Corning, Canandaigua, Elmira, Watertown and Rome, Oswego, State Line, West Stockbridge and Ogdensburg.†

The table of the average cost per mile of road, shows that the Hudson River, the New York and New Haven, and the New York and Erie are the most expensively built roads in the State, and the table of the average cost per mile of track, shows nearly the same result, except that the Troy and Bennington, and the Albany and West Stockbridge roads exceed the cost of the New Haven road, while the Rome and Watertown, the Oswego and Syracuse, and the Canandaigua and Elmira are among the cheapest roads in the State.

* The Erie and Central railroads, which together transport three-fourths of the freight, show that the tonnage of the through freight shipped is 20 per cent., and its mileage is 47 per cent., of the whole freight transported on those roads.

† There are omissions in some of the reports of the railroad companies, in the division of the tonnage of the freight, transported in the opposite directions, and in some cases of other divisions of the freight business. For the purpose of making the proportions given above, these omissions have been supplied by approximate estimates, which are so noted at the foot of each table where they have been entered.

\$1,600,000,* for which sum it is proposed to issue Bonds to you in lieu of the interest so founded, and secure the same by a Mortgage on the Road and Rolling Stock next after the amount due on your present liens upon it; such Bonds to draw interest at the rate of seven per cent., payable semi-annually, in the City of New-York.

It is claimed that serious irregularities existed in the issue of the Bonds of this Company, particularly those of the 1st and 2nd Mortgages, and protests have been put in at meetings of the Stockholders, by the City of Alton and other creditors and Stockholders of the Company denying the validity of your Bonds. This of these does not in any event intend to av—They cannot, irregularities if so be such, saving liens on the Road subsequent to, should be one of the correct these irregularities desired from you, and it is intended that the Mortgage given to secure the interest to be funded, shall ratify, confirm and make perfect these Mortgages by which your debts are now secured, and the Company will also pledge itself therein to procure such legislation as shall fully legalize and make valid your present securities, under the penalty of forfeiting the extension granted under this arrangement.

It is also to be remarked, that the Mortgages by which your Bonds are secured, are none of them first liens on more than a small portion of the Rolling Stock necessary to operate this Road, while the local debt of this Road owing to laborers, operatives, and for fuel and other necessary things along its route amounts to about three hundred thousand dollars; and judging from the experience of other Roads, it will not be practicable even for your Trustees, or those purchasing at a sale under your Mortgages to operate the Road, without making provision for that debt.

Such, then, are the circumstances under which you are applied to to defer the payment of the interest on your Bonds. Should you decline, it is considered that the result must be,

1st. An expensive and protracted litigation—in a remote district—involving the validity of your securities, and if you fail, the entire loss of your debt, and during the continuance of which you remain out of any income.

2d. The liability even in case of success, of having to make large advances of money to procure Rolling Stock.

3d. The necessity of arranging the local debt.

4th. The necessity of operating the Road through non-resident Trustees, until it can be finally sold and paid for—a sort of operation all experience in Railroad teaches as wretchedly unprofitable.

5th. The necessity of finding a purchaser for the Road when brought to sale. For it is not to be expected that any such sum as the aggregate of the moneys due you can be paid down for the Road in cash, whatever its real value.

6th. Your inability to command favorable arrangements with the connecting Roads, which are controlled by creditors cut off by your proceedings.

On the other hand, if you assent to this arrangement, you part with none of your securities. For it is not proposed that you should cancel the Coupons you now hold, but merely that you should agree to defer their collection, retaining, however, the lien on the Road they give you—so that by this arrangement you further secure in addition thereto,

1st. A complete ratification and legalization of your securities.

2d. Interest immediately on the aggregate of three years' interest on your debt. So that by deferring the interest on your claims for three years, you ultimately get it all and interest on that amount from this time, as if it were due at

* This sum may be increased should any of the Floating Debt be funded. But as Bondholders will retain the benefit of their present Coupons the amount of the Bonds issued will not be material to them.

once, being nearly equal to an additional one per cent. a year on your principal debt.

3d. A better assurance of the payment to a whole debt, principal and interest than have even if successful in but any Bondholder sale.

Indeed, it is not interest as desired, it will hesitate to be promptly made. That this will be satisfied is deemed certain. Indeed, the receipts of the Road since opened, have averaged over one million dollars per year, being more than enough to pay the interest on its Funded Debt, allowing as high as sixty per cent. for expenses of operation and repairs. That it should not have paid this interest is to be attributed to the embarrassments alluded to. How greatly such embarrassments affect the profits of a railroad, none but persons conversant with that business can appreciate. The profits of a railroad consist of innumerable small savings and curtailments, the result of constant discriminating and watchful care and economy. When managers of a railroad are occupied defending actions at law, and struggling for means to carry on the business from day to day, and are deprived of that confidence in their position and responsibility which persons dealing extensively with railroads require, it is not surprising that they cannot operate their road with efficiency or profit, or that an important share of the legitimate business of the road should be diverted to other channels.

If the arrangement now proposed to you should receive your assent the management of this road will go into competent, energetic, influential and responsible hands, and a harmonious, economical and profitable administration of its affairs can at once be looked for. With no more business than at present, this road will then earn above its operating expenses clear profits enough to more than pay the interest on your Bonds, even after the lapse of three years. But by this arrangement the business of late diverted from the road, by want of confidence in its management, and through the influence of those properly its friends, will be returned to it and a decided increase from that source alone may at once be looked for, while the continued settlement of the fertile country along its line, heretofore anticipated, but now beginning in earnest, may most reasonably be expected before these three years have expired so to add to the business of this road as to enable it thereafter, not only to meet your interest, but to provide for all its other obligations as they mature.

Provision has been made for monthly accounts in detail of the earnings and expenses of this road, which it is designed to furnish to all parties funding their interest under this arrangement who desire them. For the Company.

August, 1856. JAMES K. ALEXANDER, Sec'y.

Buffalo and Brantford Railway.

The Buffalo Courier of Monday has the following, in reference to the opening of the Buffalo and Lake Huron Railway as far as Paris:

"We are glad to announce that this important thoroughfare is now in perfect order, and that trains commenced running regularly on the road to Paris, connecting promptly with the Great Western Railway, on Saturday. Two trains are run daily, until a large number of new engines, which are on the way, can be put on the road. The facilities will then be much greater. The Road is perfectly ballasted, and is completed beyond Paris to within four miles of Stratford. They are awaiting for railroad iron, which is rapidly coming forward. Passengers now take omnibuses in the city, and go to Black Rock and Fort Erie, where they take the cars. Arrangements are making, by which the trains will be run regularly to and from the Erie street depot. This will be consummated in the course of a week. It should be a matter of congratulation to all our citizens, that this road has got into operation again on a substantial basis, and that the trade with that

Canada, by which Buffalo has been revived."

New York and Harlem Railroad.

The annual report of the New York and Harlem Railroad Company presents the following statement of the operations of this company for the year ending September 30, 1856.

The earnings of the company, according to the report, for the six months ending September 30th, were—

From Passengers.....	\$290,512 22
Freight	212,982 93
Mails and Expresses	5,762 84
Rents	12,887 27
Miscellaneous sources	25,479 37

\$547,624 62

Working Expenses, Repairs, &c.	\$352,262 68
Taxes and Assessments ..	2,668 99
Insurance	500 00
Law Expenses	479 01
Rents payable	4,325 64

360,231 32

Net earnings.....\$187,893 31

—Leaving \$187,893 31 for interest on debt and on the Preferred Stock. The debt is, \$3,853,304 funded; \$299,352 floating; and 241,312 mortgages; making a total of 4,293,968. The amount of interest payable is not given in the report, but is probably about \$300,000 per annum. This would leave \$37,893 for the six months' dividend on the Preferred Stock, which requires \$60,000.

Annexed is a condensed statement of the condition of the company on the 30th of September:

LIABILITIES.	
Capital—Old or common stock	\$4,217,000 00
Preferred stock	1,500,100 00
	\$5,717,100 00
Funded debt.....	3,853,304 71
Real estate mortgages.....	141,312 00
Floating debt (less cash and credit items).....	299,352 26
	\$10,011,068 97

ASSETS.	
Railroad and appurtenance, including gradation, and masonry, bridges, superstructure, passenger and freight station buildings and fixtures, right of way, land damages, fencing and city tracks.....	\$5,397,372 68
Real estate, not included above	999,580 49
Locomotive and fixtures, snow-plows, horses, stables, and shop equipments, &c.	370,476 78
Passenger, baggage, freight and other cars	292,670 00
Iron in public store (in suit)	56,176 27
Wood and other materials on hand.	142,592 38
Albany extension certificates	1,524,090 00
Preferred Stock (held by the Company)	29,800 00
Private account (of doubtful value, including claims against R. & G. L. Schuyler).....	295,882 58
Profit and loss.....	901,517 79

Total.....\$10,011,068 97

The report says:

"In estimating the value of the stock, from this statement, the question arises, what proportion does the sum of \$10,011,068.97, the total amount of the capital and indebtedness, bear to the value of the road, its equipment, and the real estate held by the company.

"If we deduct from the total assets the items of doubtful value, including the iron, for the possession of which a suit is now pending, and all claims against the firm of R. & G. L. Schuyler, there will

be an aggregate deficiency of \$1,255,576.64 (for which, however, the present Board are not responsible); and if the road, its equipment, and the real estate are not over-valued upon the books, this should be the entire appreciation to be charged upon the stock of the Company.

"As respects the road and its appurtenances, standing on the books, including the actual and prospective absorption of the Albany Extension Certificates—at a valuation of \$7,898,872.68, there may be differences of opinion. Its length, as laid, reduced to an equivalent in single track, is equal to 181 miles, and the above valuation is equal to \$40,875 per mile; but little more than the cost of the corresponding items of the New York and Erie Railroad, and considerably less than those of the Hudson River road, as appears from the State railroad report. These and the New York Central are the only three roads in the State of New York whose aggregate earnings exceed those of our road, and only six of the whole number in the State equal us in amount earned per mile."

In regard to the floating debt the report says:

"The floating debt of the company, which, on the 30th September, 1855, after deducting real estate, cash and credit items, stood at \$854,156.38, was reduced on the 31st March, 1856; as shown by the last report to \$535,794.05, and stood, on 30th September, 1856, at \$299,352.26. This was, however, only its amount nominally, for the sum of \$142,592.38 was represented by wood and other materials actually on hand, and the balance could at any time be met out of real estate not in use, and not covered by the mortgages, and by unissued bonds, should the Board deem it advisable to make such arrangements; but at present it is considered impolitic so to do, as most of the amount does not carry interest at all, or bears such rates as is more to the advantage of the company to pay than to submit to the losses the forced payment of the debt would entail."

The increase in the net earnings during the three years past is shown in the annexed table:

For the year ending.	Total earnings.	Total current charges.
Sept. 30, 1854.....	\$935,061.02	\$787,540.56
Sept. 30, 1855.....	1,035,677.45	801,451.70
Sept. 30, 1856.....	1,040,393.23	715,501.67
	Rate percent.	Net earnings.
Sept. 30, 1854.....	\$34.22	\$147,520.46
Sept. 30, 1855.....	77.39	234,125.75
Sept. 30, 1856.....	68.77	324,891.56

The report states that the road and equipage are in perfect order, and have been much improved during the year. Six hundred tons of rails have been purchased, and most of it laid, and a large number of new cars added to the rolling stock.—The new contract with the New Haven Company will insure some increase in the receipts from that source, but the compensation is still unsatisfactory, though no immediate change can be effected.

"On the first day of July last the agreement existing between the Harlem and Hudson River Railroad Companies, by which the fares and regulations of the two roads had been controlled for some years, was abrogated, under a notice from the latter Company. It consequently became necessary that steps should be taken to reinstate the Harlem Road in its proper position before the public, as one connecting with all the Western, Northern and Eastern routes, and possessing equal, if not superior attractions with its rival. Express trains were therefore put upon the road, running through between New-York and Albany in 4½ hours on the 4th of August last. The through business of the Company has thereby been considerably increased, and the fact demonstrated that, in every essential particular, the Harlem Road is able to perform its full share of duty as one of the links in the chain of Railroads connecting New-York with the Great West, and to the

satisfaction of the travelling community. Such modification, as to hours and connections as may insure the greatest efficiency at the least expense, will be made from the future to time; and there can be no doubt of the future influence on the receipts, this renewed attention to freight, resulting from the increased traffic of the road.

"One obstacle which has ever stood in the way of a full development of the advantages and facilities of New-York and Harlem Road, has been the want of a road under its control that would afford the necessary connections with those running to the North and West, relieving it from all dependence upon extraneous influences and schemes of opposing roads, and enabling it to compete effectually for the vast traffic in produce which is constantly pressing toward the great central market of New-York. As yet the various plans devised to secure such a connection have not been attended with success; but there is, at present, a probability that in a few months a road between Chatham and Troy will be put under contract, which, when completed, will insure all the advantages desired. It is not expected that the construction of this Road will call for any expenditure on the part of the Harlem Company, the contemplated arrangements, whereby its control will be secured, referring only to its management after completion. The preparatory surveys have been made, and grades, curves and distances have been found to be favorable."

It is the intention of the Board of Directors to direct the payment in January next of such amount of the net earnings then accumulated, as may justly be appropriated to a dividend on the Preferred Stock. Whether the amount so intended to be paid will amount to a full four per cent. dividend or not, depends in some measure upon the receipts of the intervening months.

Railroad Business at Chicago.

Some idea of the railroad traffic of Chicago may be had by the following statement of the business done at one depot (the Central) during the week ending September 20th: The total number of baggage cars arriving and depositing was 184; total number of second class cars was 46; total number of first class coaches 478. The number passengers arriving and departing was 26,740; and the number of pieces of checked baggage 11,660. The sales of tickets at the depot exclusively \$35,555.75. This is aside from the tickets sold at the general office and city and other western offices.

Artesian Wells on the Plains.

We had the pleasure of an interview yesterday with Captain J. Pope of the United States Topographical Engineers, who has just returned from his expedition to the Llano Estacado, and is now on his way to Washington. The object of Capt. Pope's long continued labors is to procure water for a new and much shorter route to New Mexico and the Mesilla Valley, on the 32d parallel of latitude, across the Llano Estacado; and with this purpose he has passed two seasons on that great plain sinking artesian wells, and prosecuting other scientific labors.

Capt. Pope went out to the scene of his labors in the Spring of 1855, from Indianola, by the way of San Antonio, and formed his camp on the banks of the Pecos River, where it is intersected by the 32d parallel of latitude. From this point he proceeded with his working parties due east a distance of fifteen miles, and there sunk the first well. From the Pecos River the country seems to the eye to be a perfect level, but instrumental observations show that there is a rise of about 600 feet in a distance of 85 miles; and from that point, which may be termed the summit of the plain, it continues with a gradual descent eastwardly, to the hills from which run the head waters of several of the forks of the Colorado River.

In sinking the wells Capt. Pope found no diffi-

culty in the geological formation. This is entirely composed of alternate strata of indurated clay and cretaceous marls of every variety of color, and easily bored through, but sufficiently hard to prevent the walls of the boring from falling and incommencing the labor.

The first stream of water was struck at a distance of 360 feet, and it rose to a height of 70 feet in the tubing. Continuing the labor, through the same formation, the second stream of water was struck at a depth of 641 feet, which rose 400 feet above the first, or about 50 feet higher than the first stream of water. These labors demonstrated the existence of water beneath the surface, but as winter was approaching, and the material which he had brought along, and the material which he went into winter quarters on the banks of the Rio Grande.

Having received fresh supplies in the spring of the present year, he returned to the Llano, and in April last resumed his labors there. His former attained results having demonstrated the existence of abundant water beneath the surface, he went five miles eastward from the first well, and there sunk the second. In the prosecution of this work he struck the same streams that he had found in sinking the first well, and on reaching a depth of 860 feet he encountered another which rose 750 feet in the tubing. At this point the material was again exhausted, and the small appropriation made by Congress for the experiment had been expended. Capt. Pope was obliged to suspend his labors, and is now on his way to Washington to make his full report thereon.

The results of this work have been eminently successful, for they demonstrate the feasibility of the plan of producing water on this great plain by the sinking of artesian wells, and it is much to be hoped that Congress will make another appropriation to continue and perfect the work. When compared with the expenditures that have been made in sinking artesian wells in other places, the expenditure has been very insignificant, the appropriation having been only \$40,000 we believe.

Through the absence of water the Llano Estacado forms a complete barrier to travel between the western towns of Louisiana and Arkansas to New Mexico and the Mesilla Valley, along the line of the 32d parallel, by a route which is some hundreds of miles shorter than any other. It is covered throughout with grama grass, which is one of the most nutritious of the grasses for cattle, which has the greater advantage that it is not killed by the cold of winter, affording abundant pasture all the year round. Fuel, too, is everywhere obtained with great ease in the mesquite root. This is a remarkable root, and might be more properly termed a subterranean forest. Its stems penetrate the earth to a distance of seventy feet in depth, with ramifications similar to the branches of trees, and with a clear and hard wood stem from five to eight inches in diameter. We have been informed that it makes excellent charcoal, and Capt. Pope was so struck with it that he is taking specimens to Washington for the examination of the Department. The supply is most abundant.

Our readers are already familiar with the fact of the great gypsum formation in this region of country. The labors of Capt. Pope have brought to light another abundant source of agricultural wealth there, in the great beds of cretaceous marl which he has discovered. These marls are of the best kind of fertilizers, and can only be compared to great subterranean deposits of guano. When treated with acids, they all effervesce, showing the abundance of lime in them. We trust that the Government will prosecute the labors so successfully begun by this expedition. They will not only open a new and much more advantageous route to the great central region of our continent, and to the Pacific shore, but bringing to the surface of the Llano Estacado the abundant streams of water that flow beneath it, will confer a value upon a vast tract of public lands now worthless from the want of that element.—N. O. Picayune,

Railway Share List,

Compiled from the latest returns—corrected every Monday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross earnings for last year.	Net earnings for last year.	Dividend for do.	Price of share.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross earnings for last year.	Net earnings for last year.	Dividend for do.	Price of share.	
Atlantic & St. Lawrence	149	1,538,100	222,905	5,019,329	470,647	110,247	6	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.				
Androsog. & Kennebec	55	588,042	661,236	2,470,600	209,475	110,247	none	10	South Western	92	1,007,486	465,500	1,824,920	283,306	141,168	8		
Kennebec & Portland	56	1,174,757	119,237	1,496,367	270,214	112,491	6	85½	Tennessee and Alabama	30	248,486	679,006	1,775,940	In progr.				
Portl., Saco, & Portsmouth	51	1,360,000	1,059,519	2,771,310	233,234	123,534	none		Tennessee and Mississ.	217	2,179,440	2,127,002	4,028,796	311,631	159,572			
Boston, Concord, & Montreal	98	986,925	899,313	3,170,687	380,221	143,555	2	13	Memphis and Charleston	163	2,568,555	1,802,921	4,536,412	199,932	109,236			
Cheshire	50	1,500,000	8,242	1,412,576	335,919	138,454	6	74½	Mobile and Ohio	188	642,534	none	623,303	In progr.				
Concord	82	2,768,400	none	3,018,633	700,529	138,299	2½	89½	Miss. Central	55	2,930,425	671,645	2,687,565	In progr.				
Northern, N. H.	61	1,048,146	787,009	1,780,062	162,687	55,173	none	4	N.O. Opelousas & G.W.	111	1,000,000	1,500,000	2,500,000	In progr.				
Conn't & Passumpsic R.	120	2,233,376	2,602,396	5,378,428	394,971	214,793	none	1½	Vicksburg, Shreveport & Tex.	16	626,426	938,593	1,033,781	In progr.				
Rutland & Burlington	117	5,000,000	3,550,236	8,463,596	890,119	214,793	none	1½	East Tennessee and Ga.	161	2,319,330	1,407,061	3,343,694	316,090	112,177	none		
Vermont & Lowell	27	1,880,000	826,656	2,188,595	480,764	140,377	6	52	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	284,973	138,694			18
Boylston and Maine	88	4,076,974	160,000	4,179,535	558,671	339,000	6	78½	Lexington and Frankfort	29	404,055	158,099	637,071	93,263	43,635	0		
Boston and N. Y. Central	73	2,240,300	1,518,671	3,463,818	99,917	8,740	none	7	Lexington and Danville	65	698,239	609,661	1,589,660	244,014	96,902	6		
Boston and Providence	55	3,100,000	359,132	3,077,164	558,671	219,089	none	6½	Louisville and Frankfort	254	866,939	77,294	613,231	In progr.				
Boston and Worcester	68	4,680,000	855,428	4,865,439	1,008,004	404,491	8	83½	Bellefontaine and Ind.	118	1,851,635	2,025,925	2,862,062	298,298	140,823	none		80
Cape Cod	47	681,600	280,598	997,252	119,221	65,827	3	40½	Clev., Col. and Cin.	141	4,547,020	1,222,857	4,613,722	1,290,295	732,065	9		102
Connecticut River	52	1,691,110	273,241	1,802,244	286,563	103,787	5	40	Cleveland and Toledo	200	2,075,425	2,689,301	5,124,629	736,272	396,986	10		71½
Eastern, Mass.	60	2,583,400	2,947,737	4,621,016	647,281	305,998	40		Clev. and Mahoning	103	628,638	628,638	1,257,276	In progr.				
Fitchburg	67	3,540,000	163,700	3,765,998	681,103	225,071	73		Clev. and Pittsburgh	133	2,780,744	3,043,992	5,537,466	581,877	309,518	68½		
Northern Eastern	30	800,242	225,585	966,521	In progr.	56,323	6½		Old, Hamilton & Dayton	60	2,153,900	1,321,218	2,967,757	508,271	278,012	8		
N. Bedford and Taunton	21	500,000	none	533,963	198,500	299,738	6	85	Cin. Wm. & Zanesville	131	1,120,450	1,131,265	2,326,450	In progr.				
Old Colony and Fall River	87	3,015,100	292,650	3,362,490	653,499	299,738	6	85	Columbus and Xenia	65	1,484,560	149,000	1,481,738	866,366	187,518	10		82
Vermont and Mass.	77	2,232,541	1,039,670	3,300,737	294,728	87,813	none	6½	Dayton, Xen. & Belpre	63	487,838	422,565	860,496	In progr.				
Western, Mass.	165	5,150,000	606,420	10,466,060	1,859,673	633,013	7	91	Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.				
Worcester and Nashua	46	1,141,000	200,565	1,351,271	204,780	75,760	2	42	Dayton and Western	35	310,000	600,000	733,769	In progr.				
Providence and Worcester	43	1,510,000	338,461	1,808,696	311,430	138,057	70		Easton and Hamilton	42	454,690	904,489	1,166,135	171,929	65,000	20		17
Hartford and N. Haven	72	2,356,000	939,000	3,315,032	730,012	352,799	10	118	Little Miami	65	2,963,921	1,171,785	3,645,172	681,562	336,708	67		87
Hart'd, Prov. and Fishkill	122	2,006,110	2,066,666	4,066,866	258,685	119,011	none		Mad River and L. Erie	205	2,451,656	2,672,932	4,444,661	In progr.				
Housatonic	110	2,000,000	414,240	2,431,773	339,190	71,427	none		Central Ohio	138	1,620,927	3,485,078	4,283,443	Recently opened.				
Naugatuck	67	1,031,800	824,244	1,580,723	220,459	93,768	25		Ohio and Penn.	187	2,451,656	3,219,000	5,670,700	1,111,626	682,117	9		80
N. York and N. Haven	62	3,000,000	2,376,308	5,376,308	884,806	338,877	none	25	Pittsburg, Mayv. & Cin.	80	371,350	81,000	390,983	In progr.				
N. Haven and N. London	50	788,258	785,165	1,450,318	88,007	30,318	none		Sandry, Manaf. & Newk	127	1,850,000	2,206,357	3,552,367	328,968	164,479	none		
N. London, W. & Palmer	66	500,200	1,073,673	1,594,893	124,044	64,430	2½	25	Scioto & Hocking Valley	135	403,975	609,000	888,868	In progr.				
Norwich and Worcester	66	2,122,300	973,489	2,507,118	304,236	86,458	2½		Spring Mt. Vernon & P.	113	1,000,000	900,000	1,900,000	In progr.				
Albany Northern	32	439,005	1,026,098	1,940,606	117,716	9,904	none		Tol. Wabash & St. Louis	242	2,600,000	4,530,000	7,130,000	In progr.				
Black River and Utica	85	343,330	317,360	974,823	In progr.	68,333	none		Ind. and Cincinnati	83	1,213,723	1,442,859	2,178,461	596,012	193,182	7		80
Buffalo, Conn. and N. Y.	100	1,487,374	1,601,183	2,519,098	172,476	68,333	none		Indiana Central	66	611,400	1,261,179	1,907,011	380,176	134,376	46		
Buffalo and N. Y. City	92	788,436	2,637,849	3,401,963	228,392	31,896	none		Ind., Clev. & Pittsburg	83	826,825	1,099,400	1,531,226	228,068	93,010	none		
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	88,768	10		Jeffersonville	66	1,014,242	694,000	1,708,242	296,444	94,318	none		
Camandigua & Elmira	47	434,111	1,022,393	1,276,796	174,089	69,506	none		Madison and Indianapolis	87	1,047,700	1,336,816	2,205,000	286,146	112,880	none		
Camandigua & Niagara F.R.	96	1,815,000	2,279,864	4,498,832	1,812,097	603,946	27½		New Albany and Salem	268	2,635,121	5,231,848	6,643,189	845,927	371,400	none		
Cayuga & Susquehanna	35	378,446	920,362	1,278,798	1,812,097	603,946	27½		Peru and Indianapolis	73	558,814	858,814	1,417,628	160,000	90,000	10½		
Hudson River	144	3,758,496	9,250,362	12,737,998	1,812,097	603,946	27½		Terre Haute and Ind.	73	974,800	604,855	1,602,156	287,512	180,702	10		
Long Island	95	1,878,148	608,949	2,655,996	301,793	118,462	28		Chicago and Rock Is'd	182	3,141,500	2,387,165	5,214,162	In progr.				94½
New York Central	534	24,154,960	14,462,742	38,622,912	6,683,581	3,162,126	6	87½	Chicago and St. Louis	230	1,639,100	1,684,736	2,884,622	722,580	379,821	20		
New York and Erie	464	10,023,958	25,126,669	35,150,627	4,381,938	2,627,118	6	81½	Chicago, Burl. and Quincy	58	1,202,500	2,135,050	2,920,241	471,399	219,588			
New York and Harlem	123	5,717,100	4,069,789	9,786,889	1,635,567	234,126	none	32	Central Military Tract	88	1,202,500	1,325,000	3,625,000	In progr.				
Northern, N. Y.	118	1,633,022	4,406,874	6,040,714	520,153	135,764	none	1	Chic. St. Paul & F'd du Lac	178	2,300,000	1,030,000	3,330,000	In progr.				
Oswego and Syracuse	35	399,000	218,081	723,083	126,540	59,982	3½		Galena and Chicago	239	5,441,500	3,318,639	7,742,014	2,815,738	1,192,042	22		116½
Pottsdam and Watertown	29	487,200	204,159	749,659	In progr.	71,149	none		Illinois Central	627	2,271,050	19,418,892	20,574,446	1,532,118	627,962			
Rensselaer & Saratoga	26	610,000	140,000	896,428	241,309	52,600	7		Peoria and Ogawka	93	560,889	818,454	1,388,342	In progr.				
Saratoga and Whitehall	48	600,000	396,000	1,000,000	71,149	21,089	none		Ohio & Miss. (Wst. Div.)	147	1,780,296	3,292,408	4,970,686	Recently opened.				
Syracuse & Binghamton	80	708,390	1,678,804	2,272,777	159,834	22,903	none		Terre Haute and Alton	178	2,231,420	1,256,000	3,537,420	In progr.				
Troy and Boston	27	437,830	787,079	1,109,822	156,383	65,184	3½	75	Detroit and Milwaukee	166	838,000	1,128,904	1,966,909	In progr.				
Watertown and Rome	67	1,370,378	700,979	2,069,663	404,574	172,474	3½		Mich. Central	282	6,032,444	5,996,015	10,668,146	2,215,282	879,666	10		96½
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	361,356	76,584	none	124	Mich. South't & N. Ind.	475	6,028,900	6,819,224	11,445,208	2,420,000	875,000	10		87½
Camden and Amboy	94	3,000,000	11,407,200	14,407,200	2,017,127	961,941	12		Green Bay, Mil. & Ch.	154	764,075	442,726	1,193,768	In progr.				
Camden and Atlantic	60	369,320	1,522,131	1,729,642	122,417	60,880	none		Milwaukee and Miss.	106	1,826,428	2,467,889	3,876,757	661,543	417,443	17		76½
New Jersey	30	3,482,850	690,000	4,310,011	861,514	500,747	10	110	Milwaukee & Water'n	72	864,661	132,000	814,238	In progr.				
New Jersey Central	63	2,000,000	2,264,176	4,264,176	898,728	171,603	6		Milwaukee and Horicon	15	554,200	854,109	1,408,309	In progr.				
Morris and Essex	61	1,167,865	376,000	1,696,560	229,341	96,267	6		Milwaukee & La Crosse	61	1,361,832	532,131	1,893,963	In progr.				
Allegheny Valley	44	1,637,967	342,564	1,983,317	Recently opened.				Racine and Miss.	47	921,906	380,715	1,299,321	In progr.				
Cataw. W. & E. R.	63	1,700,000	1,940,000	3,640,000	219,255	52,450	60		Hannibal & St. Joseph	19	292,351	690,000	823,810	In progr.				
Cumberland Valley	58	1,099,500	12,211	1,191,833	143,381	56,694	10		North Missouri	125	4,083,900	4,537,828	7,116,949	Recently opened.				
Del. Lack. & Western	1																	

Railroad Bonds.

(NAMES OF COMPANIES. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85%	85%
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	85%	85%
Bellevue and Indiana	500,000	Do. convertible	7	Jan'y, July	"	1866	85%	85%
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85%	85%
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	85%	85%
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Directs	"	1861-64	80	85
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	80	85
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	90	90
Do. do.	485,000	2d do. do.	7	May, Novemb.	"	1869	82	88
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July	"	1869	72%	72%
Cincinnati, Wilmington, and Zanesville	1,500,000	Do. convertible	7	May, Novemb.	"	1862	80	85
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861	99	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	95	95
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	90	90
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	87%	87%
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	70	70
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72	70	70
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	90
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1863	92	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	84	85%
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	90	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	78	81
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	86	87%
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	67	69
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1862	77%	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	East.	1860	100	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	101	101
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	98	98
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	94	94
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	86%	88%
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	80	80
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-76	80	80
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92%	92%
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	72%	77%
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	8	Jan'y, July	Phila.	1860	96	97
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	85%	85%
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1866	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	97	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	78	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

(NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83%	84%
Do. do.	1,125,000	Do.	6	Jan'y, July	Balt.	1875	89	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	6	10 Jan. 10 July	N.Y.	1870	90%	91%
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	102	102
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	95%	96
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	92%	94%
Do. do.	4,000,000	Not conv. Sink Fund \$420,000	7	Feb'y, August	"	1875	91	92
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	85	85%
Do. do.	8,500,000	Convertible	7	Jan'y, July	"	1862	87%	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98	99
Do. do.	2,000,000	2d do. do.	7	10 June, 10 Dec	"	1860	84%	85
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	83	84
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90%	90%
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	100	106
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	88	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80	81
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	79	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	91	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	91
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	81%	82
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	85%	88%
Do. do.	8,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	101	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	100	100
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	100	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	89	89
Do. do. 1844 '48 '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89	89
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	81%	82

CITY SECURITIES.	Int't payable.	Off'd	Asked.	CITY SECURITIES.	Int't payable.	Off'd	Asked.
New York, 7 per ct. 1857	Feb'y,	100	102	Milwaukee, 7 per ct. coup.	X	Divers	77
Do. 5 do. 1858-59	May,	93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	72
Do. 5 do. 1870-75	August, and	89	91%	N. Orleans, 6 per ct. cp. municipal X	Jan'y, July	78	81
Do. 5 do. 1880	November.	89	91%	Philadelphia, 6 per ct. 1876-98	Jan'y, July	39%	90
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	99	102	Pittsburgh, 6 per ct. coup.	X	Divers	74%
Albany, 6 per ct. coup. 1872-81 X	Jan'y, July	94	97	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	74%
Baltimore, 6 per ct. 1879-90	Quarterly	94%	97	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	85
Boston, 5 per ct. coup.	X	95	98	Rochester, 6 per cent. coup.	X	Divers	94
Brooklyn, 6 per ct. coup. Long X	April, October	99%	100%	St. Louis, 6 per ct. coup. Long X	Do.	Do.	77%
Cler'fd, 7 per ct. cp. W.W. 1879 X	Do. do.	101	101	Do. do. Municipal X	Do.	Do.	79%
Cincinnati, 6 per ct. coup.	X	88	90	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	Do.	72%
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	88%	89%	S. Francisco, 7 p. cp. 1865 pay. N.Y. X	May, Novemb.	80	80
Do. 7 per ct. coup.	1880 X	89	100	Do. 10 p. ct. cp. 1871 X	Do.	Do.	82%
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August.	100	102%	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	83	83
Long Island, 8 per ct. cp. W.W. 1877 X	March, Sept.	101	101	Do. 6 per ct. pay. N.Y. 1875 X	Do.	Do.	84
Jersey City, 6 per ct. cp. W.W. 1877 X	Jan'y, July	91	97%	Wheeling, 6 per ct. coup.	X	Divers	87%
Louisville, 6 per ct. cp. 1880-83 X	Divers	89	90	Do. 10 p. ct. cp. Mex. 1874 X	March, Sept.	81%	81%
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	88	88	Zanesville, 7 do.	X	April, October	95

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending November 12, 1856.

BONDS.		
\$5,000 Gov. & Lex., 7 per cent. 2d Mortg.	85	(& int.)
2,000 Ohio and Miss. 7 per cent. 1st Mortgage	70	"
6,000 Little Miami, 6 per ct., 1st Mortg.	80	"
1,000 Cin. & Ham. & Dayt., 7 per ct. 2d Mortg.	82	"
3,500 Gov. & Lex., 10 per cent. Income	85	"
3,000 Hillsboro' & Cin., 7 per cent. 1st Mortg.	46	"
1,000 Marietta & Cincinnati, 7 per ct. 1st Mortg.	70	"
350 Indianapolis & Cin. 7 per ct. Dividend.	70	"

STOCKS.

569 Shares Ohio and Mississippi	5	"
250 " Cincinnati and Chicago	3	"
100 " Peru and Indianapolis	8%	"
45 " Little Miami, 1st Mortg.	91	"
9 " "	91%	"
10 " Cin. & Ham. & Dayton	65	"
109 " Indianapolis & Cincinnati	68	"
51 " Marietta & Cincinnati	14	"
26 " Columbus and Xenia	85%	"
10 " Cleve. Col. and Cincinnati	100	"
200 " Covington and Lexington, 4 mos.	18	"
25 " Bellefontaine & Indiana	30	"
12 " Indiana Central	45	"
20 " Junction (Ind.)	7%	"
50 " Indianapolis & Cincinnati	68	"

By KIRK & CHEEVER.

For the week ending November 11, 1856.

BONDS.	Per ct.
Little Miami, 6 per ct. Mort.	80
Covington & Lexington, 2d Mort 7 per ct.	65
Ohio & Mississippi, 2d Mort 7 per ct. (Eastern Division)	50
Indianapolis & Cin., 2d Mort 7 per ct.	80
Cin. & Ham. & Dayton, 2d Mort 7 per ct.	84
Hillsboro' & Cin., 7 per cent. 1st Mortg.	47
Covington & Lexington, 10 per ct. Income	65
Indianapolis and Cincinnati Dividend	72
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Little Miami, Dividend Scrip, issued June, 1856	80%
Bellefontaine and Indiana, 7%—Cin. & Ham. & Dayton, 6%—Cin. & Xenia, 8%—Cincinnati, 3%—Covington & Lexington, 15%—Dayton & Western, 17%—Eaton and Hamilton, 21%—Indiana Central, 48%—Indianapolis and Cincinnati, 62%—Little Miami, 90%—Mad River & Lake Erie, 16%—Marietta and Cincinnati, 13%—Ohio and Mississippi, 6%—Hillsboro' & Cincinnati, 13%—Peru and Indianapolis, 10%—Cincinnati, Wilmington and Zanesville, 12%	

Extract from De Coppet & Co.'s Money Circular for the European Steamer of the 19th inst.

[TRANSLATED.]

NEW YORK, Monday, Nov. 18, 1856.

Our last advices of the 11th inst. noticed at the last moment a sudden decline on all Stocks. The cause which occasioned this decline proving unfounded, our market recovered the next day its tone, which it has since kept, interrupted only by a few sudden oscillations. The market still continues as during the previous week to be characterized by a great activity. There is some disposition to take advantage of the present prices to invest, and the shares of railroads, especially those the increased traffic of which promises good dividends, particularly attract attention. Investment Stocks, such as City, County and Railroad Bonds, without being so much neglected as they have been, participate but to a slight degree in the animation on the Stock Exchange. The tendency of the Money Market towards more ease, is favored by the accumulation of the Specie Reserve in our Banks, which has commenced to be felt, and by the present rates of European Exchanges, which have already sensibly slackened the exportation of the precious metals. State Stocks—Virginia 6s being scarce, have been done in sums of some importance, closing at 1½ per cent. advance; Missouri and Tennessee 6s have also been active—the former at ¾ per cent. advance, and the latter without any material change in price. City and County Bonds—Some Bourbon County 6s have been bought for American account, at fully sustained prices; we know of no other transactions worth mentioning. Railroad Bonds were moderately active; the principal business has been in Illinois Central Constructions at ½, in New York Central 7s at ½ per cent. rise, and in New York Central 6s at 1 per cent. decline, and in Hudson River 3d Mortgage without important variation; at private sale, a limited number of Galena and Chicago 1st Mortgage was done at a rise of 1½ per cent. Railroad Shares have been extremely active, accompanied by some sudden

oscillations, but showing a decided advance on the prices of last week, as appears from the annexed table of daily quotations. The most active have been: Erie, at an advance of $1\frac{1}{2}\%$; Reading $4\frac{1}{2}\%$; Cleveland and Toledo of 2; New York Central of $2\frac{1}{2}\%$; Michigan Southern of $2\frac{1}{2}\%$; and Panama of $4\frac{1}{2}\%$ per cent. The following have been dealt in to a less extent: Illinois Central at $\frac{1}{2}$ rise; Galena and Chicago at $3\frac{1}{2}\%$; Cleveland and Pittsburgh at 2; Chicago and Rock Island at 2; Michigan Central at 3; and Milwaukee and Mississippi at 2 per cent. advance. Money less stringent for short loans at 7 per cent. There is some improvement in the rates for paper; we quote from 9a12 per cent. for first-class. DECOPPET & CO.

Marie & Kanz's Money Circular for the European Steamer of the 10th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Nov. 17, 1856.

Our last advices were dated the 11th inst. The Specie reserve of our Banks has received during the last few days large accessions from California and the interior, as well as from the Sub-Treasury, and the improvement of the Money market, which had already begun to be felt a week ago, has since then made rapid progress. In addition to this the large Cotton shipments from Southern ports have caused a falling off in the rates of Foreign Exchange, and have thus removed the apprehensions of seeing the Specie export for two or three months to come exceed, or even rise up to, the amount to be received from California. In view of these favorable omens, the state of affairs in Europe now exercises but a secondary influence, and the rather unsatisfactory news received by the last two steamers has scarcely affected the market. The Stock Market has not been slow in responding to this improved state of things, and the speculative feeling has been such as to carry the amount of transactions for the week even beyond the figure mentioned in our last Circular. And as is always the case when a sudden reaction takes place, the fluctuations have been wide, and the demand has been largely increased by the necessities of the Bears, who found themselves a few days ago exceedingly short of Stocks. Erie Railroad shares have participated to a less degree in this upward movement, in consequence of the large sales made in the beginning of the week, the effect of which has been to throw upon the market an unusual portion of the capital stock. State Stocks.—Virginia and Missouri Bonds have risen in consequence of a demand for investment; the former $1\frac{1}{2}\%$, the latter 1 per cent. Some slight sales of Tennessee and Georgia have been made at $\frac{1}{4}$ to $\frac{1}{2}$ decline. City and Country Bonds have again been neglected. We quote a sale of \$15,000 Bourbon County (Kentucky) Bonds, at about former prices. Railroad Bonds have been in fair demand and generally at advancing prices. Illinois Central Bonds have risen $\frac{1}{2}$; New York Central $7\frac{1}{2}\%$; Hudson River 1st Mortgage, 1; Harlem, 1st Mortgage, 2; Harlem, 2nd Mortgage, $1\frac{1}{2}$; Terre Haute and Alton 2d Mortgage, 3; New-York Central 6s have fallen off $\frac{1}{4}$ per cent. Railroad Shares.—The transactions of the week have been still larger than the week before, and the rise has made further progress. Erie has advanced, $1\frac{1}{2}\%$; Reading, $4\frac{1}{2}\%$; New-York Central, $2\frac{1}{2}\%$; Panama, $4\frac{1}{2}\%$; Michigan Central, $2\frac{1}{2}\%$; Michigan Southern, 3; Cleveland and Toledo, $2\frac{1}{2}\%$; Chicago and Rock Island, $2\frac{1}{2}\%$; Galena and Chicago, $3\frac{1}{2}\%$; Cleveland, Columbus, and Cincinnati, $1\frac{1}{2}\%$; Cleveland and Pittsburgh, $2\frac{1}{2}\%$; Milwaukee and Mississippi, $\frac{1}{2}$; Harlem, $\frac{1}{2}$; Little Miami, 1; LaCrosse and Milwaukee, which had risen 12 per cent. the week before, is $\frac{1}{2}$ per cent. lower. Money has ceased to be scarce, and paper is in demand at the following rates: Loans on call, 7 per cent.; First-class paper, 8 to 10 per cent.; Names less current, 10 to 12 per cent. Exchanges opened with a heavy feeling, but have become firmer towards the close, the rates having slightly advanced. London, chief sales at 109, closing 109 to 109 $\frac{1}{2}$; Paris, 5.20 to 5.17 $\frac{1}{2}$.

MARIE & KANZ.

Robert Benson & Co.'s London Circular, received per "Europa."

LONDON, Oct. 31st, 1856.

Since our last circular, our money market has presented no feature of striking interest. The nominal rates of money continue the same at the Bank of England, but loans for short periods have been negotiated at lower rates. The public have been buying Consols largely for investment, which has relieved the market of a large quantity of Stock. Under this influence too prices have advanced, both for Consols and other descriptions of Home Securities. London and North-western Railway, which last Friday was 102 $\frac{1}{2}$ a103, is to-day 103 $\frac{1}{2}$ a104, and Consols which we quoted 92 $\frac{1}{2}$ a93 for money, and 92 $\frac{1}{2}$ for the account, are now 92 $\frac{1}{2}$ a92 $\frac{3}{4}$ for money, and 93 $\frac{1}{2}$ for 4th December.

The market for American Securities has been very quiet, with a tendency to lower prices during the middle of the week, although yesterday and to-day they are rather firmer. State Stocks are nominally about the same, but we have not heard of any transactions. Railroad Bonds and Shares have also been little dealt in. Michigan Southern Sinking Fund Bonds have been sold at 78 $\frac{1}{2}$ and 78. Michigan Central, 1860, 8 per cent. Bonds at 90. Detroit and Milwaukee have been offered at 70. Erie 3d Mortgage is quoted 83a84, and 1862 Bonds sold at 80. Pennsylvania 1st Mortgage has been sold at 89. Illinois Central Shares at $9\frac{1}{2}$ premium. Freedland Bonds at 92 $\frac{1}{2}$ a93. Construction Bonds have been sold at 80, and to-day 80 $\frac{1}{2}$ is offered for them. Great Western of Canada have risen to £24 $\frac{1}{2}$ a£25.

In Manchester prices continue firm, both for cloth and yarns. Buyers look for lower prices, but both manufacturers and spinners decline selling rather than submit to any reduction.

The excitement in the Liverpool cotton market has passed off. The sales for the week are about 53,000 bales. Prices of the lower qualities are partially lower, but the quotations remain unchanged.

The Corn market has been duller for all but the better qualities of wheat. A parcel of new American red which has arrived is held at 68s. per qr. of 62 lbs. Choice Flour 40s. per barrel. Indian Corn, yellow 35s.a36s., white 37s. per 480 lbs.

Small parcels of rails could be bought to day for immediate delivery at £7 cash, £7.5s. four months, but for spring contracts higher prices are asked. Yours truly,

ROBERT BENSON & CO.

American Railroad Journal.

Saturday, November 23, 1856.

The Degree of Accuracy Obtainable in Railroad Track Scales.

By T. D. STETSON, *Mech. Eng.*

The very large sales of produce and other goods now hourly taking place over large Weigh-Lock, and Railroad Track Scales, gives interest to the practical test of the latter made at the Crystal Palace on the 23rd ult., the results of which are presented below. Notice had been given that all scales entered for competition were to be rigorously tested, and it may be presumed that somewhat more than ordinary care was bestowed by all the parties in adjusting therefor.

Messrs. Fairbanks & Co., and the Vergennes Company, both of Vermont, were the only exhibitors of track scales. Fairbanks' scale at first stood empty to prove itself accurately balanced. One loaded car weighing 23,100 lbs. was then put on and moved to every position on the track; after which another was added and the process repeated. The greatest load was 52,600 pounds, and the greatest variation from the mean weight at any time was about 3 pounds. The sensitive-

ness of this scale was sufficient to show a variation of two pounds in either direction, but the graduations were intended to recognize only quantities as small as 5 lbs.

The Vergennes Company's Scale was loaded in the same manner, except that it was not, as would have been desirable, first tested empty. The maximum load applied was 44,724 lbs. The variation produced by moving the load upon different parts of the platform, strange as it may seem, was greatest after the load was reduced to one car; the greatest variation from the mean being in this condition about 17 lbs.

Fairbanks & Co. being an older concern, possess in consequence some advantages without which the triumph of their scale would not have been as complete. They were in this instance far more successful in erecting and adjusting their work; in fact the test had been twice postponed at the request of the Vergennes Company to allow a more complete preparation. But the result of this experiment, as also of an examination of the principles involved, indicates a material difference in the possible accuracy attainable in weighing varying loads. The experiments of Fairbairn, the English engineer, and others, prove that metals yield to every strain; and a very slight deflection, if not compensated for, is sufficient to affect the extremely delicate proportions required in large weighing scales. In Messrs. Fairbanks' scale the strain is transmitted through levers, and if both arms of any given lever spring to the same relative extent, no effect is produced thereby. Absolutely perfect compensation is of course rarely attained, but the construction always induces it in a greater or less degree, varying with the nature and uniformity of the iron. In the Vergennes scale, on the contrary, the load tends to twist a stout shaft, the torsion of which cannot be compensated for. In case the elasticity of the shaft with a full load be ascertained by trial, and provided for in the process of adjustment, the parts will then be correctly proportioned for large loads, but will be at fault in weighing smaller quantities. The scale appears capable of weighing very correctly any given load for which it may be adjusted, as was shown by an experiment instituted at the request of its proprietors, a short time after the trial by the committee, was concluded. In this case no sensible variation was indicated when 22,910 lbs. was moved to all points on its track. It may be proper to remark that the sensitiveness of this scale was considerably less than of the other, a fact of no importance except in determining the amount of error; for by changing the elevation of the balance ball any scale may be made more or less sensitive at pleasure.

Finances of Alabama.

The annual reports, showing the fiscal condition of this State, has recently been published. From these we learn that the total receipts into the Treasury for the fiscal year ending September 30th, were \$798,008 46—the disbursements for the same period, \$487,946 99—showing an excess of receipts over disbursements of \$311,056 47. The balance in the Treasury, including notes of the State Bank and Branches, on the 30th of September, was \$1,891,785 89. If to this is added the loan (400,000) to the Mobile and Ohio Rail-

road Company and that to the Alabama and Tennessee Rivers railroad, and the bonds of other States now in the Treasury, the assets of the State will be found very considerable and constantly augmenting. These reports certainly represent the condition of the State in a very favorable light, and argue that it will be no difficult matter for Alabama to place herself among the very foremost in works of internal improvement. The total assessments for the fiscal year ending September 30th. exceed those of the year preceding \$35,667 60.

Vermont and Canada Railroad.

We are requested to insert in our JOURNAL the following document.

Messrs. E. F. H. GIBSON and JNO. G. CAMP, Agents of the Committee on Consolidation of the Vermont Central Railroad, etc., etc.

PARIS, October 30th, 1856.

Gentlemen,—I have received your circular of September 25th accompanied by a copy of agreement relative to a scheme for the consolidation of the Vermont Central railroad, by which the Vermont and Canada railroad is asked to give up the rent unpaid by the Vermont Central (amounting to two years and a-half—or \$268,000 on the first December next) and to reduce the rent to be paid in future by the Vermont Central railroad to the Vermont and Canada, from 8 to 6 per cent. for the said road.

I formally refuse to accede to the above propositions.

I am holder of 240 shares of the Vermont and Canada railroad, rented to the Vermont Central for 50 years, at the rate of 8 per cent. of the cost of the construction of the said road (as per certificate No. 938.)

The affairs of the Vermont Central do not and should not in any way concern me. It is not the fault of the proprietors of the Vermont and Canada railroad, if the Vermont Central was badly constructed, if it has been managed by incapable or faithless agents, so as to carry its cost to the enormous expense of \$80,000 per mile. And there is no reasonable motive for asking the proprietors of the Vermont and Canada to sacrifice their interests in favor of a road which has been bankrupt for several years.

Certainly if the Vermont Central railroad had done well enough to pay dividends at the rate of 12 per cent. to its shareholders, and the Vermont and Canada on the strength of this revenue, had asked that the rate of the lease should be raised 2 per cent. and made 10 instead of 8 per cent., the Vermont Central would have found this demand very ridiculous and inadmissible. For the same reason the Vermont Central has no ground to ask a reduction of 2 per cent. on the rent, because the road has been badly managed. The proprietors of the Vermont and Canada railroad have nothing whatever to do with the ruin of the other road.

In consequence, gentlemen, I repeat that in my quality of co-proprietor of the Vermont and Canada railroad. I formally refuse my consent, as far as I am concerned, to the arrangement proposed in your circular of September 25th.

I do not admit that any one has a right to change or alter in any way the contract (or any of its conditions) upon the strength and faith of

which I have become a co-proprietor of the Vermont Central railroad.

If the Vermont Central cannot meet its engagements it ought to be sold judicially, according to common right, and the proceeds of the sale be applied to the payment of its debts; and if the Vermont and Canada office cannot bring about this sale, it should insist on the cancelling of the lease, still reserve all its rights to the payment of the rent in arrear.

FREDERIQUE ELISABETH P. d. L. F.

Authorized by me

N. L. P. d. L. F.

This letter was forwarded to the above-named agents by Messrs. J. E. Thayer & Brother, of Boston.

To Manufacturers of Wrought Iron Bolts and Railroad Spikes.

We have been requested by WILLIAM MAHONEY, Esq., Chief Engineer of the Norfolk and Petersburg Railroad Company, to call attention to the fact, that he is now ready to contract for a large amount of Wrought Iron Bolts and Railroad Chairs. The office of the Company is at Norfolk, Va.

New York Metallic Car Spring Company.

The following gentlemen were chosen Trustees at the annual election of the New York Metallic Car Spring Company, held November 4th, 1856:

CHARLES MINOT, President,
COURTLANDT PALMER, Vice President,
CHARLES ELY, Treasurer,
P. G. GARDINER,
THOS. B. NELSON.

RICHARD VOSE, Secretary.

South Side Railroad.

The seventh annual report of the President and Directors of this road has been published. It presents a very favorable exhibit of the condition and prospects of the company. The following is a statement of the receipts and expenses as compared with the previous year—

Total gross receipts \$313,801 70
Do. for 1855 252,487 96

Increase for 1856 \$61,323 74

The aggregate expenses for 1856 were \$171,175 57—being \$9,023 80 less than the previous year—leaving a net income of \$142,626 13.

The President estimates the gross receipts for the next year at \$420,000, and the expenditures (including interest) at \$311,500, leaving a surplus of \$108,500, which would give a dividend of 5 per cent. to the stockholders and leave a surplus, for a sinking fund, of \$39,915. Based as this estimate is upon the increase of the last over the preceding year, there is no reason to doubt that it will be realized, whilst there is every probability that it will be exceeded.

The *Intelligencer* says that the road "is fulfilling the most sanguine calculations and expectations of its friends, and there is every reason to believe that upon the completion of the East Tennessee railroad between Knoxville and Bristol, its business will be swelled to an extent that will render it one of the most profitable roads in the South. So far it has progressed steadily in its career from the day its first section was opened, every year exhibiting multiplied receipts as section after section was added, until now they foot up \$313,801 70 for the year closed. The success of its opera-

tions is due mainly, to the skilful and judicious management of the President, under the counsels of the Directory. Capt. Pannill has discharged his duties with an ability and efficiency which entitle him to the thanks, not only of the stockholders, but of the whole south-western region of Virginia. By his indomitable energy and financial talents he has pushed the road on to its completion under difficulties and disadvantages of the most formidable character, and it is now established upon a basis so firm and solid as to forbid all doubts and apprehensions about it."

Railroad Earnings.

The earnings of the Indianapolis and Cincinnati railroad for the month ending October 31, were—
Passengers \$38,172 42
Freight 33,453 37
Mails 752 08
Express 1,222 50

Total \$73,600 37
October, 1855 47,851 20

Increase \$25,749 17

The earnings of the Central Railroad Company of New Jersey for the month of

October, 1856, were \$60,630 13
October, 1855 35,091 98

Increase, 73 per cent. \$25,538 15

The earnings of the Norwich and Worcester Railroad Company for

October, 1856, were \$33,484 44
October, 1855 28,998 63

Increase \$4,485 81

The receipts of the Bellefontaine and Indiana Railroad Company for

October, 1856, were \$42,890 45
October, 1855 26,722 03

Increase \$16,168 42

The receipts of the Indianapolis and Bellefontaine Railroad Company for

September, 1856, were \$30,601 83
September, 1855 20,911 81

Increase \$9,690 02

The receipts for the month of October will show a much larger increase.

The earnings of the Mad River and Lake Erie Railroad for the month of

October, 1856, were \$79,049 40
October, 1855 63,744 24

Increase, 25 per cent. \$15,305 16

The revenue of the Baltimore and Ohio Railroad for October were as follows:

	Main Stem.	Washington Branch.	Both roads.
For Passengers..	\$78,308	\$29,279	\$107,587
For Freight....	354,378	9,426	363,804
Total.....	\$432,686	\$38,705	\$471,391

The revenue of the past month, compared with that of the corresponding month of last year, has been as follows:

	Main Stem.	Wash. Branch.	Total.
1856 ..	\$432,686 01	\$38,705 14	\$471,391 15
1855 ..	384,550 45	38,886 39	423,436 84

Inc. ... \$48,125 56 Dec. 1851 25 Inc. 47,954 29

The total receipts during the first month of the present fiscal year, compared with those of the same month for the two previous years, have been as follows:

1856 ..	\$471,391 13
1855 ..	423,436 84
1854 ..	359,610 51

The above comparisons show that the revenues of the road during the past month have been \$47,954 29 more than during the same month of the previous year, and \$111,780 61 more than in 1854.

The receipts of the Racine and Mississippi railroad were:

For September	\$32,281 25
For October	39,749 45

Two months.....\$72,030 70

Receipts of the Indiana Central Railroad Company, for October, 1856, viz:

Passengers.....	\$42,098 13
Freight	13,079 66
Express.....	400 00

\$55,577 79

October, 1855.....45,858 39

Increase.....\$9,709 40

The Third Avenue Railroad Company received from passengers in September, 1856, \$35,039 62.

The receipts of the Reading Railroad in October are reported as follows:

	1856.	1855.
Received from coal...	\$378,296 52	\$361,627 36
Do. merchandise...	34,389 42	31,834 93
Do. travel, &c.	35,574 57	30,646 96

Total.....\$448,260 52 \$424,109 25

Transportation, road-way, dumpage, renewal fund, and all charges.....	182,610 42	161,359 61
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Net profits for the month.....	\$265,650 10	\$262,749 46
Previous ten months..	557,375 27	2,207,340 41

Total net profit for 11 months.....\$1,822,025 37 \$2,470,090 05

The earnings of the Catawissa, Williamsport and Erie Railroad Company for the month of October, 1856, were:

	Oct. 1856.	Oct. 1855.	Increase.
Freight and Express..	\$18,367 53	\$11,358 68	\$7,008 85
Passengers & Mail....	12,210 13	10,936 70	1,273 43

Total..\$30,577 66 \$22,295 38 \$8,282 28

The earnings of the Pittsburgh, Fort Wayne & Chicago Railway Company for the month of October were as follows:

Freight	\$88,377 24
Passengers.....	86,221 25
Express Freight.....	4,192 09
United States Mail	3,883 54

Total

Earnings of same length of road in October, 1855.....117,056 89

Increase, 56 per cent.....\$65,617 28

The receipts of the Consolidated Line commenced Aug. 1, 1856, since which time they have amounted to—

For August.....	\$149,633 02
For September.....	171,678 47
For October.....	182,674 12

Whole receipts for three months

Same period in 1855

Increase, 70 per cent.....\$207,037 20

The October receipts of the New York Central railroad are now reported to have been \$928,000.

The earnings of the Erie railroad, for the first month of the new fiscal year,

October, 1856, were.....	\$564,133 24
October, 1855.....	598,340 15

Decrease.....\$34,206 61

The earnings of the Milwaukee and Horicon railroad for last month are \$9,426 06. The average length of line in operation was nineteen miles.

The receipts of the Morris Canal have been:—

Total to November 1, 1856.....	\$277,078 78
Week ending November 8, 1856.....	6,808 04

Total to Nov. 3, 1855

Week ending Nov. 10, '55.....	6,381 08
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\$283,887 30

260,877 03

Increase in 1856.....\$23,010 27

Railways in Canada.

THE CHAMPLAIN AND ST. LAWRENCE RAILROAD, Which is constructed between the St. Lawrence, at St. Lambert or South Montreal, and Rouse's Point on Lake Champlain.

It was chartered from Laprairie to St. John's, in.....	1831
And commenced in.....	1835
Was open for traffic in.....	1830

The Charter authorizing an extension from St. John's to Rouse's Point, and the Branch to St. Lambert, was granted in.....1851
It was opened for traffic throughout in its total length, including the Laprairie Branch, is 40 miles, and the cost of road, wharves, stations and equipment, amounted to.....£381,195

This, the oldest railroad in Canada, connects at Rouse's Point with the Vermont and Canada Railroad, and with all the lines of railroad to Boston, New York and all parts of the New England States, and also with the Ogdensburgh Railroad, and with the Lake Champlain steamers, thus affording the greatest facilities for communication with New York, Boston, Albany, Troy, Rochester, Buffalo, Niagara Falls, Canada West, and the Western States, and being a direct and uninterrupted railroad route to the cities above named. Goods are conveyed between Montreal and Boston, New York and intermediate places without transshipment, and by this route passengers reach Boston in 13 hours, New York in 15 hours, Buffalo in 24 hours, and Chicago in 48 hours.

The next road claiming notice, in the order of Seniority, is

THE MONTREAL AND NEW YORK RAILROAD, Which comprises—

Firstly,—THE LACHINE DIVISION, extending from Montreal to Lachine, a distance of 8 miles. It was commenced in.....	1846
And opened for traffic in.....	1847

A prominent feature in this road is the STEAM FERRY, between Lachine and Caughnawaga running directly across the St. Lawrence, a distance of about three-fourths of a mile, but which is increased by the course of the navigation to nearly 2 miles.

This, it may be remembered by the way, is the only Steam Ferry in Canada East, which is open every day in the year. The crossing is made with a powerful steamer, which has been built with a railroad track on its deck for the purpose of connecting the two divisions of the Montreal and New York Railroad without breaking bulk. The Iron-quois crosses the St. Lawrence with time, and this work it is capable of repeating every fifteen minutes, if necessity requires it.

And, secondly,—the CAUGHNAWAGA DIVISION, extending from Caughnawaga to the Province Line, a distance of 29 miles. It was commenced in.....1851
And opened for traffic in.....1852

The total length of the Montreal and New York Railroad, including the Ferry, (of say 2 miles) is 39 miles; and its cost, including superstructure, locomotives, cars, buildings, steamer, wharves, ferry slips, extra land, and general equipment was £238,229 2s. 9d. currency.

Its connections are, firstly, with the various steamers at Lachine; and secondly, with the Plattsburgh and Montreal Railroad at the Province Line to Plattsburgh, a distance of 23 miles, making in all 62 miles from Montreal. It crosses and connects with the Ogdensburgh Railroad at Moores Junction for Ogdensburgh, and then with steamers for the West, as also at Potsdam on the Ogdensburgh Line, with the Potsdam and Watertown Railroad, thus forming a continuous line on the south shore of Lake Ontario. It connects also eastward with Rouse's Point, and thence via the Vermont and Canada Railroad, &c., at Plattsburgh, by steam direct with Burlington and Whitehall, &c., &c.; at either of which points it connects with the various American Railroads leading to Boston, New York, Troy, Albany, Schenectady, and the West.

The advantages of this Railway are its unequalled Steam Ferry, the fact of there being no dust, from its being ballasted with heavy gravel; the speed that can be attained from its direct course and easy grades; and also the comfort afforded by steady cars, owing to the use of superior iron. It is in fact equal to a continuous rail, and land passengers in the City itself.

This line forms part of the nearest direct railway route from Montreal to New York, and is, it is stated, the nearest practicable air line. When the remaining link from Plattsburgh to Whitehall shall be completed the route may be then easily travelled between the two cities in ten hours.

The Montreal and New York Railroad offers the advantage for freight, of the avoidance of the necessity of twice handling previous to delivery.—This road has, from a series of unfortunate circumstances, been prevented from obtaining that share of public patronage which its positive advantages would entitle it to; but notwithstanding the consequent want of through business from which it has suffered hitherto, it is gratifying to state that the road has more than paid all its working expenses from the local business alone, thus clearly establishing the fact that with an ordinary amount of through business, the road would give fair returns upon the capital invested in its construction.

We now come to that great undertaking, whose opening is this day being celebrated.

THE GRAND TRUNK RAILWAY.

In the fall of 1852, the Grand Trunk Railway scheme was fairly launched into existence, and embraced in its ramifications, the construction of a continuous line of railway from Trois Pistoles, about 160 miles below Quebec, on the southern side of the River St. Lawrence, the point at which a junction with the proposed Halifax Railroad is looked forward to,—and Port Sarnia on Lake Huron, a distance of upward of 800 miles,—also a branch line of 50 miles in length, from Belleville to Peterborough, and the leasing of the Railroad then already built between Montreal and Portland, so that the products of the western points of the Province might be conveyed through Canada to the Atlantic seaboard without break or gauge or bulk. The total length of unbroken railway communication which will thus be obtained, when the St. Lawrence River is spanned by the Victoria Bridge, a structure unequalled in the history of engineering, either in size or in massive proportions,—is upwards of eleven hundred miles. The original capital of the company was £9,500,000, but this being found insufficient, it has been determined to increase this amount to £12,000,000 sterling, or \$60,000,000. Of this sum the Province has an interest in the undertaking in the shape of a guarantee, to an amount of upwards of £3,000,000 sterling, or \$15,000,000. Of the works proposed, however, it was found necessary from several causes, to place in abeyance the prosecution of three different sections of the work, viz: the

distance between St. Thomas to Trois Pistoles, 100 miles; from Belleville to Peterborough, 50 miles; and from St. Mary's to Sarnia, 68 miles.—But these sections will doubtless ere long, be proceeded with; in the first case, because the Lower Provinces in all probability, assisted by the Imperial Government, will complete their railway communication to Trois Pistoles, in order to connect it with the Canadian railway system; and in the two latter cases, simple because the traffic of the country will very speedily demand the construction of these lines.

With these curtailments, and they are but temporary, the Grand Trunk Railway is now composed of the following sections, viz:—

Montreal to Portland.....	292 miles.
Richmond to Point Levi, opposite Quebec, St. Thomas.....	137 "
Montreal to Toronto.....	333 "
Toronto to Stratford.....	88 "

Making a total mileage of.....860 miles—of, (when the Victoria Bridge is completed,) an unbroken Railway communication.

It is understood that the Victoria Bridge will be completed in the fall of 1859, or early in 1860. The cost of this structure was originally estimated at £1,455,000, but this sum has since been reduced, and the present calculation of its probable cost is about £1,250,000. It is supposed that in its erection 250,000 tons of stone and 7500 tons of iron have been used. The iron superstructure is supported on 24 piers and two abutments. The centre span being 380 feet, there are 12 spans on each side of the centre, 242 feet each. The length of the abutments is 242 feet each. The extreme length including abutments is 7000 feet. The height above summer water level in the centre opening is 60 feet, decreasing to either end at the rate of 1 in 180. The contents of the masonry will be three millions of cubic feet. The weight of iron in the tubes 8000 tons. The following are the dimensions of tube through which the trains pass in the middle span: viz: 22 feet high, 16 feet wide; at the extreme ends 19 feet high, 16 feet wide. The total length from River bank to River bank will be 10,284 feet, or about 50 yards less than two English miles. This gigantic structure is in progress, and when in successful operation will prove a world's wonder.

The works throughout the whole of this great length of line, have been pronounced, by competent authorities, both English and American, to be altogether unequalled by any Railway on this continent, and reflect much credit, not only on the Engineer of the Company, but also on the several Agents of the Contractors, Messrs. Peto, Brassey, Betts & Co., who have conducted them to so successful a completion. On an average there is a station to every 6 miles, 2 men to every 3 miles, and a locomotive to every 4 miles.

The average running time between Montreal and Toronto, next season, will be about eleven hours, and from Montreal to Portland about ten hours, and from Montreal to Quebec five hours; so that the journey between Montreal and Chicago can be easily accomplished in a day and half.

Apart from the through travel between the East and the West, which must be very large, the junctions between other Railways and the Grand Trunk Railway throughout the Province are very numerous, and will provide a heavy traffic. They are as follows:—

Starting from Montreal, a line is to run to Ottawa City, 120 miles in length. There have been opened 12 miles from Grenville to Carillon, but the rest of the works have for some time been stopped. And about 25 miles west of Montreal at Vaudreuil, it is proposed to run a line on the south bank of the Ottawa to that City, bearing its name; and thence in a westerly direction to Lake Huron. These lines in all probability will become a part of the North Shore Railway Scheme, which is designed to run from the North East of Lake Huron to Quebec via Ottawa City and Montreal, for the accomplishment of which the Provincial Legislature, in its last session, voted 4,000,000 of acres of wild lands.

At Prescott, 112 miles from Montreal, it connects with the Ottawa and Prescott Railway 50 miles in length to Ottawa City, affording by the junction there, the benefit of a continuous Railway connection from east to west thereto.

At Brockville, 12 miles west of Prescott, with the Perth, Ottawa, and Pembroke Railroad. This line, about 120 miles long, will be completely opened, it is expected in about two years from the present time.

At Belleville, with the Grand Trunk Branch, of 50 miles in length to Peterborough. The works on this line are however delayed for the present.

At Cobourg, with the Cobourg and Peterborough Railway, 28 miles in length to the Town of Peterborough.

At Port Hope, with the Port Hope and Lindsay Railway, 36 miles in length.

At Toronto, with the Ontario, Simcoe and Huron Railroad, to Barrie and Collingwood, 94 miles. From Collingwood 5 steamers ply regularly between Chicago and that port, and arrangements are now making for a regular line of propellers between the two places, calling at intermediate ports on Lake Michigan, and also at Toronto with the Toronto and Hamilton branch of the Great Western Railway to Hamilton.

At Guelph, with the Galt and Guelph branch of the Great Western Railway.

At Stratford, with the Buffalo, Brantford and Goderich Railway, from which line the Grand Trunk will collect at this point, all the traffic intended for Canada and Portland, from Lakes Huron and Superior. This road it is expected will be in full operation early next year.

At St. Mary's, with a branch to London in the Great Western Railway, connecting at that station with that Company's line to Sarnia and Detroit.

The Grand Trunk Railway Company have completed arrangements whereby passengers and goods can be booked through from all points in Europe to any place along the lines of the Grand Trunk and Great Western Railways, and the Railways connecting with them to the Valley of the Mississippi, and in fact to all the chief places on this Continent. By making one payment in Britain, tickets will be issued for any of these places. No further charges will be incurred for passing goods at Portland or Quebec, but a fee of 2s. 6d. per package. Especial arrangements have been made for emigrants, so that tickets for extra baggage and all other charges can be had from the place of departure to the place of destination. These important changes which will beyond all doubt divert the travel from Europe to the Great West from New York and other American ports to the St. Lawrence river, will be in full operation next year. Thus enabling the emigrant to be conveyed without change of carriage from Quebec to Detroit, if the place of destination be further West, than that point. The cars will be conveyed across the St. Lawrence between Longueuil and Montreal in the steamer, until the Victoria Bridge is finished, and will then afford to the emigrant the cheapest, speediest, as well as the most direct route to the West.

From this brief sketch of the Grand Provincial Railway of Canada and its extended connections, comprising a total length of nearly 1500 miles now in operation, it will be seen, that this Province can compare very favorably, the difference of population being considered, with any of the most flourishing States in the adjoining Republic; and if, as Washington has observed, it is an object of legislative concern and highly beneficial to the country, to give every facility to the means of traveling for strangers and of intercourse for citizens, the people of this Province will never have cause to regret their having assisted the Grand Trunk Railway to the successful completion, which they have now in such numbers met in this city to celebrate, at the invitation of our merchants and other citizens.—*Montreal Gazette.*

The 2d Mortgage Bondholders who bought the Albany Northern Railroad, have organized under the title of the Albany, Vermont & Canada R. R. Co. William White is the Pres't and Sup't.

Providence, Hartford & Fishkill Railroad.

The annual meeting of the Stockholders of this road was held at Hartford on Wednesday, when the following gentlemen were elected Directors:

Byron Sprague, Wm. W. Hoppin, James G. Anthony, Henry Lippitt, Providence; Stephen Harris, Jr., River Point, R. I.; Charles H. Warren, Boston; Joseph Trumbull, Wm. H. Imlay, Alfred Smith, Calvin Day, Hartford; John P. Elton, Waterbury, Conn.

At a meeting of the Directors, Byron Sprague was elected President, and Edward Bridgman Secretary and Treasurer.

The gross earnings for the year ending October 1st, were \$340,598, and the expenditure \$181,160—making the net earnings of the road \$169,437. The receipts from all sources were \$737,437, and the payments the same, including \$2,817 in the Treasury.

Railroad Connection Between the Mississippi, the Lakes and the Pacific Ocean.

The Wisconsin papers announce the execution of a contract by the St. Croix and Lake Superior Railroad Company with Dillon, Jackman, Jarrett & Co., of Pennsylvania, for the construction and equipment of their line of road, from Hudson to Superior. The work is to be completed and in running order by the 4th of July, 1859. The contractors are men of experience, and of first-class credit and responsibility. The road is about 140 miles in length, and connecting, as it does, the Mississippi and the Lakes, is of vast importance. It will open up to the spirit of enterprise, settlement and development, a large region of valuable and productive country. It will secure to Pittsburgh a continuous railroad to the western termination of Lake Superior, where a new emporium of commerce is fast growing up on the beautiful and capacious Bay of Superior, formed by a junction of the waters of St. Louis and Nemadji Rivers with the Lake. It is the gate through which the wealth and produce of Northern Wisconsin, Minnesota, Nebraska, Oregon and Washington Territories, as well as the British Territory, must find its way to the great Lake. A world of beautiful, rich and valuable, yet almost unsettled country, extends beyond this great inland sea to the head waters of the Yellowstone and Missouri, a distance of more than 1,000 miles.

It is through this vast region, which is interspersed with fertile plains, extensive forests, penetrated by beautiful rivers, running north as well as south, and dotted with a thousand lakes, that Gov. Stevens reports the most favorable location for the Pacific Railroad—an enterprise worthy of the mighty energies of the nineteenth century. Its completion will be a triumph alike and a monument. We hesitate not in saying that the man of mature years is now living who will pass over a continuous line of railroad from the Atlantic to the Pacific Ocean, and witness the new direction that will then be given to the great commercial current of the world. The trade of the Indies will then find a highway to European markets over the American continent in almost a direct line from San Francisco and Puget Sound to New York and Philadelphia, and thence to Liverpool and London. It is a trade, the value of which can scarcely be estimated. In past centuries, as well as the present time, it has enriched every part of Europe where it has touched, and built up in the line of its march the commercial cities which decorated the shores of the Mediterranean and the Adriatic. Every pulsation of the American heart is alive to the importance and magnitude of this undertaking. It is a work required for military defense—to extend social intercourse, and perpetuate political attachment, as well as for the great avenue of supply to the millions of the Chinese and Japan empires, of our vast agricultural production, in exchange for the luxuries of India, and the silks and cashmeres of China and Thibet. The construction of this road from Hudson to Superior completes the line of railroad from Boston to the western termination of the Lake, which is more than half the distance to the Pacific.

Journal of Railroad Law.

STOCKHOLDERS WITHIN THE STATUTES.

One who subscribes for stock in a company is a stockholder within the charter making stockholders individually liable for its debts, though he has paid nothing on his subscription and received no certificate of stock. A promise on the part of subscribers, although it is in the form to take shares subscribed for by them respectively, is undoubtedly a promise not only to take the shares, but to pay for them, to take them upon the terms and conditions set forth in the subscription paper, and the corporation could undoubtedly in the appropriate form of action enforce the payment of the subscription as we have previously shown. The general principle that a subscriber to the stock of an incorporated company may be compelled to pay the subscription price, is well settled. And the objection which has been taken, that such subscriber was not a stockholder or member of the corporation, because he had no certificate for the shares subscribed for by him, has been overruled, by Chief Justice Parker on the ground that the subscribers would not lose their right for the want of certificates, and that a Court of Chancery would compel the corporation, should they refuse to give them.

It is true that none of the cases to which we have already alluded, decide the precise point, that the mere fact of subscribing to the stock of an incorporated company constitutes such subscriber a stockholder. But they do decide that such subscription puts it in his power to become a stockholder in the broadest and most unqualified sense of the term by compelling the corporation to give him the legal evidence of his being a stockholder upon his complying with the terms of the subscription, and on the other hand that it puts it in the power of the corporation to compel him to pay for the shares subscribed for by him and thereby to become a stockholder to that amount. Neither party, therefore, can escape from the obligations created by the subscription without the consent of the other, and it is accordingly held that this state of things is sufficient to constitute subscribers stockholders within the meaning of the term, when the rights of third persons are concerned.

The determination of this question, viz, who who are stockholders within the meaning of the statute, becomes of importance in cases where the charter of a company declares that its stockholders shall be personally liable for all debts contracted by the corporation. Here it is the policy of the act to give to the creditors of the corporation the security of the individual members thereof, and persons dealing with the company have a right to look to the subscription for the stock as one means of determining who the stockholders are. As long as the relations subsisting between the subscribers and the corporation are such that the corporation can compel them to pay for their stock, it seems that the policy of the act requires that they should be considered stockholders. Any other construction would put it in the power of the corporation to collude with the subscribers and defraud the creditors, to a certain extent, of the benefit of this provision of the statute.

But in a case of this kind where the charter or a statute makes the stockholders jointly and

severally liable for the payment of all debts and demands contracted by the company, &c., it has been determined, that those who were stockholders when the debt was contracted, are liable, and not those who are stockholders at the time of suit brought. If in such case the stockholders are to be charged as partners or what is the same thing as though there was no act of incorporation, it follows, of course, that those, and those only, are liable who are members of the company at the time the debt is contracted. The construction which charges them is the one best calculated to render exact justice to both parties. A man who purchases stock and comes into a corporation after it has been engaged in business, may often be deceived in relation to the number and magnitude of its debts, but while he is a stockholder he can know something about the extent of obligations contracted by the company, and is not wholly without the means of exerting an influence over those who manage its concerns. And as to those who may deal with the corporation, they bestow their labor or part with their property on the credit of those who are known to be stockholders, and it may be ruinous to the creditor to turn him over to a remedy against persons with whom he did not deal and who have come into the corporation at a subsequent period. It is true that a member who makes a transfer of his shares for the purpose of avoiding his liability, may still be treated as a stockholder. But in such case the burden of showing the fraud lies on the creditor, and he will find that no easy task, where all our sympathies are expended upon the debtor and those who kindly aid him to live above the law. And besides shares may be transferred without fraud to persons who are much less able to respond to creditors than were those who owned the stock at the time the debt was contracted.

If the debt for which it is sought to make the individual stockholder liable be a judgment on a note, the judgment is *prima facie* evidence of indebtedness as against the stockholders, and in such case it is presumed that the debt was contracted when the note was made, until the contrary be shown.

And when the holder of stock has transferred it, though not in a proper form to entitle him to a transfer on the books of the company, he is liable for the debt as a stockholder. And this principle is even carried so far that when a stockholder has transferred his stock properly before the debt was contracted, but the transfer had not been made on the books he was held liable. If the equitable interest be changed in the former case, the legal title still remains in the original holder: he may receive dividends and enjoy all the other rights pertaining to the ownership of the property, and thus he must take the burdens of a stockholder. The Legislature has provided for the creation of the "stock," prescribed the way in which it may be transferred, and conferred certain rights and liabilities upon the "stockholders." After they had once become the legal owners, they can only throw off the liabilities incident to that relation by transferring the stock.

Up to the time of a transfer on the books the person, in whose name the stock has stood, is entitled to all the rights and compelled to bear all the burdens of a stockholder. It is argued that this being the case it would place it in the power of

the power of the company to prevent a person from relieving himself from liability for its debts by its refusal to make a transfer upon its books. It is not to be taken for granted that a company would wilfully be guilty of such an abuse of its power. And if it should do so, any court would undoubtedly grant adequate relief. But if on the other hand a party should be permitted to transfer his stock by a mere assignment between the parties and thus discharge himself from liability for the debts of the company and still be permitted to keep his name on its books as a stockholder with the right to vote at its elections, it might be that the whole control of the company would be in the hands of persons not responsible for its debts. It is well settled that though an unregistered transfer would be valid between the parties as shown in last week's article, yet that the persons whose names appear on the books of the company as stockholders are liable for its debts, although they have assigned their stock: that by the delivery of the certificate and the execution of the power of attorney the prior holders only give a power to transfer, and until the transfer is actually made, they continue to be the legal stockholders.

Wisconsin and Superior Railroad.

The *Milwaukee Sentinel* of the 12th, says:

"The books for subscription to the stock of the Wisconsin and Superior Railroad Company, upon which the grant of lands for the Eastern Railroad to Lake Superior was conferred by the late Legislature, were opened at Oshkosh on the 6th inst. We learned from parties who returned yesterday from Oshkosh that several changes have been brought about in the Board of Directors by which the control of the road and the grant passes into the hands of William B. Ogden of Chicago, and the directors and friends of the Chicago, St. Paul and Fond du Lac Railroad, which he represents."

Third Avenue Railroad.

At a meeting of the new Directors of the Third Avenue Railroad Company, whose names we have before published, held at the office of the company, corner of Sixty-first street and Third Avenue, on the 13th inst., the following officers were elected for the ensuing year: President, William A. Darling; Vice President, William Remsen; Secretary, Samuel B. Isaacs; Treasurer, John L. Geib; Superintendent of Road, William H. Schenck.

Marietta and Cincinnati Railroad.

The *Cincinnati Commercial* of this morning says: "This great line of railroad is now so near completion that nothing but continued low water, preventing shipments of iron from Wheeling, can delay the opening to the Ohio river at Marietta, by the 25th prox. The freight offering all along the line is greater than the capacity of the rolling stock to accommodate. The management of the work is strong in detail as well as a whole."

Railroad Iron.

THE undersigned, Agents for leading Manufacturers in Staffordshire and Wales, are prepared to contract for delivery on board ship at Liverpool, or Welsh port.
C. CONGERVE & SON,
13 CHURCH ST., N. Y.

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern, 56x50 lbs. per yard, now due at New Orleans, for sale by
VOSE, LIVINGSTON, & CO.,
No. 9 South William st., N. Y.
October 18, 1856.

Railroad Iron.

500 TONS best quality Welsh Rails, approved T pattern, 56 lbs. per yard, for sale by
VOSE, LIVINGSTON, & CO.,
9 South William st.

NOTICE TO RAILROAD COMPANIES. FIRE INSURANCE.



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and Tracing Cloth, Ruled and Plain Cap Papers, French, Eng-
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perior article; French Carmine; Red Inks; also, French and
Chinese Red and Blue Stamping Inks.—Mourning Green.

Envelopes.—Buff, Gold, White, and Blue, of French,
Engl. and Amer. manufacture; also, Cloth Lined, of all sizes.

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Paper Clips, Book-keeper's Rosta, U.S. Letter Balances, Card
Racks, Ivory Holders, Rulers, Pencil Cases, all grades.

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and other Water Stamps.

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MAIL, at 8 1/2 a.m., for Dunkirk and Buffalo, and intermediate
stations.—Passengers by this train will remain over night at
Owego, and proceed the next morning.

CHICAGO EXPRESS, at 12 m., for Dunkirk.

ROCKLAND PASSENGER, at 8 p.m., (from foot of Cham-
bers st.) via Piermont, for Suffern's and intermediate stations.

WAY PASSENGER, at 4 p.m., for Newburgh and Middle-
town and intermediate stations.

NIGHT EXPRESS, at 4 1/2 p.m., for Dunkirk and Buffalo;

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These Express Trains connect at Elmira, with the Elmira,
Canandaigua and Niagara Falls Railroad, for Niagara Falls; at
Binghamton with the Syracuse and Binghamton Railroad, for
Syracuse; at Corning with Buffalo, Corning, and New York
Railroad, for Rochester; at Great Bend with Delaware, Lacka-
wanna and Western Railroad, for Scranton; at Buffalo and
Dunkirk with the Lake Shore Railroad for Cleveland, Cincin-
nati, Toledo, Detroit, Chicago, etc.

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do do Louisville.....19 00

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From Philadelphia to Cincinnati.....18 00

do do Louisville.....18 00

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board the boat.

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INTERESTING TO RAILROAD MEN.

A DIAGRAM has recently been published by G. H. HEN-
RY, Civil Engineer, of the practical organization of the
New York and Erie Railroad. It shows in detail its entire
physique in every department of the road. Such information
in regard to one of the greatest railroads in the world must be
deeply interesting to all connected with the management of
such concerns. The impressions are on fine paper 11x16 inches.

Price \$1 for thick or map paper and \$1.75 mounted on rollers.

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July 24th, 1885.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No. 48.]

SATURDAY, NOVEMBER 29, 1856.

[WHOLE No. 1,076, VOL. XXIX.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, November 29, 1856.

Annual Report of the Railroad Commissioners for the State of New York.

(Continued from p. 759.)

The cost of operating the road per mile run by the trains, is as follows:

For office expenses is the greatest on the New Haven, Harlem, State Line, Watertown and Rome, and Erie, and the least on the Ogdensburgh, West Stockbridge and Central.

For agents and clerks is the greatest on the Troy to Whitehall, Watertown and Rome, Ogdensburgh, and Harlem, and is the least on the Oswego, Cayuga, Erie, State Line and New Haven.

For other salaries, and law expenses, is the greatest on the Rensselaer and Saratoga, New Haven, Harlem and Ogdensburgh, and is the least on the Whitehall, Central, Buffalo and Corning, Oswego, and the Erie.

For porters, watchmen and switchmen, is the greatest on the Hudson River, Whitehall, Harlem, and Central, and is the least on the Elmira, Binghamton, Oswego, and Erie.

For conductors, baggage and brakemen, is the greatest on the Harlem, Erie, New Haven, Cayuga, and Ogdensburgh, and is the least on the Buffalo and New York City, West Stockbridge, and Oswego.

For enginemen and firemen, is the greatest on the Erie, Oswego, Troy to Whitehall, and Cayuga, and is the least on the Syracuse and Binghamton, West Stockbridge, State Line, Hudson River, and Central.

For fuel is the greatest on the New Haven, Hudson River, and Harlem, and is the least on the

Buffalo and Corning, Buffalo and New York City, Ogdensburgh, and State Line.

For oil and waste is the greatest on the New Haven, Hudson River, Cayuga, and the Watertown and Rome, and is the least on the West Stockbridge, Ogdensburgh, and State Line.

For damages of goods and baggage is the greatest on the Ogdensburgh, Buffalo and Corning, and Central.

For damages for injuries to persons is the greatest on the Hudson River and Central, and the least on the small roads.

For all other expenses is the greatest on the Hudson River and Central, and the least on the small roads.

For the total cost of operating per mile run by the trains, it is the greatest on Hudson River, Harlem, New Haven, and Troy to Whitehall, and is the least on the Buffalo and Corning, Buffalo and New York City, Oswego, Syracuse and Binghamton, and West Stockbridge.

The total cost of maintenance of roadway, repairs of machinery, and operating, per mile run by the trains, is the greatest on the Troy to Whitehall, Harlem, Elmira, Hudson River, New Haven, and Ogdensburgh, and is the least on the Buffalo and Corning, Oswego, Syracuse and Binghamton, Buffalo and New York City, West Stockbridge, and Long Island.

The total cost of the same per passenger carried one mile is, the greatest on the Syracuse and Binghamton, Harlem, and Ogdensburgh, and is the least on the Watertown and Rome, State Line, Long Island, Central, and Erie.

The total cost of the same per ton of freight carried one mile is the greatest on the Canandaigua and Elmira, Rensselaer and Saratoga, Long Island, and Hudson River, and the least on the Erie, State Line, and Central; and of both passengers and freight together, is the greatest on the Harlem, Syracuse and Binghamton, Troy to Whitehall, Cayuga, and Buffalo and New York City, and the least on the State Line, Erie, Central, New Haven, Oswego, and West Stockbridge.

The earnings per mile of road, from passengers are the greatest on New Haven, Hudson River, Central and State Line, and the least on the Cayuga, Buffalo and Corning, Whitehall and Ogdensburgh.

The same from freight are the greatest on the Erie, Central, West Stockbridge, State Line and Hudson River, and the least on the Whitehall, Buffalo and Corning, Canandaigua, Elmira, and Syracuse and Binghamton.

The same from passengers and freight together are the greatest on the New Haven, Hudson River, Central, Erie, and State Line, and the least on the Whitehall, Buffalo and Corning, Black River, and Syracuse and Binghamton.

The payments per mile of road are the greatest

on the New Haven, Hudson River, Central, Harlem, West Stockbridge, and Erie, and the least on the Whitehall, Buffalo and Corning, Canandaigua and Elmira, and Syracuse and Binghamton.

The earnings per mile run by the trains are the greatest on the Troy to Whitehall, Hudson River, New Haven, Central, State Line, and Harlem, and are the least on the Syracuse and Binghamton, Buffalo and New York City, and Buffalo and Corning.

The payments per mile run by the trains are the greatest on the Troy to Whitehall, Harlem, Hudson River and New Haven, and the least on the Buffalo and Corning, Canandaigua and Elmira, West Stockbridge, Erie, State Line, and Watertown and Rome.

The earnings for each passenger and ton of freight carried one mile are greatest on the Troy to Whitehall, Harlem, Oswego, and Syracuse and Binghamton, and the least on the New Haven, Hudson River, Erie and State Line.

The payments for the same are the greatest on the Syracuse and Binghamton, Harlem and Troy to Whitehall, and the least on the Erie, State Line, Central and Hudson River.

The per centage of the transportation payments of the earnings, is the least on the Rochester and Genesee Valley, State Line, Erie, Central, Rensselaer and Saratoga, and Oswego, and is the greatest on the Buffalo and New York City, Syracuse and Binghamton, Ogdensburgh, Whitehall, and West Stockbridge.

The greatest average distance traveled by the way passengers, is generally upon the roads of the greatest length, but the proportions between such average distances of travel and the respective length of the roads are the greatest upon the shortest roads.

The roads of the greatest length are the Erie, Central, Hudson River, Ogdensburgh, and Watertown and Rome, the relative lengths being in the order stated. The greatest average distance travelled by all the passengers, and also by the way passengers, (except on the Erie,) is upon the several roads in the order above mentioned, but the proportions which such average distances of travel, bear to the lengths of the roads, are almost exactly in the inverse order above stated.

The per centage which the way travel bears to the whole, is also the greatest on the roads in the order above named, but the proportions which such per centage bears to the lengths of the respective roads, are in the inverse order named.

The average distance which the freight is moved on those roads, and the per centage of the way freight to the whole, as well as the proportions between the same and the respective lengths of the roads, are precisely as those above stated in reference to the passengers.

From these table it would appear that a large

proportion of railroad passengers, and also of the freight carried upon railroads, are moved very short distances, the majority of passengers traveling a distance of less than twenty-five miles, while the movement of a large amount of way freight does not exceed thirty-five miles.

If a railroad is very short, its traffic will be almost wholly through, and as the length of the road is increased so will its business be derived more and more from its way traffic, though not in the ratio of such increased length.

An examination of the deduction tables will show two very important facts in reference to the transportation of both passengers and freight.

The first is the small average load carried in each car, and the second (which is in a great measure due to the first) is the large amount of non-paying weight transported.

The average number of passengers carried in each car on all of the railroads of the State during the year was 16.13, and the average amount of non-paying weight transported for each passenger carried was 1.17 tons.*

The average amount of freight carried in each car was 3.91 tons, and the average amount of non-paying weight transported for each ton of freight carried was 2.75 tons.

In accounting for the limited number of passengers carried in the cars, it will be seen that at particular seasons of the year, such as when merchants are moving either towards or from the metropolis, when the pleasure travel is moving, and during conventions of religious, political and other societies, the trains are fully loaded in one direction, and hence many of the cars must be run back empty. To accommodate the passengers in one direction, a greater number of cars is sometimes required for a particular train, while the necessities of the company will frequently require the return of those cars, by a train which does not suit the pleasure or convenience of a sufficient number of travellers to fill them.

Children who do not pay fare, and ladies unaccompanied by gentlemen, usually occupy extra seats, while a growing practice, on the part of some travellers, to occupy a whole seat, and at night sometimes more than one, greatly reduces the average number carried in each car.

The number of passengers in a given train, are generally very unequal at the commencement and termination of the trip, and also at different places on the line, if the road be one of considerable length. The train is made up for the greatest number of passengers. Those left at the way stations, have been distributed through all the cars, so that it is difficult, without inconvenience to the passengers, to cut off extra cars, as the number of persons in the train is reduced. In this manner a greater number of cars are run in both directions, over some portions of the road, than are absolutely necessary.

It will be observed, that besides the passengers and their baggage, there is an average amount of non-paying weight carried to each, of ten times the paying weight, or if the engine is added, it is equal to fifteen times the weight of the passenger and his baggage.

The movement of the freight, is attended with an equal amount of irregularity as that for the passengers, although the proportions of through and way freight shipped, and its mileage, do not show as great differences as in the passenger travel, but the movements in the opposite directions, and in the different months of the year, show much greater differences, than in the passenger travel. On some of the roads, the tonnage in one direction, one month, is twice as much as in the opposite direction, and in another month, it is five times as much.

* In the reports of some of the companies, it is believed that in filling out the column, for the mileage of the passenger cars, the mileage of the baggage cars has also been included; if this has been done to an extent equal to one-half of the mileage of all the trains, it would increase the average number of passengers per car to 18.

These irregularities serve to explain the small average load to each car, and the great amount of dead weight carried.

This subject has been dwelt upon, for the purpose of calling the attention of railroad managers to it, so that they may provide some remedy, for so heavy a drawback upon their profits. For if the average load of the passenger and freight cars could be doubled, (which it is believed might be accomplished,) it would result in a saving of more than twenty per cent. in the cost of transportation.

Annexed hereto will be found a table, showing the number of persons injured, on all the railroads of this State, during the last four years, classifying the nature of the accidents, and also showing the ratio between the number of passengers carried and the number of persons injured.

A similar table of the accidents and their classification on the railways of Great Britain, is also appended.

The whole number of persons killed upon the railroads of this State, for the last four years, is nearly the same in each year, except the last, when there was a less number killed and a greater number injured, making the whole number injured and killed nearly the same as for the preceding three years.

Two-thirds of the whole number of persons injured in 1856, suffered from two accidents; on the Harlem and New Haven roads, one of which was reported as caused by the breaking of a rail, and the other by the collision of the trains of the two roads. Under the peculiar circumstances of these two cases, it is deemed proper to omit these accidents in the comparison which follows.

Of the whole number of persons killed, eight per cent were passengers, thirty-one per cent employees, and sixty-one per cent were neither passengers nor employees. The number injured was nearly equally divided among the above classes.

Four-fifths of the passengers killed, and one-third of those injured suffered in consequence of their own imprudence.

Three-fifths of the deaths, and one-fourth of the injuries not resulting in death, were caused by persons walking upon the track, or attempting to cross the track at the highways.

There was one passenger killed out of every 1,262,165 who traveled, and one was either injured or killed out of every 341,125.

One passenger was killed for every 47,164,426 miles traveled, and one was either injured or killed for every 12,747,142 miles traveled.

Excluding from this statement, all of those accidents growing out of the imprudence and fault of the passengers themselves, it appears that one was killed out of every 6,810,828 who traveled, and one was either injured or killed out of every 664,900.

Also that one passenger was killed for every 285,822,132 miles traveled, and one was either injured or killed for every 218,233,882 miles traveled.

On comparing the safety of railroad traveling on the roads of this State, with those of Great Britain, it is found that for the last four years there were a greater number of passenger killed, and a less number injured, upon the roads of this State, in proportion to the number carried, than upon those in Great Britain, and this is particularly the case with the travel of the last year, when there were nearly twice as many killed from causes beyond their own control, on the New York roads, and only one-half as many injured, as upon the roads of Great Britain.

The number of those killed, and also of those injured, from their own incaution, is in both cases five times as great as upon the roads of Great Britain.

The thorough system of inspection into the causes of all railroad accidents, which occur in Great Britain, has enabled the Secretary of the Railway Department, of the Board of Trade (Captain Douglass Galton,) to classify and arrange the accidents of the last year, in a very striking manner.

Captain Galton remarks, "From an examination of that table, it appears that out of 94 cases, 22

of them were attributable to purely accidental circumstances, but that in 10 only of these cases, were accidental circumstances the sole cause of the accidents. The negligence of the employees entered into the causes of 86 accidents, but of these, negligence was the main cause of accident in only 16 cases. The remaining 68 accidents are chiefly attributable to defective arrangements, which may be classed as follows:

"Defects in the construction of works or rolling stock; in sufficiency of accommodation, or of appliances for securing safety; insufficient staff; and inadequacy in the system of working."

A large portion of this report could be advantageously quoted and applied to the investigation of the causes of and remedies for preventing accidents upon our railroads, but a more extended examination of this subject, will be reserved for the next report of the Board, when it will be enabled to furnish the result of investigations into this subject, which they have now under examination.

Annexed hereto will be found—

A map of the State, on which all of the railroads completed, and those which are in progress, are delineated.

Profiles of the grades of all of the railroads in operation, and also sectional drawings of the iron rails used thereon.

A statement containing the names of all of the persons employed by the Board, and the expenses of the office up to the 30th of September, 1856, inclusive, and a copy of the Comptroller's appropriation of the expenses among the several railroad companies.

A copy of the codification of the rules and regulations for running trains;

And a copy of the correspondence with the officers of the Saratoga and Whitehall and New-York and Harlem Railroad Companies, on the subject of accidents which occurred on their roads.

The duties imposed upon the Board embrace a great variety of subjects for examination. In this, the first report, it has been deemed proper to touch upon the most prominent, and to reserve for a subsequent report, more detailed examination of questions affecting the interests of the stockholders, of the managers, and of the public.

Respectfully submitted.

JOHN T. CLARK,

WM. J. McALPINE,

JAMES B. SWAIN,

Railroad Commissioners

RAILROAD COMMISSIONERS' OFFICE,
Albany, March 3, 1856.

Green Bay, Milwaukee and Chicago R. R.

From the Report of the Green Bay, Milwaukee and Chicago Railroad Company, July 1, 1856, we extract the following

General Statement.

LIABILITIES.	
10,000 shares capital stock, \$100 each	\$1,000,000 00
First mortgage 8 per cent. bonds, due in 1863	400,000 00
Milwaukee City 7 per cent. bonds, due in 1873	200,000 00
Bills and accounts payable	109,061 91
Six month's earnings from Jan'y 1, to July 1, 1856	127,782 18
Total	\$1,836,844 09
ASSETS.	
Charter and preliminary expenses	\$14,778 00
Construction and equipments	1,502,000 00
Extra equipments	58,698 86
Steamboat Traveler	28,051 27
Interest account	96,283 68
Bills and accounts receivable	64,250 00
July dividend, 4 per cent.	40,000 00
Expenses for 6 months	49,984 55
Income account, cash and materials on hand	14,847 63
Total	\$1,836,844 09

We annex the general statement of the Company:

The following are the receipts and expenses, as nearly as they can be ascertained at the present time, for the four months ending the last day of October:

	Gross Earnings.	Estimated Expenses.	Net Earnings.
July....	\$26,786 22	\$12,045 78	\$14,690 44
August..	22,986 22	11,117 53	11,868 69
Sept....	26,606 29	12,116 52	14,489 77
Oct....	35,815 55	12,010 22	23,805 33
Total...	\$112,144 28	\$47,290 05	\$64,854 23

This table of receipts and expenses is not precisely accurate, as the receipts and payments of the steamer, which are included, are estimated, but the ascertained receipts will be larger and the payments less than the estimated, so that the net earnings will be larger than the amount of \$64,854 23 for the four months last past.

The short period in which the road has been in operation is not sufficient to enable an accurate estimate of the future revenue of the Company to be made, but it is sufficient to fully prove that the stock of the company cannot be less than 10 per cent. stock for all time to come.

I shall close by simply deducting from the tables of receipts and expenses of the first six months and of the subsequent four months' business of the road, the following results:

Gross earnings, 6 months ending July 1, 1856	\$127,782 18
Gross earnings, 4 months ending Nov. 1, 1856	112,144 28
Gross earnings, 10 months ending Nov. 1, 1856	\$239,926 46
Expenses, 6 months ending July 1, 1856	\$49,334 55
Expenses, 4 months ending November 1, 1856	47,290 05
.....	97,224 60
Total	\$142,701 86
Add for unadjusted car service	1,600 00

Net earnings for 10 months ending Nov. 1, 1856

Russian Railways and the Credit Mobilier.

In the sitting of the 23d (October) the conditions of the concession to the Society of the *Credit Mobilier* were signed. The latter undertakes the construction of about 3,800 versts of railways, the routes of which are as follows: The first, and at this moment the chief one, is that from St. Petersburg to Warsaw. The Government having already finished, at its own expense, a portion of the line—and about 300 versts—and having prepared works for constructing the whole, the company engages to reimburse the outlay, which amounts to nearly 80,000,000f. The second line is from Moscow to Theodosia. The distance between these two cities by the ordinary road is 1,856 versts, and many considerable towns are connected by this line. The surprise is that it should terminate at Theodosia instead of Odessa. I am ignorant of the cause of the exclusion of the richest city in the south of Russia; I suppose, however, that it will not be long before a branch of the principal line will make it enter the general network. The third line is from Moscow to Nijni-Novgorod (390 versts). The fourth will commence at Koursk, the capital of a province, and centre of commercial activity in the interior of Russia, and will terminate at the port of Libau. This line will cross at Dunaburg the line between St. Petersburg and Warsaw. The Company undertakes to finish these lines before the expiration of ten years. The Warsaw route will naturally be first open for circulation, and that of Nijni-Novgorod will immediately follow. The concession is for 85 years; the capital of the company is about 270,000,000 silver roubles (or 1,080,000,000f.)—that is to say, the shares to be issued are

not to exceed that amount. A third of shares are to be allotted in Russia. The shares will not be quoted on the Bourse. The government guarantees a minimum of 5 per cent.

Ontonagon and State Line Rail Road.

The surveys at this end of the line for the location of the above road have been prosecuted for the past six weeks. Several reconnaissances have been made, one of which was on the western side of the river—three gaps in the Trap Range were examined—and instrumental surveys made upon two lines, extending from the island at the mouth of the river southerly through the Trap Range. The highest elevation crossed is 590 feet above the level of the lake and distant on the line about 121.2 miles making an average grade about 48 feet to the mile and maximum of 70 feet. The part of the line this side of the range is very direct, but considerable curvature is required to get through the range.—All rock cutting is avoided, and the expense of graduation is not great. Descending south from the highest point of the valley of the Ontonagon, the distance is six miles having difference of level about 300 feet—an average grade of 50 feet to the mile, and a maximum of 70 feet.

This we believe embraces the most difficult gradients on the entire route to the state line, and they are found to be much less formidable than was anticipated.—*Ontonagon Miner.*

Grand Trunk Railway of Canada.

The third annual meeting of this company was held at Toronto on the 10th inst. at which the following report was submitted.

The Directors of the Grand Trunk Railway beg to submit to the stockholders of the Company third annual report upon its present state and future prospects.

The several sections of the railway that were in operation at the date of the Directors' Second Annual Report, are in excellent working order and are capable of carrying the traffic presented for conveyance on them, with safety and expedition.

The section from Montreal to Brockville, 125 miles, was opened for traffic on the 19th of November, 1855; that from Quebec to St. Thomas, 40 miles, was completed on the 3d December last; the length from Toronto, West to Guelph, 63 miles, was opened on the 1st July of the present year; from Toronto, East to Oshawa, 38 miles, on the 11th August; and the Directors have now the pleasure of informing the shareholders that the length between Brockville and Oshawa, 178 miles, was opened for traffic on the 27th of last month. This was at a period much earlier than originally fixed in the contracts with Messrs. Peto, Brassey, Betts and Jackson, thereby reflecting great credit on the energy of these gentlemen under untoward circumstances.

The completion of the length from Guelph to Stratford, 27 miles, took place at the same time as the opening between Brockville and Oshawa.

The Grand Trunk Railway is now a continuous line from St. Thomas, below Quebec, and from Portland in the East to Stratford, in the West, with two exceptions only, namely, the connection through Toronto of the sections East and West of that city, and the Victoria Bridge. The former will be completed early in the spring of next year.

The only unfinished work between these points will then be the Victoria Bridge; upon this subject the Directors beg to state, that in co-operation with their colleagues in London they have, since the last annual meeting of the shareholders, called in Mr. R. Stephenson, Mr. Brunel, Mr. Edwin Clarke, and Mr. A. M. Ross, to report to them as to the possibility of effecting a saving in the cost of constructing this great work, and especially in reference to certain suggestions and remarks made by Mr. Liddell, C. E. contained in a letter to Mr. McCalmont, who, the directors regret to learn, has resigned his seat at the London Board. These

reports have satisfied the directors, that having due regard to the solidity and permanence of the structure, no material reduction in the outlay can be effected. At the same time, certain modifications have been recommended, by which some saving may be obtained in the masonry and the approaches.

This structure has made good progress this season, and at its close, by the end of the present month of November, nine piers will be completed. The south abutment will also be finished to tube level, and the north abutment to the same height for about one-half its length; the remainder to within two, or at most, three courses of the same level. The north approach is brought up to within five or six feet above water level, although not to its full width on the up-stream side. Preparations for next year's operations are proceeding in the procuring and dressing of stone to a large amount, so as to ensure the advancement of four additional piers on the south side, and six additional piers on the north side, most of which we hope to complete next year. Iron for several of the tubes will reach us as early in the ensuing spring as the navigation will permit. Workshops and other necessary appliances are being constructed adjoining the Company's premises at Point St. Charles, where it is proposed to erect them. The landing wharf, at the east side of the Victoria Bridge, designed to afford the necessary accommodation to connect the railway immediately with the St. Lawrence, is now nearly completed; so that by the opening of the navigation next year, the freight cars can be brought upon the barge now building for the purpose from one section to the other without unloading.

As regards the extension of the railway to the west of Stratford, the directors have to announce, that in the last session of Parliament, an act was passed authorizing a separate company to construct a line from St. Mary's to London. At the present time the directors are not in a position to state more than that the negotiations have been opened with a view of obtaining the transfer of the charter of this company to the Grand Trunk Railway Company.

Since the date of the last Report the whole of the capital represented by the "A" shares and debentures has been called up. Its total amount at the present date is £3,682,400; of this sum £3,488,660 has been received, leaving a balance of arrears unpaid of £93,740.

It is now proposed to forfeit the £2,822 shares upon which the third call remains unpaid, and resolutions for this purpose will be submitted to the meeting.

The calls on the several classes of shares issued by the company having been all made, it is expedient to convert them into stock, and the sanction of the shareholders is requested for this arrangement.

It will no doubt be recollected, that in the early part of the present year, it was found necessary to make application to the Government and to Parliament to obtain further relief and assistance for the Company, and in consequence the Act xix. and xx. Vic. cap. 3, was passed.

The directors are of opinion that although the Act may not offer all the benefits desired, it affords relief to the Company, not only by postponing the first charge of the Government in the manner and to the extent specified in the Act of last session, but as giving to the Province a direct interest in the prosperity of an undertaking as a shareholder. It likewise evinces the strong desire of the Government and Legislature of Canada to promote the interests of the railway. The Directors therefore recommend its adoption by the Shareholders, leaving the Directors to urge, if found desirable and expedient, such modifications upon the Government as may facilitate them in carrying out its provisions, and which circumstances and measures necessary for the development of the traffic may require.

This Act has rendered necessary some modifications in the contract for the construction of the Victoria Bridge. These have been embodied in

an additional agreement with Messrs. Peto, Brassey, Betts & Jackson, the terms of which have been settled between the Company and these gentlemen by Mr. T. M. Weguelin, the Governor of the Bank of England.

The Directors consider it as a fair and equitable compromise between the contractors and the Company. The money liability of the bridge is at once reduced to the extent of a quarter of a million sterling, equivalent to \$1,250,000, and it remains subject to still further reduction in the event of any further modification of design. The forcing on the market of "B" shares, and the consequent depression of the stock are prevented, and the active prosecution and early completion of the bridge, by which alone as the Directors believe the through traffic between the North-Western States of America and the Atlantic seaboard will be effectually promoted and secured.

The additional outlay on the Atlantic and St. Lawrence Railway has involved an increased rental of £8,000, making a total of £74,000 per annum, for which the sanction of the shareholders is requested.

The capital accounts presented to the meeting show that the expenditure under that head to the 30th June, 1856, amounts to £8,693,080 11s. 7d. of which £1,879,648 2s. 7d. was on account of the Portland and Montreal Section; £3,687,113 15s. 8d. for work between Montreal and Toronto; £1,361,858 3s. 0d. for work between Toronto and Stratford; £942,775 2s. 0d. for work between Quebec and Richmond; £419,312 0s. 0d. for work between Quebec and St. Thomas; £402,778 6s. 9d. for work at Victoria Bridge.

The Directors beg to refer the Shareholders to the report of Mr. R. M. Ross, the Chief Engineer.

The London Board has made a preliminary arrangement with the Great Western Company for the conjoint construction of the branch from London to Sarnia, and also for a traffic arrangement between the two companies. This preliminary arrangement has not yet been brought under the consideration of the General Board, and the Directors are not prepared at the present stage to offer an opinion in reference to it.

The complete success of the steamers of the Canada Ocean Steamship Company in their past seasons running between Liverpool and Quebec, warrants the Directors in looking forward to the most satisfactory results in the foreign traffic, now that an European "Through" booking arrangement with this company has been made both for passengers and freight, via the St. Lawrence, for the great West.

The Directors regret much the Revenue accounts for the year ending 30th June last, present unsatisfactory results, but they are of the same character with those which have attended the partial opening of undertakings even the most successful when completed. They are still of opinion, however, that improved prospects are not remote, and that as soon as the unbroken communication from the great West to the Atlantic has been effected, the traffic on the line affording the unparalleled facilities of communication which it does ought to be remunerative to the shareholders.

But the Directors whilst deeply regretting as shareholders the present depreciated value of the stock, and the hitherto unremunerative character of the undertaking, cannot but feel the very great advantages the complete railway system afforded by the Grand Trunk Railway has conferred upon this Province, and they are gratified to know that these manifest and manifold benefits are thoroughly appreciated by the people of the Province, at large.

The Directors, in conclusion, beg to inform the shareholders that several important alterations in the management of the company are in contemplation, and it is satisfactory to learn, that the Provincial Government is inclined to assent to such modifications of the Act of Incorporation as the Company may apply for, and as may be thought necessary to insure the required changes.

JOHN ROSS, President.

General Statement of the Capital Account of the Grand Trunk Railway, for the year ending June 30th, 1856.

EXPENDITURES.		£	s.	d.
Preliminary Expenses—				
Grand Trunk Railway	2,095	18	2	
Toronto and Guelph	10,537	9	8	
Toronto and Kingston	1,160	19	1	
Montreal and Kingston	3,699	8	5	
Grand Junction	347	8	10	
Engineering	57,259	3	5	
Works and permanent way	1,172,772	0	0	
Stations, buildings and offices	129,972	2	5	
Advertising and printing	4,401	13	10	
Locomotive stock	151,972	7	10	
Merchandise car stock	96,888	10	4	
Passenger car stock	22,030	6	11	
Miscellaneous stock	13,768	12	1	
General Expenses, Canada	184,949	17	1	
Do. London	25,829	10	8	
Electric Telegraph	9,691	8	7	
Works in progress—				
Toronto and Sarnia	1,359,355	11	1	
Montreal and Toronto	8,506,316	8	8	
Quebec and Richmond	923,988	8	8	
Quebec and Trois Pistoles	419,312	0	0	
Victoria Bridge	402,778	0	0	
Berlin Falls Branch	3,100	0	0	
Extra Works	164,066	8	5	
Survey London and Stratford	2,502	12	11	
Land and Land Damages	10,831	6	9	
Steam Ferry Boats	24,962	15	11	
	8,693,580	11	7	
Balance to Credit of Capital account	208,006	12	7	
Currency	8,901,587	4	2	

RECEIPTS.		£	s.	d.
By Share Capital, viz:—				
St. Lawrence Shares. Amount received on shares of the St. Lawrence and Atlantic Railroad Company	237,978	1	8	
Toronto Shares. Amount received on shares of the Toronto and Guelph Railroad	166,859	16	8	
Quebec and Richmond Shares. Amount received on shares of the Quebec & Richmond R. R. Co.	352,154	2	5	
Grand Trunk Shares—				
Amount rec'd on the A issue	2,085,077	14	2	
Do. B do.	508,521	0	10	
Total Share Capital	3,350,599	15	9	
By Debentures, viz:—				
Debentures of the City of Montreal, issued to the St. Lawrence and Atlantic R. R. Co.	125,000	0	0	
Debentures of the Atlantic and St. Lawrence R. R. Co., issued to the St. Lawrence and Atlantic R. R. Co., for the construction of the Island Pond Division of that road	109,500	0	0	
British American Land Company's Bonds	25,000	0	0	
Montreal Seminary do.	25,000	0	0	
Debentures issued by the Quebec and Richmond R. R. Co.	121,666	13	4	
Company's Debentures, viz:				
A issue	£1,056,723	13	5	
B do.	688,998	6	8	
	1,745,722	0	0	
Total Debentures	2,151,888	13	4	

By Loan from the Government of Canada, viz:				
Provincial Debentures issued on account of St. Lawrence and Atlantic R. R. Co.	568,791	13	4	
Quebec and Richmond R. R. Co.	304,166	13	4	
Grand Trunk Railway	2,525,140	8	5	
Provincial Debentures	3,398,098	15	1	

RECAPITULATION.

Share Capital	3,350,599	15	9
Debentures	2,151,888	13	4
Provincial Debentures, Grand Total	3,398,098	15	1

Currency	8,901,587	4	2
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Revenue Account, for the year ending June 30, 1856.

EXPENDITURE.		£	s.	d.
For Locomotive Power	99,991	11	3	
Coaching charges	20,957	1	1	
Merchandise do	49,622	3	4	
Maintenance of way and buildings	78,558	7	4	
General charges	9,956	10	4	
Telegraph charges	1,802	5	7	
Taxes	2,088	13	10	
Longueuil ferry boat	3,895	11	1	
Quebec do	2,460	6	8	
Loss and damage, compensation, &c.	381	1	8	
	269,224	1	1	

Balance to Credit of Revenue Account for year ending 30th of June, 1856	25,632	16	5
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Currency	294,856	17	6
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RECEIPTS.		£	s.	d.
From Passengers, No. 343,562	101,342	2	5	
Baggage and passenger ferry receipts	1,057	10	7	
Mails	12,558	16	10	
Merchandise, tons 309,995	175,169	8	10	
Expresses	2,108	13	6	
Car hire	395	17	6	
Rents	2,229	7	10	

Currency	294,856	17	6
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Journal of Railroad Law.

EQUAL CHARGES.

The following recent case in the House of Lords is valuable as elucidating the provisions of an act of Parliament which has been copied into the statutes of some of our legislatures. It is in relation to what constitutes an overcharge or an unjust distinction between one portion of the public and another, based upon consideration of residence, personal feeling or the like. The point is fully and ably discussed, and although the decision was not as authoritatively pronounced as is desirable, yet the discussion of the points raised in the case is so masterly on both sides, that the opinions given will afford a basis for future and more comprehensive decisions.

Finnie vs. Glasgow and Southwestern Railway Company. 34 Eng. L. R. 11.

In this case an action was brought by the plaintiff who was the owner or lessee of certain coal mines adjoining a line of railway called the Kilmarnock and Troon Railway, which was originally a mere tramway for the conveyance of coal from Kilmarnock to Troon and by an act of Parliament the defendants were authorized to take a lease of this railway for 999 years and to convert it into what is called an edge railway, that is a railway on which passengers might travel, and by that act of Parliament it was provided that certain provisions in regard to charges upon the main line should come in force upon the branch line.

Then it was alleged that in pursuance of these provisions in the act of Parliament tables were made as to the rate, at which coal should be conveyed upon the one line and upon the other line. And it is sufficient for the present purpose to say that the rate of toll fixed on the branch railway

was a higher rate than that which was fixed upon the main line. Under this table the plaintiff, whether he sent his coal solely along this branch, or partly along the branch and also on the main line, was charged a higher rate than persons who were situated on the main line and sending their coal on from the main to the branch line. Thus persons on the main line for sending coal on the main and branch lines were charged main line rates, while Finnie was charged branch line rates.

By the Act. 5 Vict. c. 29, which regulates the main line, and the provisions of which are by reference incorporated in the act which relates to the Troon Line, it is provided that the Company may, if they choose, have locomotive engines and act themselves as carriers "provided always that in whatever way the said charges are made, they shall be made equally to all persons in respect of all animals and of all goods, wares, merchandize, articles, matters and things of a like description and quantity and conveyed or propelled by a like carriage or engine passing over the same portion of, and the same distance along the railway, and under the like circumstances and in respect of all accommodations of a like nature afforded in respect thereto."

The complaint was, that in violation of that provision over-charges were made as we have stated, and besides the plaintiff claimed that money paid by him at a higher rate beyond what others had paid, was an excess and ought to be declared to be so, and that he should be allowed to recover back the excess which he had paid, amounting in all to several thousand pounds.

CRANWORTH, Lord Chancellor.—The first question is, whether this is in violation of the provisions of the acts of Parliament. The court of sessions were of opinion that it was not a violation of those provisions and after carefully looking at them as fully as I have been able to do, I have come to the same conclusion at which the court of session arrived. The question is whether the charges have been made unequally. The provision is that they shall be made equally to all persons in respect of matters or things, that are of a like description and quantity and conveyed or propelled by a like carriage or engine. There is also no doubt as to that. The question is whether the articles were conveyed over the same portion of, and over the same distance along the railway. My opinion is that they were not conveyed over the same portion and over the same distance along the railway. The only way in which I can interpret the language used is this that not only are they to go over the same portion of railway, but they are to go over that and not to go over any other distance, in order to make this clause of the act of Parliament applicable.

But even supposing that the plaintiff had made out that the defendants had done something in violation of that prohibition, I must not be taken as asserting that the plaintiff would have been entitled to recover back the difference. The short ground, however, on which I go in this case is that parties have not travelled over the same portion of the railway and over the same distance, and that, consequently, the plaintiff is not a person who has a right to complain of the unequal charges which he says the company have imposed.

Therefore, I am of opinion the Court of Session is right.

Lord St. Leonard's dissenting. The view which I take is that if the Court should be satisfied that there has been a difference of toll for the purpose of giving an advantage to one set of owners of coals over another set, that is a toll which cannot be maintained, because, construe acts of parliament as you will, however the company may make their charges, whatever shape their charges may assume, however they may attempt to disguise what they are doing, it is an infringement on the rights of one to the benefit of others. The acts of parliament strike at the very root of that, and prevent the inequality of the toll.

The House being equally divided judgment was affirmed.

Fort Wayne and Chicago Railroad.

That part of the Fort Wayne and Chicago Railroad lying between Fort Wayne and Plymouth (65 miles) is now completed and in operation.—The first cars run over the line from Fort Wayne and Chicago last week, thus giving a direct communication by rail from Philadelphia, by way of Pittsburgh, Fort Wayne, Plymouth and Laporte, to Chicago.

Message of the Governor of Arkansas.

The annual Message of Gov. Conway of Arkansas was delivered to the legislature on the 4th inst. It is long, and devoted wholly to State affairs. The condition of the treasury has improved, a balance of \$142,124 remaining on hand. Of the internal improvement fund, \$300,615 have been distributed, and there is a balance remaining in the treasury of \$24,043. The amount of swamp land scrip redeemed up to the first of October was \$1,579,708.22.

A large part of the message is devoted to an exposition of the affairs of the old banks of Arkansas, and the average of the liabilities in which they have involved the State, for bonds issued in their favor. The Bank of the State of Arkansas belongs wholly to the State, and is managed by officers elected by the legislature. Its capital stock was obtained by the sale of State bonds, of which there remain outstanding the principal amount of \$752,000, and an unpaid interest of \$658,468 60. No interest has been paid for thirteen years, except that portion which the United States stopped out of the shares of the State of Arkansas in the distribution of the surplus revenue in 1841-42. To meet the interest on such bonds as the U. S. Treasury held for an investment of Indian funds. The bank was put into liquidation in 1843, but its affairs are still unadjusted, and the Governor recommends that they should be taken out of the hands of the Commissioners, and the duty of collecting and keeping the assets should devolve by law on the Treasurer of the State. The Real Estate Bank of Arkansas, was a private stock bank.—The State had no share in it, but she loaned her bonds to the company to raise capital, and took as security mortgage on the lands of the stockholders. The value of mortgaged land was estimated at \$2,603,932.

The Governor is of opinion that the lands mortgaged to the State are sufficient to pay off the whole of this debt, and he advises that steps be taken to make it available for that purpose; but he finds a complicated net of law-suits and liabilities to embarrass this undertaking. The Governor reports the State as rapidly growing in population and wealth. In 1852 the assessment of taxable property amounted to \$42,900,080; that of 1856 is 70,758,045—showing an increase in four years of \$27,859,964, or nearly 70 per cent, and he anticipated that, with prudence, skill and economy, the State will be able, by the time the bonds fall due, to pay them in full, without oppressive taxation.

The work of leveling the State is going on successfully.

The amount of swamp land ceded and confirmed to the State by the United States, was 5,970,771 acres, for 2,246,885 acres of which the State had received patents. There are still 3,643,847 acres selected as swamp lands but not yet confirmed.

No progress has been reported in the Memphis and Little Rock Railroad. The Governor is in favor of a geological survey of the State, and urges immediate attention to the subject of common schools, and education in general.

Pennsylvania and New York Internal Improvement.

Yesterday was an eventful day in our local, aye, our State history. The waters of Chesapeake Bay and our great Lakes are united, and henceforth the internal commerce of our State with Pennsylvania, through the medium of the Junction Canal, will increase to an extent that will astonish our brethren along the line of the Erie Canal, who have so long opposed our connection with Pennsylvania.

The first boat through the North Branch Pennsylvania and Junction Canals arrived here yesterday, and its arrival was greeted by our citizens with every demonstration of joy. The Tonawanda, under the command of Capt. Abraham May, loaded with fifty-six tons of Anthracite Coal, was safely moored in the Chemung Canal basin, amid the cheers of many hundred of our citizens who had congregated for the purpose.

Yesterday morning information was brought to the village that the Tonawanda was on her way, and soon would be here. Before noon she reached Arnot's Mills, about one mile east of us, where she stopped. As soon as it could be brought about, a large body of citizens, preceded by Wisner's Band, and Col. Terwilliger's field piece, marched to the boat to bid her welcome.

As many as could, got on board, when she started for her destination. Arrived at the lock which re-unites the waters of the Chemung with the Junction Canal, a brief, pertinent and eloquent speech was made by Col. Hathaway, welcoming the Pennsylvania Captain, boat and cargo, and congratulating this community on the consummation of this long looked for event, so important to the interests of our growing and enterprising village.

It is now more than twenty-five years since the commencement of the North Branch Canal. Difficulties have beset its progress during this whole period, until Gov. Bigler was placed in the executive chair. Appreciating the vast importance of a connection with the New York canals, that dignitary consulted Mr. John Arnot and others of this State, who gave him a pledge that the Junction Canal should be completed within a given time. On receiving this assurance, the Governor took active measures to complete the North Branch Canal, and recommended to the Legislature an appropriation for that purpose. Through his vigorous perseverance the bill was passed, and the work was immediately re-commenced, and is now finished.

The boat which has just arrived, and which has been greeted with so much enthusiasm, left the Pittston Mines, Pa., on Tuesday last. She was delayed two days on her trip, and reached this place on Monday morning—occupying about four days time. Other boats are now on the way; and if the pleasant weather holds, a pretty good quantity of coal will reach here this Fall. This coal is of superior quality, and is considered the best in the State of Pennsylvania.

The Junction Canal, which unites the New York Canals with those of Pennsylvania, is eighteen miles long, and was commenced in 1853. Its cost was \$400,000, one fourth of which was furnished by our enterprising citizen, John Arnot, Esq., to whose energy, perseverance and means, more than any other cause, our community and State are indebted for this link of improvement, by which we have a continuous boat navigation from the great Western lakes to Chesapeake Bay. All honors to the men who have achieved this important enterprise.—*Elmira Republican, Nov. 18th.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,888,100	2,973,700	6,019,929	470,647	110,247	none	73	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscoggin & Kennebec	53	588,042	1,622,905	2,210,947	209,475	110,247	none	19	South Western	92	1,097,496	465,500	1,624,920	253,309			
Kennebec & Portland	56	1,114,725	1,661,236	2,776,000	270,214	112,491	6	85 1/2	Tennessee and Alabama	80	246,486		679,906	In progr.			
Portland, Saco, & Portland	51	1,307,000	119,237	1,426,237	383,234	120,834			Tennessee and Missis.	163	170,831		175,840	In progr.			
Portland, Saco, & Montreal	93	1,808,098	1,669,512	3,477,610	380,221	143,565	2	13	Memphis and Charleston	217	2,179,440	2,127,002	4,028,796	311,631	399,572		
Sheshire	53	2,088,925	869,313	2,958,238	335,919	136,454	6	74 1/2	Mobile and Ohio	163	2,568,555	1,802,921	4,536,412	199,932	109,236		
Concord	35	1,500,000	6,242	1,506,242	375,042	138,299	2 1/2	80	Miss. Central	188	642,534		628,303	In progr.			
Northern, N. H.	82	2,768,400	none	2,768,400	3,016,633	370,529	138,299	2 1/2	N.O., Opelousas & G.W.	55	2,930,425	671,646	2,657,565	In progr.			
Con't & Passumpsic Riv.	81	1,048,145	787,008	1,835,153	1,626,887	553,173	none	4	Vicksburg, Shreveport & Tex.	111	1,117,600		1,077,895	In progr.			
Butland & Burlington	120	2,233,376	2,662,396	4,895,772	820,119	214,793	none	1 1/2	East Tennessee and Ga.	161	1,000,000	1,500,000	2,500,000	In progr.			
Vermont Central	117	5,000,000	3,560,286	8,560,286	489,754	140,577	6	52	East Tennessee and Va.	16	925,425	938,563	1,033,731	In progr.			
Boston and Lowell	27	1,830,000	325,635	2,155,635	584,426	339,000	6	76 1/2	Nash. and Chattanooga	161	2,319,330	1,497,081	3,816,411	816,090	112,177	none	
Boston and Maine	83	4,076,974	150,000	4,226,974	59,917	8,740	none	7	Ovington & Lexington	99	1,302,804	2,336,939	3,738,753	264,973	138,694		18
Boston and N.Y. Central	74	2,240,300	1,618,671	3,858,971	558,671	219,689	none	65 1/2	Lexington and Frankfort	29	430,055	158,099	637,071	93,263	43,635	6	
Boston and Providence	55	3,160,000	595,132	3,755,132	1,008,004	404,461	6 1/2	83 1/2	Lexington and Danville	65	694,444	62,734	747,178	In progr.			
Boston and Worcester	68	4,500,000	655,428	5,155,428	1,802,244	308,787	5 1/2	40 1/2	Louisville and Frankfort	65	698,238	669,061	1,367,299	244,014	96,902	6 1/2	
Cape Cod	47	681,690	290,598	972,288	119,221	65,527	3	49 1/2	Atlantic & Gt. Western	254	866,939	77,294	944,233	163,233	140,823	none	30
Connecticut River	52	1,861,110	278,241	2,139,351	286,563	103,787	5 1/2	40	Bellefontaine and Ind.	118	1,881,635	2,025,925	2,862,652	298,293	732,066	9	106
Eastern, Mass.	60	2,583,400	2,947,737	5,531,137	647,281	306,998	7 1/2	73	Clev., Col., and Cin.	141	4,547,029	1,225,857	4,613,722	1,290,295	336,986	10	72 1/2
Fitchburg	67	3,540,000	153,700	3,693,700	681,263	225,071	none		Cleveland and Toledo	200	2,675,425	2,689,301	6,124,629	736,272	396,986	10	
Northern Eastern	30	600,212	225,556	825,768	198,401	56,533	6 1/2		Clev. and Mahoning	103	1,000,000	1,000,000	2,000,000	2,000,000	2,000,000	2,000,000	
N. Bedford and Taunton	21	600,000	none	600,000	533,953	198,401	6 1/2		Clev. and Pittsburgh	133	2,780,744	3,043,992	6,537,466	681,877	309,518	58 1/2	
Old Colony and Fall River	57	3,015,100	282,650	3,297,750	653,499	295,738	6 1/2	83	Cin., Hamilton & Dayton	60	2,153,900	1,321,213	2,987,757	508,271	278,012	85	
Vermont and Mass.	77	2,252,541	1,035,870	3,288,411	288,726	87,313	6 1/2		Cin., Wilm. & Zanesville	131	1,120,450	1,121,266	2,326,459	In progr.			
Western, Mass.	155	5,160,000	5,966,420	11,126,420	1,628,673	750,760	2	42	Columbus and Xenia	65	1,484,550	149,000	1,633,550	356,395	187,515	10	82
Worcester and Nashua	48	1,141,000	206,565	1,347,565	294,780	138,067	7	91	Dayton, Xen. & Belpre	63	437,838	422,668	860,496	In progr.			
Providence and Worcester	43	1,510,020	338,451	1,848,471	310,432	138,067	7	70	Dayton and Michigan	140	1,076,902	393,011	1,470,000	In progr.			
Hartford and N. Haven	72	2,356,000	938,000	3,294,000	313,932	352,799	10	19	Dayton and Western	35	510,000	500,000	733,769	In progr.			
Hart'd, Prov. and Fitchburg	122	2,008,110	2,030,665	4,038,775	258,685	119,611	none		St. Louis and Hamilton	42	454,690	904,489	1,359,155	171,929	66,000	20	
Housatonic	110	2,000,000	414,240	2,414,240	339,196	71,427	none		Little Miami	65	2,963,921	1,171,785	3,648,172	681,562	336,708	89	
Naugatuck	57	1,081,800	237,803	1,319,603	884,506	338,877	none	25	Mad River and L. Erie	205	2,451,660	2,472,932	4,446,041	In progr.			
N. York and N. Haven	62	3,000,000	524,244	3,524,244	1,008,004	404,461	6 1/2	83 1/2	Central Ohio	138	1,520,297	848,076	2,438,443	Recently opened			
N. Haven and N. London	50	509,200	1,073,673	1,582,873	124,004	66,430	none		Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	50
N. London, W. & Palmer	68	2,122,800	873,489	2,996,289	304,238	88,458	2 1/2	25	Pittsburg, Mayfield & Cin.	60	371,350	81,000	390,893	In progr.			
Norwich and Worcester	32	439,005	1,825,098	2,264,103	117,716	9,904	none		Sand'y, Mansf. & Newk't	127	1,350,000	2,206,357	3,552,357	328,958	164,479	none	
Albany Northern	35	643,330	317,559	960,889	In progr.				Scioto & Hocking Valley	135	403,976	609,056	888,568	In progr.			
Black River and Utica	100	1,437,874	1,501,183	2,938,057	172,476	66,333	none		Spring Mt. Vernon & P.	118	1,000,000	950,000	1,950,000	In progr.			
Buffalo, Corn. & N. Y.	92	798,439	2,597,849	3,396,288	238,392	31,896	none		Tol. Wabash & St. Louis	242	2,500,000	4,530,000	7,030,000	In progr.			
Buffalo and N. Y. City	69	1,300,000	1,040,000	2,340,000	679,750	355,763	10		Cin., Log. & Chicago	255	4,196,979	1,006,125	2,600,438	In progr.			
Buffalo and St. Line	69	1,300,000	922,393	2,222,393	174,080	69,506	none		Evansville & Crawfordsv.	109	706,945	1,177,596	1,844,541	127,400	64,552	7	60
Canandaigua and Elmira	98	1,815,000	2,279,854	4,094,854	135,439	48,649	none		Ind. and Cincinnati	88	1,213,723	1,442,889	2,656,612	350,172	193,142	7	60
Canandaigua & Niagara F.s	36	687,000	504,689	1,191,689	125,037	60,946	none	27 1/2	Indiana Central	66	611,400	1,281,179	1,907,911	350,176	134,376	45	
Cayuga & Seneca	144	1,575,148	668,409	2,243,557	301,793	110,402	none	26	Ind., Clev. & Pittsburg	83	826,325	1,099,400	1,925,725	226,058	93,010	none	
Hudson River	95	1,875,148	14,462,749	16,337,897	1,622,128	8	88 1/2	Jeffersonville	60	1,014,252	694,000	1,708,252	206,544	94,818	none		
Long Island	334	10,024,965	25,126,639	35,151,604	2,627,118	none	60 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	2,984,516	286,146	112,880	none		
New York Central	134	5,717,100	4,068,769	9,785,869	3,538,577	234,126	none	16 1/2	New Albany and Salem	288	2,535,121	6,281,848	6,613,189	645,827	371,402	none	
New York and Erie	134	5,717,100	4,068,769	9,785,869	3,538,577	234,126	none	16 1/2	Penn. and Indianapolis	73	858,314	1,000,000	1,858,314	150,000	90,000	none	18 1/2
New York and Harlem	134	5,717,100	4,068,769	9,785,869	3,538,577	234,126	none	16 1/2	Terre Haute and Ind.	73	974,800	604,355	1,579,155	287,512	189,702	10	
Northern, N. Y.	118	3,999,000	216,681	4,215,681	126,640	59,982	3 1/2		Chicago and Rock Is'd	182	3,141,500	2,387,155	5,528,655	1,077,312	379,821	20	
Oswego and Syracuse	35	487,200	294,189	781,389	241,149	82,600	7		Chicago and St. Louis	220	1,539,100	1,684,736	2,884,622	722,580	379,821	20	
Potomac and Watertown	29	610,000	140,000	750,000	119,000	21,099	none		Central Military Tract	88	1,202,500	2,133,050	2,920,241	471,399	219,580	28	
Rensselaer & Saratoga	25	600,000	395,800	995,800	71,900	21,099	none		Chic. St. Paul & F'd du Lac	178	2,800,000	1,325,000	3,625,000	In progr.			
Saratoga and Whitehall	68	768,360	1,578,504	2,346,864	159,484	22,503	none		Galena and Chicago	259	6,441,500	3,318,039	7,742,614	2,316,796	1,192,042	22	118 1/2
Syracuse & Binghamton	27	487,830	737,079	1,224,909	166,363	55,184	3 1/2	75	Illinois Central	627	2,271,050	19,416,392	20,374,446	1,532,118	527,952	119	
Troy and Boston	97	1,370,375	700,979	2,071,354	404,374	172,474	3 1/2		Peoria and Oquawka	98	569,899	818,454	1,388,342	In progr.			
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	101,856	75,834	none		Orto & Miss. (Wat. Div.)	147	1,780,286	3,292,463	4,970,586	Recently opened			
Beldelore Delaware	94	3,000,000	11,407,200	14,407,200	2,017,127	961,941	12	124	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,420	In progr.			
Camden and Ansoy	68	3,639,320	1,622,131	5,261,451	122,417	50,090	none		Detroit and Milwaukee	185	838,000	1,129,964	1,967,964	In progr.			
Camden and Atlantic	30	3,482,550	690,000	4,172,550	101,514	50,090	121		Mich. Central	282	6,032,444	5,993,013	10,685,457	2,215,283	879,656	10	98 1/2
New Jersey Central	63	2,000,000	2,296,178	4,296,178	898,728	171,608	6		Mich. South'n & N. Ind.	475	6,928,900	6,319,224	13,248,124	2,410,000	875,000	10	87 1/2
Morris and Essex	51	1,157,506	375,000	1,532,506	229,341	96,267	6		Green Bay, Mil. & Oh.	155	764,075	442,726	1,206,801	In progr.			
Allegheny Valley	44	1,637,867	842,564	2,480,431	1,988,317	Recently opened			Milwaukee and Miss.	106	1,826,428	2,467,889	3,578,757	691,843	417,443	17	77
Catawba, Wil. & Erie	56	1,700,000	1,940,000	3,640,000	219,283	152,450	none		Milwaukee & Watertown	72	354,861	132,000	514,238	In progr.			
Cumberland Valley	56	1,099,500	1,221,111	2,320,611	148,981	66,994	none		Milwaukee and Horicon	15	554,200		554,200	In progr.			
Del. Lack. & Western	109	3,051,622	3,884,702	6,936,324	528,911	259,263											

Railroad Bonds.

(NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$888,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	85 1/2
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	85 1/2	85 1/2
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	85	85
Central Ohio	1,250,000	1st mort. conv. sec. sec.	7	Divers	"	1861-64	77 1/2	82
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	72	77
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	90
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	82	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72 1/2	82 1/2
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	80	80
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	91
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	80	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	87 1/2	87 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	70	70
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	70	70
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	10
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	80	80
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	92	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	92	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	78	81
Indianapolis and Cincinnati	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	87 1/2
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	69	69
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat	1860	100	100
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	100 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	98	98
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	93	93
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	85	88
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	85	85
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	85	85
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	92 1/2	92 1/2
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	72 1/2	72 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96 1/2	96 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1876	82 1/2	82 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	80	80
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	98	80
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	78	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

(NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82 1/2	83
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	86	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95	96 1/2
Erie Railroad	8,000,000	1st mortgage	7	May, Novemb.	"	1867	102	103
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94	94 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1876	94	94 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	85 1/2	86
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87 1/2	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98 1/2	99
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	85	87
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	63 1/2	63 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	91 1/2	91 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	100	105
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	88	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	80	81
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1859-60	79	80
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	94	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	91
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	82 1/2	83 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	85 1/2	85 1/2
Do. do.	3,000,000	No m'ge conv. from June 67-69	7	15 June, 15 Dec.	"	1864	101 1/2	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	100	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	100	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	88 1/2	88 1/2
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	88 1/2	88 1/2
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October	"	1870	81 1/2	82

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES.	Int't payable.	Off'd	Asked
New York 7 per ct. 1857	Feb'y, 100	102		Milwaukee 7 per ct. coup. X	Divers	77	80
Do. 5 do. 1858-60	May, 93	95		New Orleans 6 per ct. cp. R.R. X	Do.	72	75
Do. 5 do. 1870-75	Aug., 89	91 1/2		N. Orleans 6 per ct. cp. municip. X	Jan'y, July	78	81
Do. 5 do. 1890	Novemb., 89	91 1/2		Philadelphia 6 per ct. 1876-98	Jan'y, July	92 1/2	92 1/2
Albany 6 per ct. coup. 1871-81	Feb'y, Aug., 99	102		Pittsburgh 6 per ct. coup. X	Divers	74	
Albany 6 per ct. coup. 1873-81	Jan'y, July	78		Quincy 5 per ct. coup. 1868 X	Jan'y, July	77	
Baltimore 6 per ct. 1873-90	Quarterly, 94	97 1/2		Racine 7 per ct. coup. 1873 X	10 Feb'y, Aug.	85	
Boston 6 per ct. coup. Long X	April, October, 95	98		Rochester 6 per cent. coup. X	Divers	94	
Brooklyn 6 per ct. coup. Long X	Jan'y, July, 99 1/2	100 1/2		St. Louis 6 per ct. coup. Long X	Do.	77 1/2	
Clev'rd, 7 per ct. cp. W.W. 1879 X	Do. do., 101			Do. do. Municipal X	Do.	79 1/2	
Cincinnati 6 per ct. coup. X	Divers, 88	90		Sacramento 10 p. ct. cp. 1862-74 X	Do.	72 1/2	
Chicago 6 per ct. coup. 1873-77 X	Jan'y, July, 88	89 1/2		S.F. Cisco 7 p. a. cp. 1866, pay. N.Y. X	May, Novemb.,	80	
Do. 7 per ct. coup. 1880 X	Jan'y, July, 99	100		Do. 10 p. p. ct. 1871 X	Do. do.,	90	
Detroit 7 per ct. cp. W.W. 1873-78 X	Feb'y, Aug., 100	102 1/2		Do. 10 do. pay. N.Y. X	Jan'y, July	83	
Evansville 6 per ct. cp. Long X	March, Sept., 91			Do. 6 per ct. pay. N.Y. 1875 X	Do. do.,	53	
Jersey City 6 p. ct. cp. W.W. 1877 X	Jan'y, July, 94	95		Wheeling 6 per ct. coupon X	Divers	87 1/2	
Louisville 6 per ct. cp. 1880-83 X	Divers, 80			Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.,	81 1/2	
Memphis 6 per ct. coupon 1882 X	Jan'y, July, 68			Zanesville 7 do. X	April, October	94	100

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending November 18, 1886.

BONDS.	Per ct.
\$5,000 Cin. Ham. & Dayt., 7 per ct. 2d Mortg. 82 1/2 (& int.)	
2,000 Little Miami, 6 per ct., 1st Mortg. 80	
1,000 Ohio and Miss., 7 per cent. 2d Mortgage 48	
5,000 Town of Perryburg, Wood county, Ohio, 7 per cent.	47
3,000 Township of Pleasant, Putnam Cnty., 7 p. ct.	46
10,000 Cov. & Lex., 7 per cent. 2d Mortg. 85 1/2	
1,200 Indianap. & Cin. 7 per ct. Dividend 70	
2,000 Clark County, Ky., 6 per cent.	70 1/2
1,000 Cov. & Lex., 10 per cent. Income 56	
700 Columb. & Xenia, 7 per cent. Div. due '60-90	
STOCKS.	
150 Shares Ohio and Mississippi	6
100 " Do. do. 30d.	6 1/2
300 " Do. do. 60d.	6 1/2
200 " Cincinnati and Chicago	3
100 " Do. do.	3 1/2
25 " Little Miami, cash	91
70 " Indianapolis & Cincinnati	68
69 " Indiana Central	48
10 " Cin. Ham. & Dayton	65
250 " Hillsborough and Cincinnati	14
600 " Junction (Ind.)	6 1/2
12 " Springfield, Mt. Vernon & Pittsburg	5
12 " Columbus, Piqua and Indiana	1 1/2
6 " Dayton, Xenia and Belpre	4 1/2
20 " Clevel. Zanesville and Cin.	103
50 " Columbus and Xenia	86

By KIRK & CHEEVER.

For the week ending November 18, 1886.

BONDS.	Per ct.
Little Miami, 6 per ct. Mortg.	80
Covington & Lexington, 2d Mortg. 7 per ct.	65
Ohio & Mississippi, 2d Mortg. 7 per ct. (Eastern Division)	40
Indianap. & Cin., 2d Mortg. 7 per ct.	80
Cin. Ham. & Dayton, 2d Mortg. 7 per ct.	83
Hillsboro' and Cin., 7 per cent. 1st Mortg.	47
Covington & Lexington, 10 per ct. Income	63
Indianapolis and Cincinnati Dividend	70
Columbus and Xenia Dividend, due Jan'y 1, 1861	88
Little Miami, Dividend Scrip, issued June, 1866	60 1/2
STOCKS.	
Bellefontaine and Indiana, 75.—Cin., Ham. & Dayton, 65.	
—Cov. & Xenia, 85.—Cincinnati and Ohio, 3 1/2.—Covington & Lexington, 15.—Dayton & Western, 17.—Eaton and Hamilton, 21.—Indiana Central, 48.—Indianapolis and Cincinnati, 68.—Little Miami, 90.—Mad River & Lake Erie, 16.—Marietta and Cincinnati, 13.—Ohio and Mississippi, 6.—Hillsboro' and Cincinnati, 13.—Peru and Indianapolis, 10.—Cincinnati, Wilmington and Zanesville, 10.—Cin., Ham. & Dayton, 10.	

How American Railways are viewed in England.

We copy the following from Mr. Satterthwaite's London Circular in reference to American Railways.

"We are of opinion that the present prosperity of the leading lines of railway in America is without any parallel in the history of the country; and that, as the immense development of the traffic returns takes place on nearly the same amount of capital, a very large addition to the Dividend Fund will be found as the result. Prudence, and a desire to avoid the stimulating cupidity of projectors, may cause a limit to the amount to be divided, but the financial position of such lines as the New-York Central, Michigan Central, Pennsylvania Central, Galena, Chicago, and Reading will, we have no doubt, satisfy the most fastidious investor; and in the face of such material prosperity as the balance-sheets of those companies will place before his eyes he will learn to care little for the fluctuations of the day, and only rejoice if he can obtain such valuable property at an immense reduction in price, owing to the timidity or necessities of the present holders. Those parties in this country who are rejoicing in the prosperity of the Great Western of Canada road, will be aware that the traffic on that road was, during September, £42 17s. 6d., £48 14s., and £49 16s. and £55 12s. per mile, per week, respectively, and that the capacity for traffic, and general condition of the New-York Central road, must be somewhat satisfactory to average, during every week of the same month, a return of £74 14s. 1d. per mile; and may possibly some day become aware of the fact that the adjoining lines on the American territory are at least equal to the provincial undertaking, and that a premium of 22 1/2 per cent. on the Great Western of Canada, against a discount of 16 per cent. on the New-York Central, is a large margin to be paying for the additional security of having a colonial property.

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 26th Inst.

New York, Tuesday, November 26, 1856.

The business in the Stock Market during the last two weeks has been attended with frequent fluctuations but a general upward tendency of prices; and, although there has been some reaction from the highest points, the quotations herewith show, in many cases, a considerable advance upon those given in our last report of 11th Inst.—The transactions continue large, and, as for some time past, are mainly confined to leading railroad shares, which, on account of the favorable dividend prospects for the current half year, and the wide margin afforded at present prices for an improvement in the market value, are apparently regarded as the most eligible investments. There is, however, a perceptible increase in the demand for other classes of securities, although, in consequence of the almost entire absence of orders from Europe, they remain comparatively neglected.

In money matters there is a material improvement. The export of gold has been partially checked by the lower rates of exchange on Europe, and the weekly shipments are now below the receipts from California and the interior. In consequence of this favorable feature, and the less alarming accounts from London and Paris, the banks in the city have abandoned the system of curtailment pursued by them during the last few weeks; and in view of the steady accumulation of coin in their vaults, have felt justified in increasing their line of loans to a moderate extent. The advance in stocks is, in a great measure, due to the confidence produced by this change of policy, and the belief that there is no longer reason to apprehend a serious stringency during the winter. The position of financial affairs in London and Paris, however, still causes considerable anxiety; and until the anticipated crisis has been met or averted our market will be more or less influenced by the tenor of the accounts received by the European mails. The advices per "Niagara," being of a more gloomy character than those brought by the two preceding steamers, checked the buoyant feeling which previously existed, and produced a downward tendency in the prices, but the market is again rather firm at the close, although we have this morning, per "Persia," accounts of a further advance in interest by the Bank of England.

State Stocks are, generally, rather higher. In Virginia 6s there is an improvement of $1\frac{1}{4}$ per cent. The principal transactions have been in Virginia 6s, at $92\frac{1}{2}$ to $94\frac{1}{2}$ to $93\frac{1}{2}$; Missouri at $89\frac{1}{2}$ to $89\frac{1}{2}$ to 89 ; Tennessee at $91\frac{1}{2}$ to $91\frac{1}{2}$; North Carolina at 95 ; Ohio 6s, 1860, 102; California 7s, 1875, at $69\frac{1}{2}$; and Indiana 6s at 83 . The annual payment on account of the principal of the Illinois Internal Improvement Stock will be made at Springfield on 1st January next. The amount applicable to this purpose is \$500,000, and it will be distributed among the holders of such bonds as are presented at the time and place above named. The Canal Bonds do not participate in this payment.

In Railroad Bonds there is a slightly increased activity. Of Illinois Central Railroad construction Bonds, there have been considerable sales at $90\frac{1}{2}$ to $91\frac{1}{2}$. Of Free Land Bonds there have been small sales, without privilege, at $88\frac{1}{2}$ to $88\frac{1}{2}$, and of those with privilege, none are in market. We have also to notice sales of New York Central 6s at $85\frac{1}{2}$ to $85\frac{1}{2}$ to $85\frac{1}{2}$, of 7s at 101 ; Erie 1st Mortgage at $102\frac{1}{2}$ to 103 , 3d Mortgage at 94 , Sinking Fund at $91\frac{1}{2}$ to 94 , Convertibles of 1871 at $85\frac{1}{2}$ to $85\frac{1}{2}$, and 1862s at $87\frac{1}{2}$; Hudson River, 1st Mortgage, at 98 , and 3d Mortgage at $63\frac{1}{2}$; Terre Haute and Alton, 2d Mortgage at 73 ; Northern Indiana, Goshen Branch, at $83\frac{1}{2}$; Chicago and Rock Island, 1st Mortgage, at $94\frac{1}{2}$ to $94\frac{1}{2}$, and Lake Erie, Wabash and St. Louis, 1st Mortgage, at $70\frac{1}{2}$ to 71 . This road is now completed to its Western terminus, at the Illinois State line, and in the course of a few days, when the connection will be made with the Great Western Railroad, of Illinois, it will be put in operation

throughout its entire length. The traffic thus far has been entirely local. As compared with our last quotations, to-day's closing prices show an advance of 1 per cent. in Erie, 1871, Bonds, 3 in Sinking Funds, 1 in Hudson River 1st Mortgage, 1 in Illinois Central Construction, and 4 in Chicago and Rock Island Bonds.

The market for Railroad Shares continues very active, and quotations herewith show an advance, during the fortnight, of 3 per cent. in New York Central, 5 in Reading, 3 in Cleveland and Toledo, $7\frac{1}{2}$ in Galena and Chicago, 4 in Chicago and Rock Island, 3 in Michigan Southern, $4\frac{1}{2}$ in Michigan Central and 6 in Panama. Erie has fluctuated between $59\frac{1}{4}$ and $62\frac{1}{2}$, closing at $60\frac{1}{2}$. The annual report, which will be published in a few days, it is stated, will show a reduction over \$800,000 in the funded and unfunded debt, during the year; but a rumor, that in consequence of payments for constructions, the purchase of propellers, an increased supply of fuel, &c., the present floating debt is larger than was generally anticipated, has had a depressing effect on the stock. Of Illinois Central Railroad there have been sales at $115\frac{1}{4}$ to 117 , and of rights at $121\frac{1}{2}$. The land sales for October were 56,421 acres, producing \$906,800, making a total, since Jan. 1, of 236,030 acres, producing \$3,575,109.

Money is abundant on call at 7 per cent, and the rates of discount are slightly lower, first-class paper selling at $8\frac{1}{2}$ to 9 per cent. The Bank returns for the fortnight show an increase in loans of \$1,455,448. Shipments of specie since our last report, \$1,669,477; receipts of gold from California, \$1,753,558.

Foreign exchanges have been rather inactive for this mail, and the market closes heavy.

Very respectfully, CAMMANN & CO.

Bank of England Interest.

The announcement of the advance to 7 per cent., occasioned considerable surprise. Last week a general impression prevailed of the possibility of a new movement, but the anticipation had since, without any very clear cause, almost wholly subsided. Nevertheless, there has been every disposition to recognize in it a continuance of the sound policy which kept the financial world free from all shocks during the war, and which has thus far averted the possibility of our being permanently damaged by the subsequent break-up of the Continental inflation.

In the five weeks since the last advance was notified the Bank bullion has undergone a further diminution of more than a million, and the foreign exchanges have in many quarters become less favorable, while the applications for discount have lately been on a scale again to trench on the reserve of unemployed notes. The fact is also to be noticed that these immediate changes are not to be attributed to any unsound action on the part of the Bank of France. If such were the case, a new rise in the rate of discount would scarcely be of much use. But that establishment for two or three weeks past has abstained from its irregular operations, and the French rate of exchange has consequently again approached a point at which gold might be sent away in ordinary course. The question was, therefore, whether this condition of circumstances was to be allowed to go on. It is true, the arrival of the overdue gold from Australia might exercise an influence on the Continent, whither it would be at once dispatched, which would react well on this side, but it could not do more for the moment than prevent the money market from becoming worse, and the thing desired is an action that shall put an end, if possible, to the chronic uncertainty, that prevails, and produce, if only in a very gradual manner, a turn of the tide. What has now been resolved upon may not even effect that object, and it is quite certain it will not do more. That it is a measure in the right direction must, therefore, be beyond question.

Meanwhile, it cannot be too distinctly repeated not only that the present advance should be viewed without the slightest commercial appre-

hension, but that the public might still remain free from alarm, whatever rate might be adopted. What is going on is merely a scramble on the part of other countries for our money, and, as to avoid a final crash in their speculations, they are ready to offer anything, they will, of course, succeed, unless we take care to keep up to the full range of their biddings. Money being a commodity, like everything else, we cannot complain of this position. In fact, as the character of the drain upon us gives evidence that we are the only people who have any to spare, and that we are still lenders rather than borrowers, it is the most satisfactory ground we could occupy. It would be better for commerce to be free from such disturbances altogether, but if they are to happen we could not find ourselves in a state of greater security than that which now exists. If our manufacturers are obliged to pay 7 per cent. for their capital, all other manufacturers are obliged to make greater sacrifices, and hence, our power of competition not being injured, we have only to make a proportionate increase in the charge for our productions. Indeed, as it is plain from the extent of our exports, the guarded nature of our trade, our sufficient harvest, and our absence from commitments from foreign or home enterprises calculated to absorb our means, that we have not laid the foundation of any ill consequences, we may rest assured that the only duty we now owe to ourselves is to have faith in our own soundness, and not to allow the real bearing of such measures as the Bank have lately adopted to be misrepresented or made in any quarter the cause of idle panic.—*London Times*, Nov. 13.

American Railroad Journal.

Saturday, November 29, 1856.

Financial Condition of the United States.

The commercial position of the United States is now admitted to compare favorably with that of any of the leading powers of the world. It is the strongest of any, when we compare the means of our people with the calls upon them, and the resources they possess. Up to the present moment the wants neither of the Federal or State Governments are so great as to be inconveniently, or sensibly felt. All the surplus earnings of our people consequently become the basis of further production. They have another advantage in the fact that labor produces more in this than any of the countries of Europe. Of the great staples, cotton and the cereals, we produce abundantly with no further labor than that of turning up the soil. We now possess what we never had before, and what no country has in an equal degree, railways penetrating every nook and corner of the land, affording cheap and expeditious means of transport at all seasons of the year. All the conditions which can secure the greatest reward to labor exist, and the prosperity of the country rests upon bases perfectly natural and normal in themselves.

As a basis of our foreign trade we have three articles of prime importance in the commerce of the world—food, cotton for clothing, and the precious metals. We can meet any demand upon us for the former. In raw cotton, we have the monopoly of production for the world, and export it to the amount of \$100,000,000 annually. This product never fails. We produce more than \$50,000,000 in gold annually, and can export a very considerable portion of the amount without inconvenience. We have thus in the precious metals a surplus always on hand sufficient to meet any balance that may be found against us in the course of trade.

No element of strength appears to be wanting to our people. Taking one year with another we can hardly fail hereafter to show a favorable balance in our dealing with other nations. With our increased means of internal commerce, our exportable commodities are very largely increased, so that the future is almost certain to give us increased strength in everything that relates to our foreign relations.

So much for our foreign commerce. As the prosperity of every nation depends much more upon its domestic than its foreign commerce, we are stronger than any other from the vastly superior means for its accommodation. The diversities of our climate give to us nearly all the products that enter into consumption, from the gains and grasses of the extreme north to the sugars and fruits of the tropics. The internal commerce of a country with suitable avenues for its movement, must be very active between a people among whom is raised nearly every article they consume. Avenues of some kind are the necessary conditions of all commerce and all wealth. The wealth of a nation may be more accurately measured by the extent and excellence of its highways than by any other test. It may, in fact, be said that there is hardly any limit to the possible wealth of a people who have the means of economic and speedy distribution of whatever they can produce. In all the means at present used, our people possess a great superiority over any other. In a few years more, we shall have hardly anything to wish for in this line. In addition, we have far greater natural resources than any other people.

Reasoning from the above data we may safely reckon upon the financial strength of the United States. There is no doubt whatever that our people were never so strong as at the present moment. They are already largely reaping the benefits of their unrivalled system of public works, although their construction is only just completed. In five years more these benefits will be quintupled, and a corresponding financial and commercial strength will be the result.

American Institute.

The following premiums were awarded by the American Institute at the close of the State Fair at the Crystal Palace—

Gold medals, 19; gold medals certified, 30; silver medals, 100; silver medals certified, 64; silver cups (\$175), 17; bronze medals, 215; diplomas, 392; books (vols.), 75. At the Cattle Ground:—Silver medals, 29; silver cups (\$1,361), 97; cash premium, \$48; books (vols.), 44. Of the above we have only space to print the names of those who received gold medals:

Pacific Mills, Lawrence, Mass., Little, Alden & Co. (agents), No. 36 Nassau street, for 35 pieces of lawns, and 34 pieces of printed calicoes.

Dunnell Manufacturing Company, Providence, R. I., T. L. Dunnell, Providence, R. I., for 102 pieces of calico prints, and 91 pieces of printed lawns.

American Linen Company, Fall River, Mass., McCurdy, Aldrich & Spencer (agents), No. 65 Broadway, for 38 pieces of assorted linen goods, sheeting, &c.

Calvin Kline, No. 92 Wall street, for the best marine chronometers.

Metropolitan Knife and Plate Works, No. 563 Broadway, A. Ibbotson & E. V. Haughwout (agents), for the best steel and plated cutlery.

J. Gurney, No. 349 Broadway, for the best Photographic Portraits (untouched).

Leo & Larned, No. 13 Greenwich street, for the best Steam Fire Engine.

No. 12 Fire Engine of Brooklyn, best of the first class.

Allen & Wheelock, Worcester, Mass., (Union & Wheelock, agents, No. 99 Maiden Lane,) for the best Breech Loading Rifle, &c.

Alfred E. Beach, No. 128 Fulton street, for a Printing Telegraph (raised letters).

Bernard & Hughes, Rochester, N. Y., Daniel Hughes (agent), Johnson's Hotel, for the best atmospheric trip-hammer.

Pinney, Youngs & Co., Milwaukee, Wis., J. B. Smith (agent), No. 35 William street, for the best sawing machine.

C. H. Denison, Green River, Vt., for the best double planing machine with rotary bed for wood.

H. H. Crozier, Oswego, N. Y., for the best barrel machine.

George H. Reynolds, Medford, Mass., for the best non-condensing steam engine.

John North Middletown, Conn., S. F. Bacon (agent), Boston, Mass., for the best book-folding machine.

Chickering & Sons, Boston, Mass., H. Warren (agent), No. 506 Broadway, for the best grand action piano-forte.

Fairbanks & Co., No. 189 Broadway, for the best iron frame railroad scales.

Ames Manufacturing Company, Chicopee, Mass., Balls patent safety pump (steam power).

Rutland and Burlington Railroad.

The following statement is from the concluding part of the Trustees' report, showing that since the property has been under their management, the sum of \$61,999 has been paid for interest on bonds. That more has not been paid is evidently not the fault of the Trustees, who have, no doubt, faithfully discharged the arduous and complicated duties entrusted to them.

The net earnings of the road, since it came into the hands of the Trustees, have been:

As per foregoing report \$49,510 90
And as per report August 31, 1855 .. 117,942 97

\$167,453 87

The disposition of which is as follows, viz:—

Locomotives.....\$16,229 46
Cars.....1,669 00
Tools and machinery.....1,863 00
Coupons due Feb'y 1, 1854, paid.....61,999 00
Fuel on hand.....32,845 60
Shop stock.....24,331 38
Sundry available accounts.....28,516 43

\$167,453 87

The expense of operating the road would be but slightly increased, if its receipts were brought up to seven hundred thousand dollars a year, and if the gross receipts can, as we think they may be, when our Northern and Western connections are completed, brought to that amount, the bondholders may expect to receive their interest.

[Signed.] SAMUEL HENSHAW, } Trustees.
THOMAS THACHER, }

—Boston Courier.

Covington and Lexington Railroad.

An arrangement has been consummated, by which the owners of the Maysville and Lexington railroad have leased to the Covington and Lexington Railroad Company that part of their road which lies between Lexington and Paris for ten years.

Hannibal and St. Joseph Railroad.

At an election by the stockholders on the 13th instant, the following gentlemen were chosen Directors for the ensuing year:—

Robert M. Stewart, Buchanan Co., Mo.; Joshua Gentry, Levi Barkley, Marion Co., Mo.; H. H. Hunnewell, John E. Thayer, C. W. Chapin, Fred'k T. Bush, Robert S. Watson and Robert B. Forbes, Boston, Mass.

Railroad Earnings.

The earnings and expenses of the Wabash and Rome Railroad Company for October 1855 and 1856, were:

	1855.	1856.
Passengers.....	\$16,424 83	\$23,528 80
Freight.....	35,895 71	33,730 46
Mail, &c.....	2,298 24	2,800 29
Total.....	\$54,618 78	\$59,559 55
Expenses.....	17,938 99	18,099 64
Balance.....	\$36,679 79	\$41,459 91
		36,679 79

—Showing a gain of.....\$4,780 12

The receipts of the Toledo, Wabash, and Western Railroad for October were as follows:

Passengers.....	\$19,046 90
Freight.....	28,437 56
Mail.....	937 50
Expresses.....	1,350 00

Total.....\$54,771 95

The following is a comparative statement of earnings from the New York Central railroad, during the month of October, 1855 and 1856:

1856.....	\$913,565 25
1855.....	736,421 82

Increase.....\$177,143 43

Hartford, Providence and Fishkill R. R.

The following is a statement of the operations of this road for the year ending October 1, 1856.

EARNINGS.

From Passengers.....	\$190,429 37
From Freight.....	136,982 39
From Mails.....	6,118 48
From Express.....	4,871 44
From Rents.....	2,195 77

\$340,593 05

EXPENSES.

For Road Repairs.....	\$83,961 80
For Engine and Car Repairs.....	27,405 65
For Salaries and Labor.....	64,406 65
For Bridge, Fence and Station Repairs.....	824 81
For Wood, Coal and Oil.....	40,649 62
For Printing and Stationery.....	3,214 80
For Incidental Expenses.....	696 91

171,160 24

Net earnings from operating road....\$169,437 81

The following is a condensed statement of the financial condition of the company on October 1st, 1856:

ASSETS.

Construction, cost of road from Providence to Waterbury, 122½ miles.....	\$3,856,239 67
Equipment.....	300,995 19
Materials on hand, Wood, &c.....	99,934 14
Sinking Fund, Cities of Providence and Hartford.....	36,036 42
Sundry Notes and Accounts.....	50,047 37
Cash on hand.....	2,817 32
	\$4,285,170 11

LIABILITIES.

Old Stock issued.....	\$1,540,800 08
Preferred Stock sold.....	398,800 00
Bonds sold.....	1,771,230 00
Bills payable.....	379,268 53
Sundry Acc'ts payable.....	808 64
	4,090,907 25
Excess of assets.....	\$194,262 86

The Canadian Inland and Ocean Navigation.

Montreal, at the head of sea navigation proper, is the port for the great chain of River, Lake and Canal navigation which extends westward to Fond du Lac and Chicago, a distance of about fourteen hundred miles, embracing the largest extent of inland water communication in the world. The following table exhibits this in a condensed form:

	Length in miles.	Breadth in miles.	Depth in feet.	Elevat'n over sea.	Area in sq. miles.
Lake Superior	420	120	600	600	32,100
" Michigan	320	70	1,000	573	21,900
" Huron	270	145	350	578	18,750
" St. Clair	25	18	20	570	300
" Erie	250	45	70	564	9,300
" Ontario	190	40	500	234	7,300
River St. Lawrence	700	..	..	..	....

CANALS.

	Length in miles.	Depth.	Size of Locks.	Lockage.	No. of Locks.
Lachine	8 1/2	10	200x45	44 3/4	5
Beauharnois	11 1/2	10	200x45	82 1/2	9
Cornwall	11 1/2	10	200x55	48	7
Farrand's Point	10	10	200x45	4	1
Rapid Plat.	10	10	200x45	11 1/2	2
Point Iroquois	9 3/4	10	200x45	6	1
Galops	10	10	200x45	8	2
Welland	28	10	160x26 1/2	330	27

Here the ocean steamers connected with the fleets of Lake and River craft, and thus contribute to make this city a great central depot for imports and exports.

The Lachine Canal, the first in the link, extends from Montreal to Lachine, cuts across the southern point of the Island of Montreal, and avoids the Lachine rapids. The Beauharnois Canal extends from the village of Beauharnois to Hungry Bay, and passes the rapids of the Cascades, Cedars and Coteau. The Cornwall Canal, commencing at Cornwall and ending at Dickson's Landing, passes the Long Sault rapid, Farrand's Point, Rapid Flat, Point Iroquois and Galops. Rapid canals are short detached canals. The Welland connects Port Dalhousie, on Lake Ontario, with Port Colborne on Lake Erie, and surmounts the difficulties interposed by Niagara. Mr. Andrews, in his report already quoted (1852), speaks of these canals as surpassing in magnitude and importance those of any other country. They have been constructed under the direction of Scientific Engineers with great care, and in the most substantial manner, so that a "break" or any interruption is of rare occurrence. The level of the St. Lawrence, unlike that of the Mississippi and other western rivers, varies but little, and a constant supply of water is obtained from the vast volume collected in the basins of the Lakes, which flows steadily onward to the ocean.

Vessels and steamers passing westward, avail themselves of these canals to avoid the rapids, as also do heavily laden vessels tending eastward, but the mail steamers freighted with passengers, regularly run through all the rapids with ease and safety. The Government have caused the several channels to be explored, and they are now laid down on charts for the guidance of navigators.

Passage is thus afforded from the western Lakes to the Atlantic for vessels drawing ten feet of water, and suited to the capacity of the locks. A canal connecting the St. Lawrence with Lake Champlain and the head waters of the Hudson, debouches at Sorel, about forty miles below

Montreal. It is named the Chambly canal, has 10 locks, and extending 11 1/2 miles, equalizes the difference between the level of the Richelieu River and Lake Champlain, by a lockage of 79 ft. This vast canal system which centres at Montreal, is in keeping with the mighty stream and Lakes to which it is necessary. In a westward course from our city, the Lakes Ontario, Erie, St. Clair, Huron, Michigan and Superior, are traversed, one inland sea succeeding another.

Even now, in its infancy, the favored portion of the earth watered by these Lakes, is teeming with the products of its great fertility, its seas are alive with vessels, and an energetic race pour into it in myriads. This is its beginning, who can foresee its future? To these completed canals others are designed to be added.

Among the projected canals, are the following, the Georgian Bay Canal, connecting Lake Huron at Collingwood with Lake Ontario at Toronto. The Ottawa Canal, joining the waters of Lake Huron with the Ottawa River, which empties itself into the St. Lawrence at Montreal. In this project the city of Montreal has a peculiar interest, for the Ottawa country is the back country proper of the city.

All these canals will materially shorten the water communication and benefit our Sea Port. They will be rivals it is true, but only so for the general welfare. All may open their channels, and the Erie Canal may increase her capacity, but all combined cannot satisfy the demands that will be made on them. Consider the vast territory yet unoccupied, but which in a few years will teem with its millions of producing and consuming inhabitants, and judge if this be an over estimate.

The time required to pass by propeller from Montreal to Chicago, and vice versa, has averaged ten days this season, although the trip has been made to and fro, (calling at the Lake Ports) in eighteen days. With an improved class of vessels, and with the distance saved by the projected canals, who can doubt but that the average voyage will yet be four days.

The rates of freight between Chicago and Montreal this year, have averaged for wheat 20 cents, and for flour 75 cents. The vessels which navigate these waters carry about 10 barrels of flour, 37 bushels of wheat, and 40 bushels of corn per ton. The certainty of means of transport, that will be induced to Montreal by the steady supply of freight, will make the rates of carriage for imports and exports less than they are at present here, and lower than they will be at New York or elsewhere.

European emigrants too seeking a home and an independence in the west, and attracted here by our Ocean Steamers, will see the superiority of an uninterrupted water communication from their old home to their new one.

The advantages of the Canadian Ocean route are, as we have said, very great, as will be apparent from the ensuing statements:—The principal point to which produce is sent from the United States and Canada is Liverpool. The shortest way of reaching it, even from New York is round the north end of Ireland. Yet New York is between the 40th and 41st parallel; and the Island of Tory, off the north point of Ireland is about 55 deg. north. One would think it much shorter to go by Cape Clear, at the south end of Ireland, which is between 51 and 52 deg. north latitude. But this is not the case. So much is gained by running to and across the northern compressed longitudes, that the distance from New York to Liverpool by the north end of Ireland is 2980, and by the south end 3013 miles. New Yorkers are obliged then to run in any case 11 degrees north to get to Liverpool, and find it to their advantage to run up 3° 30' more. Keeping these things in view, if any one will take a globe or map of the world, he will see that the St. Lawrence and Lake Ontario and Erie have been so laid down by nature as to form one end of the arc of a great sailing circle, the other extremity resting upon the north of Ireland. We have already found the distance between New York and Liverpool by the

shortest route to be 2980 miles. The distance from Montreal to Liverpool by the St. Lawrence route is 2750 to 2760 miles. Oswego is by this route considerably nearer Liverpool than New York by the nearest possible route. Suppose goods to be afloat on Lake Ontario off Oswego seeking the European market. If sent via New York they would require to be transhipped to go—

By Canal	.....miles	210
" River	.....	150
" Sea after a second transhipment	.....	2,980
Total	.....	3,340

If sent via Montreal, they may go entirely without transhipment—

By Canal	.....miles	30
" River and Gulf	.....	1,072
" Sea	.....	1,878
Total	.....	2,980

Or they may go with a single transhipment at Montreal. A saving by the latter route is effected, it will be seen, of 360 miles, or the whole distance from Oswego to New York. But this by no means shows the case so strongly as it should be put,—for the navigation by 210 miles of small canal to Albany is much more tedious than the river navigation to Montreal with only 30 miles of a larger canal. Or take the case from Buffalo. A cargo is transhipped there to be sent through 360 miles of canal to Albany, there again to be transhipped or towed down the river to New York and transhipped there. Here is—

Canal	.....	360
River	.....	150
Sea	.....	2,980
		3,490

—say 3,500 miles.

By the St. Lawrence route:—

Lake and river to Montreal	.....	380
Canal	.....	70
River and Gulf	.....	885
Sea	.....	1,878

Total distance.....3,213

Showing a gain via the St. Lawrence of between 275 and 300 miles. When a vessel had reached the eastern end of Lake Erie with a cargo of western produce, therefore, it may save one or two transshipments and about 290 miles in distance, and that of tedious canal navigation, by coming on to Montreal and transhipping here; or the same distance and two or three transshipments by sailing straight on via the St. Lawrence to Liverpool. If, on approaching the eastern end of Lake Ontario, she comes on to Montreal instead of turning into Oswego, her cargo will be saved the same number of transshipments and 360 miles of sailing—out of which there will be a gain of 180 miles of canal navigation.

With such advantages to Montreal and our Province, judge for yourselves of her prospects, and say whether we, her citizens, have not reason to look forward to a brilliant future.

It may be interesting to give in this place a few particulars of the scenery of the St. Lawrence route, which, in addition to shorter distance and smooth water nearly one-third of the way, gives it advantages of no mean kind for passengers and tourists, who now in such large numbers visit the new world. The traveller from Europe after losing sight of land on the north of Ireland, again comes in sight of land at Belle Isle, on the coast of America in five or six days steaming; and afterwards he sails within sight of the land during the remainder of his journey to Montreal. The appearance of Belle Isle is bold, cold and inhospitable; and the same remark may be made of portions of the Labrador coast, the Island of Newfoundland, and to a certain extent of the Island of Anticosti, which come in turns into view. The Straits of Belle Isle are quite narrow, and in sailing through them, both shores are seen at once,—

The only human habitations visible are the fishing settlements on the Labrador coast. Anchored in their vicinity a considerable number of vessels of various sizes are seen. After steaming through the Gulf, and entering the mouth of the river, the eye can scarce take in its gigantic dimensions, but by and bye, as the traveller still streams along, the banks on both sides become distinctly visible. They are for the most part high, bold and wooded. The mouth of the Saguenay, one of the most wonderful rivers in the world, making its deep and silent way in a fissure between mountains is now passed; but ere the traveller reaches this he has noted the white houses and barns of the Canadian farmers smiling peacefully on both banks of the St. Lawrence. Villages now begin to make their appearance on both sides; and indeed the houses form a continuous street for the remainder of the journey. At every short distance there is a village church, white-washed or white-painted like the houses, and with shining tin roofs; on a fine day, they fairly glisten in the sun. If we add to this the gigantic dimensions of the noble river, with its mountain banks, and see the whole when our Canadian sky assumes its own blue hue, the traveller will pronounce the scene to be one of magnificent beauty. Mr. McGregor thus speaks of it:—"This river and the whole country unfold scenery, the magnificence of which with the most delightful physical beauty, is unequalled in America and perhaps in any other part of the world."

Chicago, St. Paul and Fond du Lac R. R.

This great railroad is now completed to its depot in the city of Janesville, and is doing a splendid business. The track is well laid, and good engineers and conductors are employed. Mr. S. F. Johnson, the Superintendent and Chief Engineer, is as active, capable man; and Wm. B. Ogden, the President of the Company has been the life of this great enterprise. The great bridge across Rock River, at Janesville, called the Monterey bridge, is the best work of the kind in the State, and the other bridge above, being built by the Milwaukee and Mississippi Railroad, is now nearly ready. When this is finished and the two railroads are united, we can go directly to Madison by the cars, and the latter city will have a direct railroad connection with Chicago. This arrangement will be of vast importance to the State, as it relieves the country of the monopolizing spirit of Milwaukee, which would force all the business of the State into that city. To this country it opens a more direct communication with the interior cities of the State, and to this town an easy access to Chicago, which will be of great benefit. Already are we feeling its beneficial influences, and this will continually increase.—*Beloit Journal*.

Wabash Valley Railroad.

We are about making three different connections by railroad, which cannot fail to give a decided impetus to the business of Toledo for the coming year, and to exert an important influence on its future growth and prosperity. The road from Toledo to Detroit will be opened through the larger portion of its distance in a few days, and from point to point by the 1st of January; The Wabash Valley Road, which opens up to market an immense agricultural region, as productive as any in the world, and reaches with its connections to the Missouri River and to St. Louis, is to be opened through its whole length in a few days; and the Air Line Road to Chicago, by the way of Goshen, is also soon to be completed and opened to the public. The effect of these connections cannot fail to be very important to our commercial relations. Toledo now commands the whole lake shore from Detroit to Cleveland, and has a position naturally superior to either. From this time forward, every road that is opened from the interior to the lakes point directly to this city, and add to its wealth and resources. The Wabash Valley Road unites at Danville with the Western Illinois, which is completed to the Illinois River, and is ultimately to be extended across the State of Missouri to Kansas. This road, with the help of some connections, stretches in a line, almost

direct, from Toledo to St. Louis; and arrangements have already been made by which passenger and freight trains are to be run through from St. Louis to this city, without change of cars. This will be done certainly by the first of December, perhaps sooner. The line and distances are as follows:

From Toledo to Danville, (Wabash Valley R. R.).....	250 miles.
From Danville to Tolono, (Great Western R. R.).....	35 1/2 "
From Tolono to Mattoon, (Illinois Central R. R.).....	34 "
From Mattoon to St. Louis, (Terre Haute and Alton R. R.).....	131 "

Total.....450 1/2 miles

Making the whole distance between this city and St. Louis 450 miles, which will probably be run in about fifteen or twenty hours. The road lies in the great thoroughfare between the West and the East, and must command an immense freight business, and probably a large passenger business also. The Air-Line road is also through a rich agricultural region, and will be the shortest route to Chicago. It is demonstrated, we believe, that passengers can reach Chicago from Detroit, by taking the Detroit, Toledo and Air-Line roads, several hours sooner than by the Michigan Central. In the first place, the distance is a few miles shorter; and, in the second place, the track of the Air-Line road is straight and level, and the locomotive can push over it with an indefinable speed. We may, therefore, be sure that it will be the favorite route to Chicago, beside opening to our market an amount of products the extent of which cannot well be calculated.—*Toledo Blade*.

Railway Defalcations in England.

The people of Great Britain appear to be no more exempt than ourselves from fraudulent Railway officials. A very heavy defalcation has lately been discovered in the Great Northern Railway Company, of which we copy the following account from English papers:

Great consternation has been caused among the officials of the Great Northern Railway by the discovery of a series of most extensive frauds—frauds which throw the defalcations of William Robson on the Crystal Palace Company completely into the shade.

From inquiries which have been instituted, it appears that Mr. Leopold Redpath, of No. 27 Chester Terrace, Regent's park, was the registrar of shares and transfer of stock in the Great Northern Railway, and in that capacity had a command over the whole of the shares of the Company. Mr. Redpath has always borne the strictest character for honesty, and the conviction of his integrity was strengthened by the fact that he was a governor of Christ's Hospital, a governor of the Royal Society of St. Anne, and was intimately connected with many of the most influential and useful institutions in the country. This gentleman, to whom such vast interest were entrusted, and upon whom the breath of suspicion never rested, has disappeared, and with his disappearance comes the appalling fact that he has robbed his employers—the directors and shareholders—of many thousand of pounds. It is said and apparently on the best authority, that the defalcations amount to no less a sum than £150,000. Whether that calculation is above or below the amount of which the Company have been defrauded, it must of course remain for future investigation to reveal.

As principal registrar of stock, Mr. Redpath had, of course, the entire control of that department of the Company's business. The investigation of the books since his disappearance—for he left the office in a somewhat hasty manner on Tuesday last, and has not since been heard of—have shown that the frauds have been perpetrated in the following manner: When Mr. Redpath, who was the principal registrar, had to issue a \$100 stock, it appears that he added an "0" to the amount, thus making it \$1,000 in the Company's

books. This operation was not confined to one hundred, but extended to stock of £200, £300 and £500, so that out of every £100 stock transferred he gained £900. The directors appear not to have made any examination into the accounts, probably because they never had any suspicion of their officer, and it has been to them a mystery for years past that they were called upon to pay dividends upon £15,000 or £20,000 more than, according to their audited accounts, they were liable for. Perhaps it is scarcely right to say the directors were negligent of their duties, inasmuch as two or three weeks since they established a distinct department for the purpose of securing a strict investigation of the Company's accounts.

The officials of this new department met on Monday last, and on Tuesday morning they re-assembled for the purpose of entering upon their duties. Soon after they met, Mr. Redpath entered their room and said to the chief clerk: "What are you going to do?" The chief clerk replied: "To go through all the accounts from the commencement of the Company." Mr. Redpath said: "That is a perfectly useless proceeding. You will find all the accounts right in the gross, and it is of no use entering into details." The chief clerk said: "We are bound to go into the whole of the accounts, as the directors have given in explicit direction to do so, and we wish to begin with the numerical register." Mr. Redpath took up one of the books and threw it down again, saying: "Well, if that is your intention, I will have nothing to do with it." He then said to one of the officers: "I am going out for a few minutes." He went, but he never returned.

Previous, however, to his departure, he sent one of the ticket-porters belonging to the railway to the Union Bank in Argyll place, for the title-deeds of his house in Chester place, and for other securities which were lodged there in his name, directing him to meet him with the documents at Chester Place. The porter, misapprehending his instructions, took the parcel he received from the bank to the Great Northern Railway, and the officials of the Company have taken possession of it, and notice has been given at the bank to withhold his balance until further inquiry.

As soon as the discovery of the frauds were made, directions were given to the police to take possession of Redpath's house in Chester place. This was done, and almost simultaneously Inspector Williams arrested Mr. Charles James Cumming Kent, a young man aged 25, who was a clerk in the register office over which Mr. Redpath presided. Mr. Kent, who is supposed to be the dupe of Redpath, was arrested at his residence in Castle terrace, Hampstead road, and immediately afterwards underwent a private examination at Clerkenwell Police Court. He was remanded until Tuesday next, and is now in the custody of the Governor of the House of Detention.

A warrant has been granted for the apprehension of Leopold Redpath, who is still a fugitive from justice. He is described as being about 45 years of age, 5ft. 10 in. in height, with fair complexion and brown hair. He walks in a hurried or "jolting" manner. He dresses well, but not foppishly, and his general demeanor indicates a person of extremely quiet habits and good position in society.

The Directors of the Great Northern Railway appear to have been acquainted with the expensive habits of their servant, and to have been aware that £300 a year could not have met his expenses. Singularly enough a feeling prevailed that he filled his responsible office simply from a desire of having something to do; and this opinion was confirmed by the fact that he made large contributions to the many religious and charitable institutions with which the metropolis abounds.

Although his salary was not very extensive, amounting to something between £250 and £300 a year, he lived in a luxurious style in a fashionable house, had a box at the opera, was an *habitué* of the theatres, a governor of Christ's Hospital and of the Royal St. Ann's Society, and a subscriber and director to many of the most permanent me-

tropolitan institutions. There was scarcely a fashionable party, an operatic performance, or a gathering of the *beau monde*, in which the name of "Leopold Redpath, Esq.," did not appear. Operating under the *prestige* which these various occupations afforded, he averted suspicion, and was thus enabled to perpetrate the enormous frauds which will hereafter require so strict an investigation.

Direct Transportation from Superior to Liverpool.

An article from the European Times recites the arrival at Liverpool, direct from Chicago of the "Dean Richmond," whose departure we announced some three months ago. In this simple announcement is contained the initial fact of a new era in commercial history and issues of startling and overwhelming significance crowd upon the calmest view of its relations with the future of the West.

It seems to us—we know not if we apprehend its bearings correctly—that the results of this experiment must be an eventual revolution of the internal traffic of the Western States. It virtually makes our inland lakes the Mediterranean Sea of North America, and Chicago becomes the Alexandria of modern times. It peels off the littoral rind of the New World at a stroke—and splits the ripe apple of the continent to its core. Ocean commerce will follow that entering wedge. Direct transportation will inevitably supersede the expensive and complicated machinery employed in conveying western grain through its present channels—which besides involving several expensive transshipments is attended with an important diminution of bulk.

The Atlantic—the far Bosphorus, the Baltic and the hundred seas of the old hemisphere will flow in through the rent torn by the keel of the "Dean Richmond" and the majestic commerce of the ocean overleaping the huge complications of human ingenuity—passing in triumph past the monuments of Clinton's genius, past railroads and canals—through rivers and lakes—2000 miles into the interior will plant its sea-worn flag upon the shores of Lake Michigan, and sit in royal state like another Queen of Sheba, on the throne that western industry shall build for her in the chief city of the interior plain of North America. Nobody can doubt that the demonstrated practicability of direct shipment from Chicago to Europe will eventually transfer the business of transportation to this channel. An inevitable consequence of this will be the enlargement of the Welland ship canal, the ring bolt in the chain of communication from the ocean to the lakes, to a capacity sufficient for a ship of any required size. The application of steam will overcome the delays of navigation and the path opened by the "Dean Richmond" will be thronged with the flags of every nation. But this is not all. What is true of Lake Michigan is true of Lake Superior. What is possible by the Welland canal is equally possible with the Sault Ste Marie.—The splendid chain of inland navigation does not end with Chicago. It is complete to the extreme western end of Lake Superior.

Here, at the uttermost limit of ship navigation, the town of Superior, some two years old, and containing not more than 800 inhabitants, is slowly rising on the shores of the Queen lake, from the sombre woods that surround it, to meet the majestic destiny that is creeping with slow pace up the St. Lawrence and through the lakes toward her, to cast the commerce of the ocean at her feet, and crown her with a diadem of ocean pearls.

Nor is this all. The ocean highway extending from the mouth of the St. Lawrence to the extremity of Lake Superior, will be the basis of the whole system of Western Railroads. A Northern Pacific Railroad with a terminus at Superior, is the necessary supplement of the navigable highway we have described. The Western terminus of that highway will be the Eastern terminus of the first Pacific Railroad ever built. The arguments in its favor are irresistible, unanswerable.

It is a logical deduction from the whole law of railroads.

The paramount purpose of the Pacific Railroad, we take to be, to facilitate the commercial intercourse between the Atlantic and Pacific coasts, in other words to facilitate transportation. Now transportation is impelled by an irresistible impulse in the cheapest route. Hence gravitation itself is scarcely more a law than the tendency of Railroads to the nearest watercourse in the direction of their destination. They break off at once by a sort of physical necessity as transporting agencies, at the nearest navigable water communication. One always ends where the other begins. The commercial apparatus of the country is full of instances pertinent to this. By this long chain of inland lakes covering nearly half of the distance between the Atlantic and Pacific coasts, nature seems to point with the force of a divine decree to a supplementary Railroad route to the Pacific, to connect at its nearest span the ocean navigation of the opposite sides of the continent, and there can be no doubt that other things being equal in feasibility of route west of the Mississippi, the first road to the Pacific will abut on the shore of Superior.—*St. Paul (Minnesota) Advertiser.*

Mineral Point Railroad.

The business of all the roads terminating in Chicago is rapidly increasing, and will continue to do so until the country west of us reaches its maximum production. Not only will the increasing production of the country tributary to the various arteries pouring into Chicago, and the extension of Iowa roads tend constantly to augment the business of Chicago roads, but yet other roads are now progressing toward completion that will help to swell the mighty current of trade and travel. Among these roads may be instanced the Mineral Point Railroad, connecting with the Illinois Central at Warren, and extending in a north-westerly direction into Wisconsin, and penetrating the great lead, copper and zinc region of that State. In addition to these important and valuable mineral resources, the section of country through which it passes is one of the richest agricultural portions of Wisconsin. Such ample resources cannot fail to furnish an amount of business to the Mineral Point Railroad as will place it among the list of Western roads that will pay 'fat dividends,' and consequently will be a most important tributary, both to the Illinois Central and the Galena and Chicago Union Railroads. The City of Chicago will thus reap her share of the benefits of this particular railroad extension that will tend to add largely to her trade. Let merchants, produce dealers, manufacturers and shippers look after the valuable trade that will flow over this road, and they will find it well worthy of their attention. The road is now in operation to Darlington, (the county seat of Lafayette County, and the regular and formal opening of the road to that place is advertised to take place on Monday, the 17th inst. Darlington is 18 miles distant from this point, and is a fine, flourishing town of about 2,000 inhabitants, rapidly and constantly increasing. The track of the Mineral Point Road is fast approaching the town of Mineral Point, to which place it will be completed in about 30 days.—*Chicago Democrat.*

Improvements of the Mouths of the Mississippi.

The official organ of the Government at Washington states the following particulars of the recent contract for the improvement of the mouth of the Mississippi River below New Orleans. Mr. RICHARDS one of the contractors, is now at the Astor House, in this City, with his models for the machinery to be employed:

"They are to give a depth of twenty feet below low water, and a width not less than three hundred feet to the Southwest Pass and Pass a Loure, for the sum of \$125,000 each; the time limited to ten months from date for the first named, and fifteen months for the second.

They furthermore agree to maintain such depth

and width to said Passes for the term of 4½ years thereafter, for the further sum of \$72,000.

The contract possesses more than ordinary interest, aside from the gigantic work it proposes to accomplish, from the fact that an entire new principle in mechanics is to be applied and developed; and, from the evidences before us, we can but predict its eminent success.

The unphilosophical and exploded system of scraping and dredging out the channel of a river, on the score of feasibility and economy, is by these enterprising inventors demonstrated to be unworthy the present age of progressive science; and we especially commend this valuable invention to the consideration of parties interested in deepening the outlets of rivers and harbors on the Gulf Coast, assured as we are that, whenever a sufficient volume of flowing water can be centralized, the desired result can be speedily attained. It is gratifying to us to record the fact that the exclusive right to this new principle is secured to the inventors by a patent dated July 8, 1856.

The main features of this novel invention consist in a peculiar shape and point given to sawed spiles, so that after the first one, styled "beginner," is driven to its proper bearings, and secured to a substantial and continuous beam, the remaining ones, unlike the first, styled "followers," are one after another placed to the edge of its predecessor, and successively driven down. Obeying this new mechanical law, these followers, in their descent, maintain a close contact and true line forming a complete dam or breakwater as the work progresses, each being also fastened to the continuous beam.

Aside from the magnificent results promised to the commerce of the South by the opening of her rivers to vessels of the largest class, this invention assures a speedy and effectual stopping of all crevasses and breaks to the levees that line the margin of her great rivers.

Vermont Central Railroad.

We would call the attention of parties interested to the advertisement in another column of the Agents of the Committee on Consolidation of the three different interests in the Vermont Central Railroad Company. From an examination of the books we find that the bond and stockholders are coming into the compromise rapidly, and it is to be hoped that this plan so much to be desired will be carried out successfully, by means of which the road will be placed in the hands of the owners of the property and managed for their interests. It must, of course, be a work of considerable time to obtain the sanction of the different interests, but already bondholders representing \$1,400,000 have signed the agreement, and about one-third of the Canada and more than half of the Central stock has been signed for. We advise all parties to look to their interests in this matter promptly, for this plan of consolidation will render the property valuable and lucrative, but without it we have little hope for any of the interests—all of which bid fair to be eaten up by litigation, as at present conducted.

There appears to be an erroneous impression abroad respecting the failure to obtain the passage of the "Consolidation Act" at the session of the Vermont Legislature just closed. It has been supposed that this result would stop all efforts at consolidation, but so far from it, the movement is going on more successfully than ever. The matter is only postponed to the next session, and in the meantime no efforts will be spared to obtain the assent of two-thirds of all the interests, and then there will be little doubt of favorable action by the Legislature. The principal objection to the passage of the act came from the parties who now hold possession of the Central. Besides this was added the protest of other roads in Vermont, against any action at present, and doubtless an act can be passed at another session which shall meet the cases of all the roads in the State desiring to avail themselves of its privileges.

The Committee of the Vermont Legislature to whom the subject was referred, reported in substance, that although the plan of consolidation of

the several securities of the railroad was desirable, and probably necessary, and that it should meet with liberal treatment from the Legislature, yet, as it was a new measure in Vermont and was not fully matured and developed, and involved so large an amount of property, it was deemed inexpedient to legislate on the subject at this session.

Public sentiment is evidently in favor of carrying out consolidation, and the essential point now is for the bond and stockholders to come in without delay and sign for their interests, no matter how small they may be in individual cases. These are the very parties most interested to save their property from total destruction.—*Boston Advertiser*.

Chicago, Iowa and Nebraska Railroad.

The contract for the construction of the second division of the Chicago, Iowa and Nebraska Railroad, extending from De Witt to Cedar Rapids, a distance of 60 miles, has been let. The work is to be done by the 1st of October next, and the cars to be running to Cedar Rapids in 14 months from this date.

Ohio and Mississippi Railroad.

The *Vincennes Gazette*, of Thursday, says the managers of this road expect to have it finished and the cars running through to Cincinnati by the first day of February next.

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REFERENDOS IN NEW YORK:
A. Oakley Hall, District Attorney, of New York City; Henry L. Pierson; D. Randolph Martin, President Ocean Bank.

AGENTS

MAINE.—N. F. Deering, Portland.
NEW HAMPSHIRE.—John S. Harvey, Portsmouth.
VERMONT.—T. W. Bruce, Middlebury.

MASSACHUSETTS.—Harley Williams, Worcester; W. H. Taylor, New Bedford; S. W. Stekney, Lowell; L. Thorndike, Salem; H. S. Noyes, Springfield; J. B. Swan, Nantucket.

CONNECTICUT.—Olas Robinson, New Haven; J. W. Goodwin, Hartford; H. P. Eaton, Norwich; Nathl. Greene, Bridgeport; J. O. Learned, New London.

RHODE ISLAND.—Charles H. Mason, Providence.
NEW YORK.—John Hopper, 110 Broadway, New York City; H. N. Dowd, Albany; J. W. Russell, Rochester; Leonard Wilson, Buffalo; O. S. Moss, Lockport; B. B. Burt, Oswego; J. H. Edmunds, Utica; D. E. Bitterhall, Troy.

PENNSYLVANIA.—Robert Salaton, Philadelphia.
DISTRICT OF COLUMBIA.—Charles Fletcher, Washington.

OHIO.—Charles Bradburn, Cleveland; B. Urner, Cincinnati.
MISSOURI.—Alonso Cutler, St. Louis.

ILLINOIS.—O. N. Holden, Chicago; George W. Woodward, Galena.

KENTUCKY.—James G. Breed, Louisville.
SOUTH CAROLINA.—H. S. Hayden, Charleston; H. E. Nichols, Columbia.

ALABAMA.—R. S. Bunker, Mobile.
MICHIGAN.—Edward A. Lansing, and Philip Furber, Detroit.

WISCONSIN.—Philetus Hale, Milwaukee; L. O. Spoford, Fond du Lac.

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To Railroad Companies.

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New York, July 21st, 1860.

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Papers.—Blank Note and Bond Papers, Whatman's Drawing Papers, all sizes, from Cap to Antiquarian, Tracing Paper and Tracing Cloth, Ruled and Plain Cap Papers, French, English and American Letter Papers, Packet and Commercial Post.

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Cutlery.—Pen, Pocket, Razing, and Desk Knives, Bankers' Shears and Scissors.

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Lawyers' Blanks of every description. Seals, Seal Papers, Brief Paper, Indexes, Wax Matches, Red Tape, Custom House Blanks, Bills of Lading, Ship Receipts, Bills of Exchange, Notes, Drafts and Checks, Interest and Exchange Books.

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AS FOLLOWS:

1. They will name a premium at a low rate upon a policy to cover all the perishable property of any Railroad Corporation.

New York, August 21st, 1866.

The Railroad Companies desiring insurance, will furnish a schedule of all their perishable property, with its value, and state the amount for which they desire the same insured.

2. This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No 49.]

SATURDAY, DECEMBER 6, 1856.

[WHOLE No. 1,077, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, December 6, 1856.

The Chicago, St. Paul and Fond du Lac Railroad.

The recent disposition of the north-eastern land grant, having called attention to this road, it is deemed a favorable time to bring more prominently before the public the merits of the project. In order to do so we shall, at the outset, speak more particularly of that portion of the road which runs from Chicago to Janesville.

This is very nearly an air line, 92 miles in length. The amount of curved line is only 5 per cent of the whole, so that a shorter and more direct line can never be constructed between the two cities. It has been completed and in running order to Janesville since the middle of September. The earnings for October are about \$50,000, already exceeding the estimate of the company's last report.

The country through which it passes from Chicago to Janesville, is of the most beautiful and fertile description. Nowhere, in the whole west, is seen a better improved country, or a more enterprising and intelligent people. In the future, it is to be like a highly cultivated garden, and so salubrious and healthful is the climate that the productions of the soil, abundant as they are, will not keep pace with the increase of population. The time will come when it will appear along the whole of this route, like a continuous village, such as exists in Belgium and other parts of Germany—while the whole country will be studded with farm houses. To predict what the business of a railroad will be through such a country, in all time to come, would be impossible, while a mere

approximation would seem so extravagant to persons unacquainted with it, that we will not attempt it in figures.

That the city of Chicago is to become the commercial metropolis of the north-west, we have no doubt. It is no longer a matter of prediction—it is now a fact. That it is to become the third city in population in the Union, very soon, we feel confident. The intimate connection that must exist between such a metropolis and the country for ninety-two miles in circuit, must be very close, not only in a commercial, but in a social, a religious and literary point of view.

Taking these things into consideration, and then remembering that the people who have settled, and whose descendants are to fill this region of country, are principally from New York and New England, whose brains are teeming with intelligence and enterprise, and no present estimate can realize the commercial and agricultural wealth that must here centre and find a distributing point. Railroads are therefore a necessity and must be built. Fortunate are those which, commencing early, secured their depot grounds and right of way while land was yet cheap and the means of construction low. Such has been the case with the Chicago and Fond du Lac company. Their purchases of depot grounds, if now put in market, would pay a profit of one-fourth of the cost of the road from this city to Chicago. The connections which will be formed with the C. St. Paul and F. road are numerous and important, contributing business throughout almost its entire length. These connections by crossing roads will take the place of the branches which other roads have been obliged to build at immense cost.

The first connection of this sort occurs at Crystal Lake, 42 miles from Chicago, where the Central Wisconsin road, running from Elgin to Jefferson or Watertown, crosses it, passing through the valley of the Fox, and will form a feeder to this road.

At Harvard 62 miles from Chicago, the Kenosha and Rockford Road crosses the C. St. P. and F. road. When this is built it will form the shortest route from Rockford to Chicago, while the travel and freight from Kenosha, to and from the west and south-west, will pass over the Chicago and Fond du Lac road to this junction.

By the completion of the Racine road to Beloit (which crosses the Chicago road at Clinton Junction, 76 miles from Chicago) a route is now opened for Beloit to reach Chicago 14 miles shorter than that by Belvidere, and in addition to this they have a route by railroad from their place to Milwaukee and Madison via Janesville, which is a great accommodation to them, and is beginning to be much used.

At Janesville several roads will concentrate which will become feeders to this road, viz:—the

Milwaukee and Mississippi, running north-westerly to Madison and north-easterly to Milwaukee, and the Southern Wisconsin, running nearly due west.

By a communication signed by the engineer of the Milwaukee and Mississippi road, dated the 29th ult., we learn that that road is nearly completed to Prairie du Chien, and that it will be finished in ample time for the earliest opening of navigation in the spring. This will be an important feeder to our Chicago road. Mr. Brodhead says: "If we consider Chicago as the starting point, we can take a passenger thence over the Chicago and St. Paul railroad to Janesville, and thence over one hundred and forty miles of our road to Prairie du Chien, from eight to ten hours in advance of the route via Dunleith, which advantage is sufficient, in my judgment, to give to at least one hundred and forty miles of our road the great bulk of travel to northern Iowa, Minnesota, St. Paul, and the great upper Mississippi country."

The great value of this trade and travel can be appreciated only by those who have visited the region spoken of. It is now settling more rapidly than any other portion of the United States, by a Yankee population. Their communication with the east will be constant, and it will be made, doubtless, as Mr. Brodhead says, over the Milwaukee and Mississippi and C. F. & St. Paul railroads. The amount will exceed all estimates that have been or will be made of it.

It cannot be doubted that a large amount of traffic and travel will seek the east from Madison and north-west of that point over the Chicago road. The shortest route from Madison to Chicago, by over 50 miles, is through Janesville and over this road—that is sufficient to determine the direction of its trade and travel.

The Southern Wisconsin road is built as a feeder to the Milwaukee road, but it is not doubted that a considerable portion of its travel and some of its freight will pass over the Chicago road. It will be completed from Janesville to Monroe some time next season. We confidently expect to see the Monroe people, as well as those of the lead region generally, passing through our city to Chicago.

North of this the C. St. P. and Fond du Lac road is located through a fine region of country, well settled, and improving very rapidly.—It has the advantage of more timber—and we think, the disadvantage of less prairie; but that being a debatable point, we will say no more about it. The timber will all be wanted on the prairies around and south of us, either in the shape of lumber or of wagons, furniture or firewood, and thus form another source of traffic and transportation.

The first feeder to our road north, is at Water-

town, where the Milwaukee, Watertown, and Columbus road crosses it. As one of the roads to which the north-western land grant was made, must be built from Columbus, this will bring to Watertown an immense trade from the north-west, and Chicago will doubtless take the largest share of it, as this is the nearest route by railroad to the eastern cities.

The Chicago road crosses the La Crosse road near Dodge Center, and five miles further on connects with the Milwaukee and Horicon road, which is being extended on through Ripon and Berlin to Stevens' Point. These two roads are both reaching out into new regions, which are settling with great rapidity. They cannot but furnish considerable business to a road direct to Chicago.

At Fond du Lac the road reaches the head of Lake Winnebago, a body of water some 85 miles in circumference, navigable some seven months in the year, upon which a large and increasing commerce is carried on. The people all around this lake must be presumed to know their own interests best, and they are unanimously in favor of a connection with Chicago, over this road. It was their influence that enabled the Chicago road to succeed in getting control of the north-eastern land grant. A large proportion of their business will center at Fond du Lac and pass over this road. A railroad will soon be built from Sheboygan to Fond du Lac, and there connect with our road, bringing upon it all the railroad travel of that region towards the east. The Lake Shore railroad is not expected to be continued further than Milwaukee, unless Milwaukee builds it herself. Menasha at the lower end of Lake Winnebago is to be connected with Manitowoc by railroad, and the same sentiment prevails there as at Sheboygan.

At Oshkosh the people are quite as favorable to a Chicago connection, as their brethren at the other end of the lake. The city council having already voted to take \$150,000 in stock have recently proposed to increase it to \$200,000. Doubtless this will be done, and the road extended to that flourishing city. Here it will meet the lumber trade descending the Wolf river, and the great commerce which is but just commencing on the Fox river and its improvements. The Wolf river is also navigable for steamboats for about 160 miles north of Oshkosh, and with its tributaries, embraces the finest pine region in Wisconsin. Of the immensity of this trade no one can now form a correct estimate. The demand for lumber on our bare prairies and in our growing cities is as unlimited as the supply, while the pinneries will need our grain, pork, cattle and the manufactures and luxuries of the east and south. No country could be better situated for a profitable and extended commerce, and nowhere can railroads be built with greater ease and facility.

From Oshkosh the road will doubtless pass northwardly towards the State Line, and there connect, and probably consolidate, with a Michigan road which has received a grant of land similar to ours, which will terminate, either at Ontonagon or Marquette, on Lake Superior.

Here it will penetrate the richest copper and iron region in the world, and will come in contact with the largest of our great lakes, whose waters are just beginning to be stirred by the keels of our adventurous seamen.

From the highest point where our lumbermen have penetrated towards lake Superior to the narrow belt of land on the shore of that lake called the "copper regions," little is known of the country: but the rumors brought down by hunters and lumbermen represent it as beautiful and fertile, well watered and timbered with oak and pine on the streams, sugar maple and bass wood. The soil is well adapted to winter wheat, barley, oats, potatoes, the grasses, &c., and what is quite as necessary for the agriculturalist, a good market in the pinneries and in the mineral region. Indeed no better inducements for farming can be found anywhere; for the prices are now and must be for years double that usually received for farm pro-

ducts in any portion of the west. We predict that next season this country will take the crowd of emigration.

We have thus faintly sketched the route of the Chicago, St. Paul & Fond du Lac railroad, from Chicago to lake Superior. It will, when finished, constitute a main trunk line of upwards of 450 miles in length, under one directorship, and control. It will have no branches and will need to build none, as it will have running connections with the numerous roads that cross it from west to east, and will thus be able to put forth all its energies in one direction, a fact that cannot be stated of any other road of equal extent in the whole Union. It is fortunate, also, in having men of ability and railroad experience, at this juncture, to manage its affairs, and thus will be able to command means in abundance to prosecute the great work to an early and successful completion. —*Janessville Gazette.*

Laws in Reference to Railroad Securities in Wisconsin.

We give below a copy of an act which, as will be seen, contains many valuable provisions touching the railroads and the securities of this State.

The people of the State of Wisconsin, represented in Senate and Assembly do enact as follows:

SECTION 1. Any railroad company may borrow such sum or sums of money at such rates of interest and upon such terms, as said company or its board of directors shall authorize and agree upon and may deem necessary or expedient, and may execute one or more trust deeds or mortgages, or both, as occasion may require, on any railroad or railroads constructed in or in process of construction by said company, for the amount or amounts, borrowed or owing by such company, upon such terms and in such manner as such company or its board of directors shall deem expedient, and such company may make such provisions in such trust deed or mortgage for pledging or transferring their railroad track, right of way, depot grounds, rights, privileges, franchises, immunities, machine houses, rolling stock, furniture, tools, implements, appendages and appurtenances belonging to or used in connection with such railroad or railroads, in any manner whatever as security, for any bonds, debts or sums of money that may be secured by such trust deed or mortgage as they shall think proper, and in case of any sale of any railroad or railroads or any part thereof constructed or in process of construction by any railroad company on or by virtue of any trust deed or on foreclosure of any mortgage, thereupon the party or parties acquiring titled under any such sale, and their associates, successors or assigns, shall have and acquire thereby, and shall exercise and enjoy thereafter all and the same rights, privileges, grants, franchises, immunities and advantages in and by said mortgage or trust deed enumerated and conveyed, which belonged to and were enjoyed by the company making such deed or mortgage or contracting such debt so far as the same relate and appertain to that portion of said road or the line thereof mentioned and described in and conveyed by said mortgage or trust deed and no further as fully and absolutely in all respects as the importers, share holders, officers, and agents of such company might or could have done, therefore had not such sale or purchase taken place, such purchaser or purchasers, their associates, successors or assigns may proceed to organize anew and elect directors, distribute and dispose of stock, take the same or another name, and may conduct their business generally under, and in the manner provided in the charter of said railroad company with such variations in manner and form of organization, as their altered circumstances and better convenience may seem to require: Provided however, that no greater or enlarged powers shall be exercised by the new organization, than are conferred by the charter of such company.

Sec. 2. All rolling stock of any railroad company used and employed in connection with its

railroad, shall be, and the same are hereby declared to be fixtures, and all such property—and all additional rights of any depot grounds and other real property acquired subsequently to the execution of any such trust, deed or mortgage, which may be described or provided for therein, shall be subject to the same lien as is created by such trust, deed or mortgage, upon the property there in described, to which such company had title at the time of its execution, every such mortgage or trust deed, upon any railroad in this State, and upon any part thereof—and every discharge or satisfaction thereof, may be recorded in the office of the Secretary of State, in a proper book left for that purpose, and the certificate of such recording endorsed on such mortgage or trust deed, by the Secretary of State—shall be evidence thereof, and the said mortgage or trust deed so recorded shall have the same effect, as if recorded in the several counties through which said road may be built, and the record of such trust deed or mortgage so made as above provided, shall be evidence—and notice of the lien hereby created upon all such subsequently acquired property, to all persons interested to the same extent and with the same effect as the same is now by law made; notice of the time of such trust deed or mortgage upon any to which such railroad had title at the time of its execution.

Sec. 3. It shall and may be lawful for any railroad company annually or oftener as its board of directors shall deem expedient, to set apart and appropriate a sum of money not exceeding fifty per cent of its net earnings or resources in any one year after paying the current expenses of their road, and the interest on its outstanding indebtedness in order to sink, redeem, pay off, cancel or discharge the indebtedness of said company incurred in the construction and equipment of its road; and said sums to set apart shall be annually applied to the payment and discharge of such debts, of said company as shall be due, and to the purchase and redemption of the outstanding evidence of indebtedness of said company, upon the best and most favorable terms, to be held or cancelled by said company, as the board of directors thereof shall deem most, for the interest of said company.

Sec. 4. That all mortgages or trust deeds heretofore executed by any railroad company, are hereby declared to be included within, and subject to the provisions of this act as fully and as effectually as if its provisions had been incorporated in its charter, prior to, and at the time of the execution of such mortgages or trust deed; provided however, that such railroad company shall first accept of the provisions of this act by a resolution of its board of directors and shall cause a copy thereof under the certificate of its Secretary, with the corporate seal thereof attached thereto, to be filed in the office of the Secretary of State; and provided further, that this section shall not be construed in any wise to effect any liens acquired by any person or persons, corporation or body politic upon such subsequently acquired property at any time after the execution of such mortgage, and prior to the filing or the acceptance of the provisions of this act as above provided, in the office of the Secretary of State.

Sec. 5. All suits brought or instituted against any railroad company, created by the laws of this State, except appeals from the awards of commissioners or jurors appointed under its act of incorporation to appraise compensation and damages for property taken, for the use of such corporation, shall be brought in some county through which such railroad runs, and no proceedings shall be had or entertained in any such suit, unless the process shall have been duly served upon the president, secretary, superintendent or general attorney of such corporation.

Sec. 6. In case of any sale of any railroad or of any portion of any railroad with its appurtenances, property, right of way, franchises and privileges, or any of them under, and by virtue of any trust, deed or mortgage now executed, or that may be hereafter executed upon the same, such sale

when made in accordance with the provisions contained in such trust, deed or mortgage, shall be absolute, unless the said company or any subsequent incumbrancer shall within one year from and after the date of such sale, redeem said railroad and property so sold, by paying the amount of the purchase money on such sale and interest thereon, at the rate of twenty per cent per annum, in the manner provided by law, and any such sale shall not be required to be made in accordance with any other law of this State, for the sale of real estate under foreclosure of mortgage or otherwise.

Sec. 7. This act shall be in force and take effect from and after its passage.

JOSHUA STARK,
Speaker pro tem. of the Assembly.
ARTHUR McARTHUR,
Lt. Gov. and Pres't of the Senate.

Approved October 10, 1856.
COLES BASHFORD.

STATE OF WISCONSIN, } [SS.]
Secretary's Office. }

The Secretary of State of the State of Wisconsin, does hereby certify, that the foregoing act has been compared with the original enrolled act deposited in this office, and that the same is a correct and true copy thereof, and of the whole of such original.

In witness whereof the said Secretary of State has hereunto set his hand and affixed the Great Seal of the State, at the Capitol in Madison, this 21st day of November, A. D. 1856.
D. W. JONES,
Secretary of State.

The Grand Trunk Works.

It may not be uninteresting to our readers to recall a little of the early history of the railway movements which proved the germ of the Grand Trunk Railway.

Date of Charter.
Portland to Canada line..... Feb'y 10, 1845.
Montreal to Boundary..... March 17, 1845.

Work commenced by breaking ground at Portland, July 4th, 1846. Sections opened as follows:

	Miles.		Date of Charter.
Portland to Yarmouth.....	12	July 4, 1848	
" Mechanic Falls.....	36	Feb'y 4, 1849	
" Paris.....	47	June 8, 1850	
" Bethel.....	70	March, 1850	
" Gorham.....	91	July 23, 1851	
" Northumberland.....	122	July 12, 1852	
" Island Pond.....	149	Jan. 29, 1853	
Montreal to St. Hyacinthe.....	30	Dec. 27, 1848	
" Richmond.....	72	Oct. 15, 1851	
" Sherbrooke.....	96	Sept. 11, 1852	
" Island Pond.....	143	July 11, 1853	

Opened for business from Montreal to Portland, July 18, 1853..... 292 miles.

Richmond to Quebec.....	96	Decemb. 1854
" St. Thomas.....	41	March, 1855
Montreal to Brockville.....	125	Nov. 19, 1855
" Toronto.....	208	Oct. 27, 1856
Toronto to Stratford.....	88	Oct. 13, 1856

850 miles.

Celebration at Montreal to commemorate opening to Toronto, Nov. 12th and 13th, 1855.
The stone of the first pier of Victoria bridge laid July 22, 1856.

Keokuk and Fort Des Moines Railroad.

The above road is now open and running for five miles. Track laying is pushed rapidly, and the next fifteen miles will be open in December, to Farmington and to Bentonport, 38 miles, in January next, which will complete the first division. It is expected that the road will be finished to Eddyville, Wappello county, ninety-six miles from Keokuk, by January, 1856. This will leave but sixty miles to be completed to Fort Des Moines.

Finances of Arkansas.

The Legislature of Arkansas met at Little Rock on the 3d ultimo. On the same day, Gov. Conway transmitted his message upon the affairs of the State. His Excellency "points with pleasure to the increasing prosperity of the State," and hopes the law-makers will take such measures as will "protect and promote a policy which will gradually ensure the extinguishment of the public debt, and restore the tarnished honor of the State to its original brightness and lustre."

There was in the treasury on the 1st of October last, for the current expenses of the State \$142,154.22 in gold and silver. All of the Arkansas Treasury Warrants ever issued, have been redeemed, except one hundred and ninety-eight dollars not presented for payment.

The whole amount of the Internal Improvement fund, distributed to and drawn by the several counties before the first day of October, 1856, was \$300,615.55; and on that day a balance of this fund remained in the Treasury, in specie, amounting to \$24,043.35.

The entire amount of the Seminary fund distributed to and drawn by the several counties, before the first day of October, 1856, was \$43,224.90; and on that day a balance of this fund, in specie, remained in the Treasury, amounting to \$6,411.74.

The whole amount of the Saline fund distributed to and drawn by the several counties, before the first day of October, 1856, was \$1,727.17; and a balance of this fund, in specie, remaining in the Treasury, on that day, amounting to \$3,520.23.

The Seminary and Saline funds are appropriated, by law, for the benefit of common schools. The message enters at length into the banking affairs of the State, and urges various matters of a local character upon the attention of the law-making power in reference thereto.

Finances of Savannah.

Statement of Property owned by the City.

2,322 shares Central Railroad and Banking Co.	\$232,200
10,000 shares Savannah & Gulf Railroad 60 per cent. paid in.	600,000
2,517 shares Augusta & Waynesboro' Railroad Co.	251,700
2,500 shares South-Western E. R. Co.	250,000
1,058 shares Montgomery & West Point Railroad 105,800	
50 shares Ogeechee Plank road stock ...	5,000
13 shares Bank of the State of Georgia..	1,300
2 bonds of John J. Kelly, for payment of Lot letter E, Hesthote Ward, payable in 2 and 3 years, each of \$1,300 bearing interest	2,600
	\$1,448,800

CITY DOMAIN.

644 lots in 22 Wards, under lease valued at	\$489,902
86 lots in Springfield plantation	19,285
	\$509,187
Lots laid off and valued, not under lease	70,200
Approximate value of land not laid off nor valued—	
20 lots south of Hospital	18,000
20 lots east do.	20,000
9 acres of land of the old Cantonment, reserved for City lots	20,000
Remainder of the Springfield plantation	80,000
Site purchase for Water Works	22,000
	789,887
Water Works valued at	200,000
Total value of stock and domain as above	\$2,887,987

FUNDED DEBT.

Statement of the Funded Debt of the City of Savannah, including all the Bonds issued and outstanding, October 31, 1856.

Amount of Bonds issued.	Interest.	Total.
\$199,000 00 Central R. R. and Banking Co.	\$18,930	
150,000 00 South-west. R. R.	10,600	
200,000 00 Augusta & W'n's-boro' R. R.	14,000	
27,840 00 Springfield plantation	1,948	
100,000 00 Muscogee Branch R. R.	7,000	
* 5,000 00 Ogeechee Plank Road	350	
22,000 00 Purchase land Water Works....	1,540	
5,000 00 Savannah Gas Light Co.	850	
100,000 00 Montgomery and W. P. R. R.	7,000	
200,000 00 Construct'n Water Works	14,000	
68,000 00 Improvement of Savannah river.	4,410	
600,000 00 Savannah & Gulf R. R.	42,000	
		117,028
1,957 50 Corporation Notes probably destroyed.		
1,827 00 City Scrip. outstanding.		
1,675,124 50		\$117,028

BONDS TO BE ISSUED.

400,000 00 Savannah & Gulf R. R.	\$28,000
25,000 00 Improvement Savannah river....	1,750
200,000 00 Main Trunk	14,000
	43,750

2,300,124 50 \$160,778
Amount of Mayor's Notes now running in the Banks of Savannah..... \$13,000
Amount of Bonds, 1839, now outstanding and unredeemed..... 198,000
SAVANNAH, Nov. 20, 1856.

Finances of North Carolina.

The annual Message of the Governor of North Carolina, was transmitted to the Legislature on Tuesday of last week. He states that the public debt amounts to \$5,038,802, principally due in 1883, '4, '5 and '6. The last legislature directed subscriptions to certain works of improvement which will increase this total by the sum of \$1,180,600. The State is further liable for \$800,000 on bonds of certain works of improvement endorsed by it, the interest on which has been regularly paid by the several companies, the bonds themselves being secured by mortgages.

To meet these liabilities the State is in possession of assets as follows:

Railroad stocks	\$4,220,500
Plank roads do.	160,000
Navigation do.	175,000
Bonds drawing interest	60,794
Total	\$4,616,294

A portion only of these stocks are productive, many of the works of improvement in which investments have been made by the State being still unfinished.

The total revenue of the State the last fiscal year amounted to \$803,113. The ordinary expenses of the State Government average \$85,000 per annum, leaving a balance of about \$320,000 applicable to the payment of the interest on the public debt. The interest on the debt already contracted is \$302,328 15—less than the sum applicable to that purpose; but \$70,836 additional will be required when all the subscriptions autho-

ried shall have been made. The Governor recommends additional taxation to meet this liability and to form a sinking fund. In the meantime it is anticipated that some of the works of improvement about completed will commence paying dividend, and to that extent relieve the State from taxation and increase its ability to meet all its engagements.

Railroads in Florida.

We publish the following correspondence for the purpose of showing the condition and prospects of Railways in this State:—

EXECUTIVE CHAMBER, }
Tallahassee, Oct. 10, 1856. }

Sir—Whenever it may suit your convenience, formally to appoint your selecting agent under the recent Act of Congress, donating lands to the several Railroad Companies in Florida, &c., &c., you will please forward such appointment in due form to this Department, when it will give me great pleasure to approve and certify the same to the Commissioner of the General Land Office, under the Seal of the State.

The railroad enterprises of our State are progressing most favorably. The Fernandina and Cedar Key road is located, graded for about fifty miles, and the iron for that portion purchased, the balance being under contract to be finished in about one year. The road from Pensacola to Jacksonville has been located from this point eastward to its terminus, 167 miles. One hundred and twenty-five or thirty miles of this is under contract to responsible parties, and the balance will be given out in November. Between this time and the first of February, it is expected the track-laying will commence in good earnest. The road from Tallahassee to St. Mark is finished, and the steam engine is making his daily trips, giving life and animation to this section of the State.—This, however, to me, is not the most interesting feature in progress. The Engineers are now on the line between this city and the Apalachicola River. The locations have commenced westward, and there is no opposition, however formidable, that can arrest the progress until we reach on your beautiful Bay, and vie with your own great enterprise, in making Pensacola the great City of the South.

With high regard,
Your obedient servant,
JAMES E. BROOME.

Maj W. H. Chase,
Pres. A. & F. R. R.

PENSACOLA, Nov. 4, 1856.

Sir—On my return to this place from Washington, to-day, I had the honor to receive your letter of the 10th ultimo.

My acknowledgements are due to you for the promptness uniformly evinced, to render effective the Act of Congress donating lands to the Alabama and Florida Railroad Company.

We are awaiting the arrival of the person whom we have invited to act as selecting agent of the Company, in order to present his name and appointment in due form, for your approval, and certificate of the same to the Commissioner of the Land Office, under the Seal of the State.

I am truly obliged to you for the interesting statement you have been pleased to make in your letter, of the condition and flattering prospects of the great railroad enterprises of the State, affording as it does bright hopes that the good work of facile intercommunication with every section will be completed at an early day. In return it gives me pleasure to be able to inform you that the construction of the road extending hence to the State line of Alabama is steadily advancing, and that your letter affords the gratifying assurance that, in a few years, the western as well as the eastern section of the State will be brought within easy communication with the metropolis, thereby doing away with all sectional feeling, and promoting the contentment of the people and the best interests of the community.

With the Catholic spirit in which you desire to perform the high duties of your office, and with a

wise legislation, results alike honorable and advantageous to the Government and people cannot fail to be obtained.

I shall have the honor to communicate your letter to our Board of Directors at its next sitting, and to assure you that it will prove acceptable to the Board as it has to me.

I remain, your obedient servant,
WM. H. CHASE,
Pres. A. & F. R. R. Co.

His Exc., James E. Broome, Gov. of Florida,
Tallahassee.

Journal of Railroad Law. STATEMENT IN TIME TABLES.

An interesting and important case has been recently decided in the court of Queen's Bench in England of a somewhat novel character. It was the question of the liability of railroad companies for any failure to carry passengers at the time advertised by them. It also passes upon the question of liability in case the company fail to make good the statement in their advertisements, that the trains will pass over the road within any specified time. It is somewhat singular that such a case should never have gone into the courts before: such instances of failure are frequent, and it is surprising that some one who has experienced pecuniary loss by such representations, should not have tried the question. The decision in the case is novel and startling: true, the damages were trifling, but a case may arise under similar circumstances where great loss result from the failure of the company to run trains as advertised. The same principle which in this case gave damages of a few dollars for the detention of the plaintiff, might give damages for thousands in some peculiar cases under the doctrine here laid down. We believe this is the first decision that touches upon the point; at least we know of no other, nor is any similar case referred to either in the pleadings of counsel or the decision of judges. It will be well to have this case fairly brought to the notice of every railroad company in the land; at present they feel very lightly the responsibility they assume when they advertise the times of running their trains and the times of arrival at the various points upon the route.

The following points are to be held as settled by this case:—first, that the publication of the time tables amounted to a promise on the part of the advertisers, the railway company, that the train would leave the town for its place of destination, as advertised, for the conveyance of any person who regularly applied for a ticket and tendered the proper fare, even though a part of the line belonged to another company, and that the company were liable for a breach of contract; secondly, that by continuing the publication of time tables, after they had ceased to run their trains as advertised, they were also liable to any loss which any individual had sustained caused by a false representation knowingly made, and lastly, that an action would lie for a breach of duty in neglecting to convey to the place advertised.

Denton against The Great Northern Railway Company. 34 Eng. L. R. 154.

From the statement of the facts herein set forth it seems that Denton, a Civil Engineer in London on 25th March, 1855, having business at Peterborough on the morning of the 25th, and

also having important business at Hull in Yorkshire at an early hour on the morning of the 26th consulted the time tables for the month. A train of first and second class carriages was advertised to leave Peterborough for Hull at about twenty minutes past seven o'clock in the evening and to arrive in Hull at about midnight. In the time tables the following notice was contained. "The companies make every exertion that the trains shall be punctual, but the arrival or departure at the time stated will not be guaranteed, nor will the company hold themselves responsible for delay or any consequences arising therefrom."

For the purpose of the due transaction and dispatch of the plaintiff's business at Hull on the morning of the 26th, it was necessary that he should arrive there not later than midnight on the 25th. He made his arrangements on the faith of the time tables and set out sufficiently early to be at Peterborough and transact his business in season to go on in the train advertised to reach Hull at midnight. After transacting his business at Peterborough he presented himself at the ticket office and applied to the clerk for a ticket to Hull, and offered to pay the advertised fare. He was then informed by the clerk that there was no train which left for Hull at that hour. It seems that the passengers on the line had been transferred to the carriages of another company under the clearing system, but that subsequently the train which had run in connection with the defendants' road, had been taken from the road. Thereupon Denton entered the cars at Peterborough and was conveyed as far as Milford Junction where he was obliged to pass the night and was unable to keep his appointment in Hull, and sustained damage thereby estimated at \$5.10s. There was no question as to the damage, but it was denied that the company was in any way liable.

Among the points taken on the one side it was urged that there was first a contract that the train should run, and a breach thereof on the part of the company, the effect of the publication being analogous to that of the publication of an advertisement offering a reward. There was a contract with the plaintiff as soon as he offered to perform the conditions entitling him to be carried as a passenger; secondly it was claimed that the company was liable for the damage caused by a false representation.

In reply to these points it was claimed that there was no binding contract. The publication amounted to an invitation to persons to come and deal with the company and no more. It was merely an offer to contract. Secondly, the defendants are not liable for a false representation, as the damage to the plaintiff was caused by something which happened off their line. The time tables were true when printed and continued so as to defendant's own line.

The decision in this cause was delivered by LORD CAMPBELL, Chief Justice.—I think there was a binding contract and that the case is the same as if the company should publish in express terms, that if customers would come to a particular station at a particular hour, a train would be passing, and every one who tendered his fare should have a ticket and be carried from station to station advertised. We have here both a promise and a good consideration, and that in law

constitutes a contract. It is a conditional promise, and when the condition has been performed it becomes absolute. There is therefore no ground for saying that there was any excuse for not performing it.

With respect to the other ground I can have no doubt. This time table contained what the law calls a false and fraudulent representation, and the defend'ts have thereby made themselves liable. It is an established rule of law that when a false representation is made knowingly, to which another gives credit, and damage is suffered, he has a remedy by action against the person who has made the representation.

In this decision concurred Justices Wightman and Crompton, and judgment was given for the plaintiffs.

At some future time we may review the decision in this cause. The doctrine is new, or rather old principles are applied to new subjects, and it cannot be that the ruling on so important and novel a matter should be acquiesced in without a struggle. It certainly appears to us that however just the decision itself may be in this particular instance, as perhaps a cause of action exists under one head of the complaint, that the rule passes too strongly against advertisers and will not be borne out by future decisions.

The Credit Mobilier.

The Credit Mobilier, according to the provisions of its Charter, is a joint-stock Company, organized for the purpose of developing works of public improvement by consolidating the securities of various enterprises into one common fund. Its capital stock is fixed at 60,000,000 of francs, divided into shares of 500 francs each, payable to bearer. It is authorized to subscribe for or acquire public funds, the shares or bonds of any joint stock company, and more particularly of railways, canals, mining and other public works, now existing, or hereafter to exist; also, to bid for any loan, or for the stock of any kind of public works, and to dispose of and realize the same. It is also authorized to issue its own bonds for an amount equal to its subscriptions and purchases; such bonds may be issued to the extent of ten times its capital, (that is, 600,000,000,) but they shall not have less than forty-five days to run. This privilege has not yet been availed of, the Government having requested them to postpone the proposed issue of 240,000 Bonds (120,000,000 francs) in 1855, in order not to interfere with the forthcoming State Loans, as well as to guard against increased embarrassment in the money market. The aggregate amount of money received in account current, and of Bonds issued having less than a year to run, cannot exceed twice the amount of capital paid in, (that is, not over 120,000,000 francs.) The Company has authority to sell or hypothecate its securities, and to exchange the same for others. It can loan on public funds, shares and bonds, and open credits in account current on these various securities; it can take charge of all collections for account of joint-stock companies, pay their coupons and dividends and make other disbursements for them. It is, however, expressly understood (so runs the statute) that it shall not sell "short" or buy on time. (*Il est expressément entendu que la société ne fera jamais de ventes a découvert, n'a d'achats a prime.*)

The company which was created in November, 1852, has, thus far, issued but three very condensed and incomplete reports, and extensive as are its operations thus far, it states that from its inability to issue bonds at present, it has not yet been able to show the world the full merits of its working.

The reports refer to the operations of the calendar years of 1853, 1854 and 1855, and bear date April, 1854, 1855, 1856. The next report may, therefore, be expected in April, 1857.

Capital p'd in, Dec. 31.....	1853.	1854.	1855.
fr. 56,500,000	60,000,000	60,000,000	
Accounts current..	65,800,000	64,900,000	103,180,000
fr. 122,200,000	124,900,000	163,180,000	
Invested (together with profits):			
Stocks and Bonds on hand, Dec. 31. fr.	37,260,000	57,460,000	132,000,000
Less instalments not due.....			31,000,000
			fr. 101,000,000
Treasury, City of Paris & oth'r notes..	fr. 20,700,000	29,100,000	14,000,000
Railroad & oth'r bonds..	17,100,000	17,200,000	32,500,000
Stock contracts..	28,000,000	21,000,000	37,800,000
fr. 103,000,000	124,760,000	185,300,000	
T't'l purchases thr'gh the y'r. fr.	146,000,000	164,000,000	323,000,000
T't'l sal's thr'gh the y'r.	111,000,000	110,000,000	217,000,000

The particular nature of the purchases and sales is not made public. We do not find in the papers before us any reference to the dividends or total profits except for the year 1855. But the profits on investments and stock transactions at the Bourse alone amounted to 3,618,000 francs in 1853, and 6,207,000 francs in 1854; and the profits of all kinds to 26,000,000 francs in 1855. The profits on the "quick terms" at the Bourse are set down at 2,000,000 francs in 1853, and 3,400,000 in 1854; there is no means of ascertaining those of 1855, the report being silent on the subject. Full particulars are wanting as to the various transaction of the company relating to subscriptions to the capital stock of new companies, to loans to companies already established, and to the negotiations in which the company, without engaging its fund, acts simply as sponsor and intermediary. But the following comprise the chief transactions which have contributed to give eclat to this active corporation: In 1853 it confined itself to previously existing corporations. In 1854 it created the Company of the Grand Hotel du Louvre, in the Rue de Rivoli, with a capital of 24,000,000 francs; the Maritime Company, (of Clippers,) with 30,000,000 francs capital; and the Austrian Railway Company, with a capital of 200,000,000 francs, the shares of which were issued in the beginning of 1855. In 1855 it subscribed for a large portion of the new stock of the Saint Rambert Railway, the Western Railroad of France, (*Ouest*), and the Central Railroad of Switzerland, and the Elro Canal Company—amounts not mentioned.

In 1853 it took a large amount of the Credit Foncier Bonds, and 30,000,000 francs of the Grand Central Railroad Bonds, and 6,000,000 francs of the Vieille Montagne (Zinc) Company's Bonds,—In the same year it sold out all the Credit Foncier Bonds, and most of the Vieille Montagne; the Grand Central Bonds were, most of them, still unsold at the beginning of 1855.

In 1854 it took about 5,500,000 francs of the Eastern Railroad (*Est*) Bonds, and purchased sixteen thousand bonds of the Dole and Salins Railroad Bonds; the amount of these bonds is not mentioned, probably 500 francs each.

In 1855 it guaranteed the sale of 18,000,000 francs of the Western Railroad Stock, (*Ouest*) and of 100,000 Bonds of the Southern Railroads, (*Midi*), representing 28,000,000 francs; and it charge of the loan of 82,000,000 francs for the

Austrian Railway Company, which passed rapidly and almost wholly into the hands of German capitalists.

The company acted as sponsor or agent, in 1854, for the re-formation of the mines of the Loire, and for the fusion of the several omnibus companies in Paris into one joint concern; and in 1855 for the consolidation of the various Parisian gas companies. It has, moreover, been preparing for two years past the consolidation of the Eastern and Southern Salt Works.

It put in a bid for the last government loan of 780,000,000 in behalf of itself and its correspondents, for no less a sum than 625,000,000; but its share was reduced when the bids were adjudicated to 1,281,000 francs of the 3 per cent. Rentes.

At the close of last year it embarked in grand speculations, which remained unsettled at the date of the last balance sheet, but they appear there as yielding an estimated loss of 500,000 francs.

The amounts received in account current are mostly from large companies, and can only be withdrawn, according to express stipulation, to be expended on their respective works. Individuals are also allowed to make deposits, the company agreeing to take charge of their investment and stock speculation.

In order to fully appreciate the power of this vast machine as a speculative agent, it must be borne in mind that the managers and leading depositors are men in the enjoyment of extraordinary resources of wealth and position, and that in their speculative operations at the Bourse, they and the company all act in concert, thus acquiring a power over the market which nothing, in the absence of extraordinary circumstances can hope to resist. This power is made the greater from the large amounts employed by the company in carrying stocks for brokers and outside speculators, in the shape of stock contracts, or as the French call them, *reports*, which contracts mostly mature on the same day in each month. The company are thus enabled to depress the Bourse when they wish to buy, by refusing to make new contracts when settlement day comes, thereby forcing sales on a tight money market; and to promote a rise when they wish to sell, by granting a great increase of facilities to other dealers in stocks.—*N. Y. Daily Times*.

Hempfield Railroad Company.

ELECTION OF DIRECTORS.—The stockholders of the Hempfield Railroad Company held their annual election, at Washington, Pa., last week, and re-elected the old Board of Directors. It was stipulated that the eastern portion of the road, from Washington to Greensburg, should be completed. The Board consists of the following named gentlemen:

C. M. Reed, Wm. McKennan, Washington; James C. Clarke, Greensburg; S. Brady, J. C. Acheson, Thomas Sweeney, Wheeling; Daniel Deal, Philadelphia.

Pittsburg and Connellsville Railroad.

The Connellsville *Enterprise* has an article in reference to the above road, in which it speaks in flattering terms of the prospects and progress of the work. The grading and ballasting is all done, with the exception of the last mile at Turtle Creek, and it will require but a short time to complete that section. The track-layers are now busy at work, and those in the immediate charge of the road will leave nothing undone to facilitate its completion. Between eleven and twelve miles of track is yet to be laid, in order to complete the connection. We understand a double gang of track-layers will soon be put on, which will much hasten the work. When the connection is made it will put an entire new phase on the business of the road. Travel will largely increase, and freight of all descriptions will be shipped in abundance. The coal fields on the route will be opened up, and new life will be given to the whole Youghiogheny Valley.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.....	140	1,882,100	2,073,700	6,019,929	470,847	110,247	6	64	Brunswick and Florida, Ga.	80	800,000	800,000	550,000	In progr.	141,108	8	---
Androscog. & Kennebec.....	54	583,042	1,023,905	2,510,967	309,478	110,247	none	16	South Western.....	92	1,007,496	465,500	1,924,920	253,906	141,108	8	---
Androscog. & Portland.....	54	1,114,726	1,061,236	2,470,600	283,284	112,491	6	64	Tennessee and Alabama.....	90	246,496	---	979,906	---	---	---	---
Port, Saco, & Portsmouth.....	61	1,307,000	110,287	1,496,327	270,214	112,491	6	64	Tennessee and Alabama.....	90	170,921	---	175,240	---	---	---	---
Boston, Orono. & Montreal.....	98	1,308,098	1,080,512	2,771,310	330,221	143,655	2	18	Memphis and Charleston.....	217	2,179,440	1,217,002	4,023,796	811,651	150,572	---	---
Oshesire.....	58	2,086,926	890,313	3,179,087	880,221	134,405	6	74	Mobile and Ohio.....	188	2,588,555	1,802,921	4,584,412	199,882	100,236	---	---
Concord.....	38	1,600,000	8,242	1,608,242	362,897	134,405	2 1/2	80 1/2	Miss. Central.....	188	642,534	---	623,503	---	---	---	---
Northern, N. H.....	32	2,768,400	---	3,014,063	370,829	133,299	2 1/2	80 1/2	N. O., Opelousas & G. W.....	55	2,930,425	671,645	2,657,565	---	---	---	---
Conn't & Passumpsic Riv.....	61	1,048,145	787,608	1,780,063	162,897	55,178	none	4	Vicksburg, Shreveport & Tex.....	111	1,117,500	---	1,077,895	---	---	---	---
Rutland & Burlington.....	120	2,238,376	2,662,390	5,278,498	894,197	---	none	---	East Tennessee and Ga.....	111	1,000,000	1,500,000	2,500,000	---	---	---	---
Vermont Central.....	117	5,000,000	3,550,286	8,550,286	920,110	214,737	6 1/2	5 1/2	East Tennessee and Va.....	116	638,425	928,593	1,033,781	---	---	---	---
Boston and Lowell.....	37	1,890,000	325,635	2,188,595	490,754	140,377	6	77 1/2	Nash and Chattanooga.....	161	2,810,330	1,497,081	3,843,694	310,000	112,177	---	---
Boston and Maine.....	53	4,078,974	150,000	4,178,974	844,426	339,060	6	77 1/2	Govington & Lexington.....	96	1,302,304	2,235,959	3,738,753	264,973	188,694	---	18
Boston and N. Y. Central.....	74	2,240,300	1,518,671	3,463,118	69,917	8,740	none	6 1/2	Lexington and Frankfort.....	29	490,055	158,099	637,071	93,263	48,636	6	---
Boston and Providence.....	55	1,800,000	352,132	2,152,132	658,671	219,689	6 1/2	6 1/2	Lexington and Danville.....	64	694,444	52,734	747,178	---	---	---	---
Boston and Worcester.....	68	4,500,000	655,428	4,855,428	1,008,004	404,481	6 1/2	49 1/2	Louisville and Frankfort.....	65	698,236	699,061	1,899,568	244,014	90,902	6	---
Cape Cod.....	47	681,600	280,598	967,282	112,221	65,627	3	49 1/2	Atlantic & Gt. Western.....	264	866,989	77,294	1,131,221	---	---	---	---
Connecticut River.....	52	1,691,110	273,241	1,802,241	296,563	108,778	5 1/2	43	Beaufort and Ind.....	115	1,881,638	2,025,925	2,852,652	298,293	140,528	none	80
Eastern, Mass.....	60	2,683,400	2,947,737	4,621,137	647,281	305,996	59 1/2	59 1/2	Clev., Col. and Cincln.....	141	4,647,020	122,867	4,813,722	1,290,296	732,066	9	106
Fitchburg.....	57	3,540,000	153,700	3,755,968	681,168	225,071	72	72	Cleveland and Toledo.....	200	2,676,428	2,689,301	8,124,923	783,272	366,985	10	74 1/2
Northern Eastern.....	30	800,242	245,585	988,521	In progr.	---	---	---	Clev. and Mahoning.....	103	---	---	628,633	---	---	---	---
N. Bedford and Taunton.....	21	500,000	---	533,963	195,431	65,538	6 1/2	6 1/2	Clev. and Pittsburg.....	139	2,780,744	3,043,992	8,537,486	881,877	809,518	---	59
Old City and Fall River.....	87	1,016,100	292,650	3,362,949	663,499	295,738	6	84	Cin., Hamilton & Dayton.....	60	2,153,900	1,321,213	2,987,757	508,271	278,012	---	65
Vermont and Mass.....	77	2,232,541	1,033,870	3,266,728	1,569,737	87,513	7	91 1/2	Cin., Wilm. & Zanesville.....	131	1,120,450	1,181,255	2,326,459	---	---	---	12
Western, Mass.....	155	6,150,000	5,966,420	10,496,906	1,569,737	633,013	7	91 1/2	Columbus and Xenia.....	85	1,484,540	149,000	1,451,738	865,898	187,518	10	82
Worcester and Nashua.....	46	1,141,000	205,565	1,361,271	294,780	76,760	2	42	Dayton, Xen. & Belpre.....	63	437,338	422,658	880,826	---	---	---	---
Providence and Worcester.....	43	1,510,020	338,451	1,808,969	311,490	188,067	6 1/2	70	Dayton and Michigan.....	140	1,078,002	398,011	1,186,829	---	---	---	---
Hartford and N. Haven.....	72	2,350,000	939,000	3,313,932	780,012	352,799	2	119 1/2	Dayton and Western.....	35	810,000	500,000	753,769	---	---	---	17
Hart'd, Prov. and Fishkill.....	123	2,008,110	2,030,666	4,000,869	258,685	110,611	none	---	Easton and Hamilton.....	42	454,690	804,489	1,165,135	171,922	65,000	20	---
Housatonic.....	110	2,000,000	414,240	2,481,773	339,160	71,427	none	---	Little Miami.....	65	2,983,921	1,171,785	3,648,172	681,562	356,708	---	89
Naugatuck.....	67	1,031,800	824,244	1,580,728	229,448	93,745	---	---	Mad River and L. Erie.....	206	2,451,550	2,572,982	4,448,061	---	---	---	16
N. York and N. Haven.....	62	3,000,000	2,376,808	5,376,808	884,806	333,577	36	36	Central Ohio.....	183	1,620,927	3,495,076	4,233,443	Recently opened.	---	---	---
N. Haven and N. London.....	50	738,258	784,164	1,450,318	85,007	30,815	none	---	Ohio and Penn.....	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	54
N. London, W. & Palmer.....	66	500,200	1,073,673	1,594,353	124,044	64,430	2 1/2	25	Pittsb'g, Mayevs & Cin.....	57	871,350	31,000	890,935	---	---	---	---
Norwich and Worcester.....	66	1,222,300	773,439	2,597,143	304,236	88,453	2 1/2	25	Sand'y, Mansf. & Newk.....	127	1,860,000	2,206,357	3,642,357	322,958	164,470	none	---
Albany Northern.....	32	439,005	1,025,998	1,840,995	117,716	9,904	---	---	Scioto & Hocking Valley.....	135	408,978	509,060	888,858	---	---	---	---
Black River and Uden.....	36	643,330	317,869	974,323	In progr.	---	---	---	Spring Mt. Vernon & P.....	113	1,000,000	960,000	---	---	---	---	---
Buffalo, Conn. and N. Y.....	100	1,487,871	1,601,183	2,819,099	172,478	66,235	none	---	Tol. Wabash & St. Louis.....	242	2,500,000	4,890,000	---	---	---	---	---
Buffalo and N. Y. City.....	92	738,439	2,537,849	3,401,869	288,892	81,896	none	---	Cin., Log. and Chicago.....	245	4,196,079	1,008,126	3,080,423	---	---	---	---
Buffalo and St. Line.....	99	1,300,000	1,040,000	2,494,364	679,750	358,763	10	---	Evansville & Crawfordsv.....	109	708,945	1,177,556	1,844,541	127,400	64,552	---	---
Canandaigua and Elmira.....	47	434,111	922,398	1,275,799	174,096	69,600	---	---	Ind. and Cincinnati.....	88	1,218,723	1,442,859	2,178,451	555,012	193,142	7	60
Canandaigua & Niagara F's.....	91	1,815,000	2,279,854	4,495,832	135,433	48,649	none	---	Indiana Central.....	66	611,400	1,261,179	1,907,011	850,176	134,875	---	45
Oswego & Susquehanna.....	35	687,000	506,689	1,193,689	182,077	60,946	27 1/2	27 1/2	Ind., Clev. & Pittsburg.....	83	828,528	1,099,400	1,881,226	228,068	93,010	none	---
Hudson River.....	144	3,768,468	9,250,362	12,737,899	1,812,067	606,940	none	---	Jeffersonville.....	97	614,252	694,000	---	---	---	---	---
Long Island.....	96	1,876,148	668,949	2,565,988	801,798	116,462	26	26	Madison and Indianapolis.....	87	1,647,700	1,336,816	1,206,000	295,146	112,880	none	---
New York Central.....	594	24,164,960	14,462,742	32,622,913	5,643,551	1,162,125	8 1/2	8 1/2	New Albany and Salem.....	298	2,534,121	6,281,948	6,643,189	645,827	871,402	none	---
New York and Erie.....	464	10,023,958	25,126,669	33,429,431	5,488,993	2,627,118	6 1/2	6 1/2	Penn and Indianapolis.....	73	---	888,814	---	---	---	---	16 1/2
New York and Harlem.....	138	5,717,100	4,098,769	9,758,203	1,586,577	234,120	16 1/2	16 1/2	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,512	169,702	10	---
Northern, N. Y.....	118	3,033,022	4,406,874	6,470,714	300,168	135,764	none	---	Chicago and Rock Is'd.....	182	3,141,500	2,387,156	5,214,152	1,077,512	---	98 1/2	---
Oswego and Syracuse.....	34	399,000	216,681	722,689	126,540	89,992	3 1/2	3 1/2	Chicago and St. Louis.....	223	---	---	---	---	---	---	---
Pottsdam and Watertown.....	29	467,200	294,189	749,683	In progr.	---	---	---	Chicago, Burl. and Quincy.....	58	1,439,100	1,654,736	2,584,622	722,890	379,821	20	---
Rensselaer & Saratoga.....	25	610,000	140,000	896,423	241,449	82,900	7	7	Central Military Tract.....	91	1,202,500	2,133,060	2,920,241	471,399	219,588	---	---
Saratoga and Whitehall.....	48	500,000	396,000	719,000	71,909	21,089	none	---	Chic. St. Paul & F'd du Lac.....	178	2,300,000	1,326,000	3,626,000	---	---	---	---
Saratoga & Binghamton.....	80	768,589	1,678,804	2,272,777	189,454	22,608	none	---	Galena and Chicago.....	259	6,441,000	3,318,693	7,742,614	2,815,786	1,102,042	23	118 1/2
Troy and Boston.....	27	487,530	737,079	1,164,363	156,363	55,184	---	---	Illinois Central.....	627	2,271,060	19,416,392	20,374,440	1,682,118	627,962	---	116 1/2
Watertown and Rome.....	97	1,370,378	700,979	2,068,063	404,574	172,474	3 1/2	76	Peoria and Okawva.....	98	659,898	818,454	1,383,342	---	---	---	---
Belvidere Delaware.....	64	1,000,000	1,619,000	2,619,000	161,358	75,534	none	---	Ohio & Miss. (Wat. Div.).....	147	1,780,236	8,292,403	4,870,556	Recently opened.	---	---	---
Oamden and Amboy.....	94	3,000,000	11,407,200	6,838,623	1,071,127	961,941	12	124	Terre Haute and Alton.....	178	2,291,420	1,256,000	3,587,424	---	---	---	---
Oamden and Atlantic.....	80	369,320	1,622,181	1,729,642	122,417	50,080	none	---	Detroit and Milwaukee.....	185	588,000	1,128,964	1,966,969	---	---	---	---
New Jersey.....	30	4,892,850	600,000	4,310,011	861,514	500,747	10	122	Mich. Central.....	282	6,032,444	5,999,012	10,688,156	2,215,288	879,656	10	98 1/2
New Jersey Central.....	63	2,000,000	2,296,178	6,883,149	893,728	171,603	---	---	Mich. South'n & N. Ind.....	476	6,928,300	6,319,224	11,645,208	2,410,000	878,000	10	36 1/2
Morris and Essex.....	58	1,187,505	375,000	1,638,550	229,341	90,267	6	---	Green Bay, Mil. & Ch.....	156	764,074	442,728	1,193,768	---	---	---	---
Allegany Valley.....	44	1,337,967	342,564	1,968,317	Recently opened.	---	---	---	Milwaukee and Miss.....	106	1,826,428	2,467,889	3,676,797	691,843	417,443	17	75 1/2
Oatway, W. & Erie.....	63	1,700,000	1,940,000	3,640,000	219,263	62,450	---	---	Milwaukee & Water's.....	72	364,361	132,000	614,238	---	---	---	---

Railroad Bonds.

Names of Companies. (The following quotations are ex-interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$388,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85 1/2	
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	97	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	80	
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	77 1/2	
Do.	800,000	2d do. Inconvertible	7	March, Sept.	"	1865	72	77
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage Inconvertible	7	20 Jan. 20 July	"	1867	90	
Do. do.	455,000	2d do. do.	7	May, Novemb.	"	1880	82	84
Cincinnati and Marietta	2,600,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	72 1/2	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	80	
Cleveland, Painesville, and Ashtabula	567,000	Do. Inconvertible	7	Feb'y, August	"	1861	91	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	98	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1878	75	80
Cleveland and Toledo	525,000	Do. Inconvertible	7	Feb'y, August	"	1863	88	40
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	65	30
Do. do.	1,200,000	Do. Inconvertible	7	April, October	"	1862-72	65	50
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	210
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	90	21
Fort Wayne and Chicago	1,250,000	Do. conv. till 1868	7	Jan'y, July	"	1873	80	80
Gaens and Chicago	2,000,000	Do. Inconvertible	7	Feb'y, August	"	1863	93	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	90	90
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	92	94
Jeffersonville	300,000	Do. 2d sec. Inconv.	7	April, October	"	1873	75	
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	78	81
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	87 1/2
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	69 1/2	71
Little Miami	1,500,000	Do. Inconvertible	6 1/2	May, 2 Nov.	"	1863	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100	100
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869	100	100
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1862	95	
Do. do.	650,000	Do. 2d do. 1868	8	April, October	"	1863	93	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	85	87
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1868	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	92 1/2	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	72 1/2	77 1/2
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96 1/2	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875	82 1/2	
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	96	
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	80	
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	72	73

Names of Companies. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	83	83 1/2
Do. do.	1,128,500	Do.	6	Jan'y, July	Balt.	1875	86	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	95	95 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	102	104
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	97	
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94	94 1/2
Do. do.	4,000,000	Not conv. Sink Fund \$420,000	7	Feb'y, August	"	1875	93	94
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	88 1/2	86
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	85 1/2	90
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	86	87
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	63 1/2	64
Illinois Central	17,000,000	Mortgage, Inconvertible	7	April, October	"	1875	91 1/2	91 1/2
Do. (Free Land)	3,000,000	Mortgage 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	103	105
Michigan Southern	1,000,000	1st mortgage, Inconvertible	7	May, Novemb.	"	1860	88	94
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	79	80
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	82 1/2	86
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	91	
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	85 1/2	88 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	85 1/2	86
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	16 June, 15 Dec	"	1864	102	103
Panama, 1st issue	900,000	Convertible till 1866	7	Jan'y, July	"	1866		100
Do. 2d do.	1,478,000	Do. till 1868	7	Jan'y, July	"	1866		100
Reading, issued 1843	1,573,000	Mortgage, Inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,800,000	Do. convertible	6	Jan'y, July	"	1860	90	
Do. do. 1849	3,468,000	Do. Inconvertible	6	April, October	"	1870	81	82

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES.	Int't payable.	Off'd.	Asked.
New York 7 per ct. 1857	Feb'y, 100	102		Milwaukee 7 per ct. coup. X	Divers	76 1/2	80
Do. 5 do. 1858-60	May, 93	95		New Orleans, 6 per ct. ep. R.R. X	Do.	72	75
Do. 5 do. 1870-75	August, 89	91 1/2		N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	89	85
Do. 5 do. 1880	November, 89	91 1/2		Philadelphia, 6 per ct. 1876-98	Jan'y, July	92	92 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August, 99	102		Pittsburgh, 6 per ct. coup. X	Divers	74	
Albany, 6 per ct. coup. X	Jan'y, July, 76			Quincy, 8 per ct. coup. 1868 X	Jan'y, July		
Baltimore, 6 per ct. 1870-90	Quarterly, 94	97 1/2		Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	
Boston, 5 per ct. coup. X	April, October, 95	98		Rochester, 6 per ct. coup. X	Divers	96 1/2	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July, 99 1/2	100 1/2		St. Louis, 6 per ct. coup. Long X	Do.	77 1/2	78 1/2
Cleveland, 7 per ct. ep. W.W. 1878 X	Do. do., 101			Do. do. Municipal X	Do.	79 1/2	80 1/2
Cincinnati, 6 per ct. coup. X	Divers, 89	90 1/2		Sacramento, 10 per ct. ep. 1862-74 X	Do.	72 1/2	
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July, 87 1/2	89 1/2		S. Francisco, 7 per ct. ep. 1866, pay N.Y. X	May, Novemb.	80	
Do. 7 per ct. coup. 1880 X	Jan'y, July, 99	100		Do. 10 per ct. ep. 1871 X	Do.	90	
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August, 101	102 1/2		Do. 10 per ct. pay N.Y. X	Jan'y, July	85	
Urbana, 8 per ct. ep. Long X	March, Sept., 91			Do. 6 per ct. ep. N.Y. 1874 X	Do.	85	
Jersey City, 6 per ct. ep. W.W. 1877 X	Jan'y, July, 94	95		Wabash, 6 per ct. coup. X	Divers	87 1/2	
Louisville, 6 per ct. ep. 1880-83 X	Divers, 80			Do. 6 per ct. ep. Min. 1874 X	March, Sept.,	81 1/2	
Memphis, 6 per ct. coup. 1882 X	Jan'y, July, 70			Zanesville, 7 do. X	April, October	85	100

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending November 26, 1866.

BONDS.		Per ct.
\$5,000 Cov. & Lex., 7 per cent, 2d Mortg.	65	(4 int)
4,000 Little Miami, 6 per cent, 1st Mortg.	80	
3,000 Ohio and Miss. 7 per cent, 2d Mortgage.	49	
2,000 Do. do. do. 1st do.	70	
1,000 Hamilton Co. Ohio, 6 per cent, due 1881.	90	
3,000 Cin. Cambridge and Chicago, 10 per ct.		
Real Estate	30	
1,000 Ind. and Cin. 7 per ct. 2d Mortg.	80	
1,000 Indiana Central, 10 per ct.	98	
750 Ind. and Cin. 7 per ct. Dividend.	70	
500 Cov. & Lex., 10 per cent Income.	60	

STOCKS.

100 Shares Ohio and Mississippi	8	
200 " Do. do.	5 1/2	
200 " Do. do. 60d.	6 1/2	
200 " Cincinnati and Chicago	3	
100 " Indianapolis & Cincinnati	67 1/2	
40 " " 10d.	68	
30 " " 10d.	68	
50 " Cin. Ham. and Dayton, 39d.	65	
210 " Little Miami, 10d.	90	
60 " Do do. cash	90	
21 " Indiana Central	50	
80 " Cincinnati, Harrison and Indianapolis.	8	
48 " Hillsborough and Cincinnati.	14	

By KIRK & CHEEVER.

For the week ending November 26, 1866.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2d Mort. 7 per ct.	65	
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	49	
Indianap. & Cin. 2d Mort. 7 per ct.	79	
Cin. Ham. and Dayton, 2d Mort. 7 per ct.	83	
Hillsboro' and Cin. 7 per cent, 1st Mortg.	47 1/2	
Covington & Lexington, 10 per ct Income	66	
Indianapolis and Cincinnati Dividend	70	
Columbus and Xenia Dividend, due Jan'y 1, 1861.	68	
Little Miami, Dividend Scrip, issued June, 1865	50 1/2	

STOCKS.

Bellefontaine and Indiana, 25.—Cin., Ham. and Dayton, 65.—Col. and Xenia, 85.—Cincinnati, Ohio, 3 1/2.—Covington & Lexington, 15.—Dayton & Western, 17.—Eaton and Hamilton, 20.—Indiana Central, 48.—Indianapolis and Cincinnati, 68.—Little Miami, 90.—Mad River & Lake Erie, 18.—Marietta and Cincinnati, 14.—Ohio and Mississippi, 6 1/2.—Hillsboro' and Cincinnati, 14.—Peru and Indianapolis, 8.—Cincinnati, Wilmington and Zanesville, 10.—Cin., Harr., & Indianapolis, 10.	
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Extract from De Coppet & Co.'s Money's Circular for the European Steamer of the 26th inst.

[TRANSLATED.]

NEW YORK, Monday, Dec. 1, 1866.

Since our advices of the 25th November, our market has offered no particular feature to notice. With a steady but moderate movement the fluctuations have been small. Our Money Market also has not experienced any material change, although for the last two days a slightly-increased demand for Money might have been noticed, being probably the natural sympathy resulting from a decidedly brisk demand in Boston, Philadelphia and Baltimore. This has, however, in no way affected stocks, and to-day there is increased animation with a decidedly upward tendency. State Stocks.—We notice transactions in a greater number of Stocks of this class than usual. The principal sales were of Tennessee 6 per cent. and Virginia 6s at well maintained prices; of Missouri 6s at a rise of 1 per cent; Indiana State 5s dealt in lesser amounts, have advanced 1 per cent., and California 7s, 1875, 4 per cent. City and County Bonds.—There have been sales of St. Louis 7s, Milwaukee 7s and Cincinnati 6s, without variation of prices; also, of San Francisco 6s, held at an advance of 2 1/2 per cent. Railroad Bonds transacted at the Stock Exchange have not been active, and fluctuations small, except a rise of 6 per cent., in Illinois Free land, with privilege; Illinois Central Construction advancing 1/2; Erie 7s, 1871, and Hudson 8d Mortgage without material change in prices, and New York Central 6s at an advance of 1/2, constituted the leading transactions. At private sale we notice the negotiation of \$350,000 Bonds of the Milwaukee and Mississippi Railroad, 8 per cent, due 1880, and convertible in Stock till 1861. These Bonds are guaranteed by a 1st Mortgage on 36 miles of road from Janesville to Munroe, called the Wisconsin Southern Branch, and on all the rolling stock. They provide for the redemption of this loan they will be an annual deposit in the sinking fund 6 per cent, rendered

peremptory under pain of foreclosure, by the terms of the mortgage deed. We shall, in future, quote this new emission of Bonds, and shall furnish next week some details upon this Road. Railroad Stocks have been fairly active, but the market offers no special feature to notice, except that the last day there is an increased animation, and a more marked advance in prices. The principal business was in Erie, at a rise of $\frac{3}{4}$; in Cleveland and Toledo, at a rise of 2; in New York Central, at a rise of $\frac{3}{4}$; in Chicago and Rock Island, at a rise of 1; in Illinois Central, at a decline of $\frac{1}{2}$; Michigan Southern, at a rise of $1\frac{1}{4}$; Michigan Central, of 1; La Crosse and Milwaukee, of 3; Milwaukee and Mississippi, of $1\frac{1}{2}$ per cent. Money, without being difficult to obtain, was in rather better demand at the end of the week—7 per cent. for loans on call; business paper, $9\frac{1}{2}$ per cent. DE COPPET & CO.

The Monetary Crisis in France.

There are characteristics in the present financial crisis which naturally suggest the inefficiency of existing institutions of circulation and credit, as well as the necessity of their further transformation. We are now suffering at once from the exportation of one of the precious metals and from a deficiency in the circulating medium. The following succinct statement of facts will expose the urgency of a reform in our monetary system. Last year the crisis was due to two causes—a bad harvest and a multiplicity of public loans. Overtaken by a scarcity of food, the States of Europe competed for specie to purchase grain in Sicily, Egypt and the United States. The war also necessitated large loans, and capital was attracted from all quarters by heavy premiums. The banks, to retain the precious metals, had recourse to restrictive measures; discounts rose and securities fell. The crisis of this year is generally attributed to a cause more radical—more profound. To one organic—not accidental. The number of enterprises is out of all proportion to the circulating medium, or, in other words, the development of affairs has outstripped the capabilities of credit institutions. Amongst the countries which have imitated France in the mania for speculation Germany is pre-eminent. There is scarcely an insignificant town in the confederation that has not lately established a bank or Credit Mobilier. Added to the demand for capital caused by the establishment of these societies, the old established banks strive to retain the specie to cover the immense paper emissions of governments, railways, and the banks themselves. According to M. Horn, the fiduciary circulation in Germany amounts to £59,611,582, whilst in France it is not more than £24,800,000, in the United States £36,000,000, and in England £37,480,000. From the above amount, which bears no proportion to the commercial activity nor metallic resources of the country, the demand for the precious metals can be easily conceived. The fabulous sums lately subscribed to government loans has excited much astonishment. To the last loan of the French government for 750,000,000 f. was subscribed the enormous sum of three milliards 653 millions. But what is that compared with the amounts subscribed for the smallest bank project in Germany. Two months ago a bank was established in Hamburg; 15 millions of marks was demanded, and the public subscribed 600 millions. A few days afterwards another bank was established in the same town. A subscription was opened for 8 millions of marks, and 1,595 millions was inscribed for on the registers. The development of public undertakings and the multiplication of bank projects in Germany has thrown there a mass of *titres de credit* on the market out of all proportion to the metallic circulation. Hence the singular phenomenon which confounds the economists of a rise in discounts following an increase in credit establishments.

In calculating the sums necessary to complete industrial undertakings either in Austria, Germany, Switzerland, Spain or Sardinia, they must amount to more than one milliard 500 million francs, to be provided for within three or four years. The impossibility of these States making

provision for such sums oblige them to have recourse to other countries less inundated with paper and better supplied with specie. France and England have been more particularly applied to. But both these countries are themselves more or less embarrassed from like causes, and the banks of England and France have been forced to add new rigors to the restrictions of last year. In 1853 it was calculated that the public wealth of France was about twenty milliards, represented by sixteen milliards (six hundred millions) in various securities, and three milliards in specie. From a table published in a recent work by M. Tedesco, it will be seen that an increase of nineteen and a half milliards has since taken place in the securities alluded to. These paper securities, then, must now amount to more than twenty-five milliards—that is to say, seven times the amount of the metallic currency. It may be said that all these securities are not made payable to the bearer, and that they do not represent a floating, but a funded debt, consequently the disproportion between them and the metallic circulation is not of the importance it would be were they immediately convertible. We would reply to this remark, that what constitutes a portion of their value is their convertibility. If their realization is difficult, they instantly fall in value, so that their proportion to the metallic currency can in no case be immaterial. Let us refer, however, to strictly convertible securities—to bank notes, for instance. According to Mr. Hibner, the note circulation not covered had increased in Europe from 1846 to 1854 by 1,759,591,545 francs, i. e. nearly 87 per cent. Who would prove that during the same period, in spite of our Australian and Californian remittances, the increase of specie had followed the same progression? Let us see what has passed in France. Our metallic circulation was in 1848 about three milliards, nearly all in silver. Since this epoch, the silver, on account of the premium it has borne, has been in part replaced by gold, and moreover, our metallic circulation has increased according to recent calculations, about 250 millions. The new resources in specie furnished by the mines are in the proportion, then, of 1 to 12, but the demand for capital by the increased development of affairs has in the same period more than doubled. It is credit that has to fill this void, and hence the increase in the paper circulation, while specie has diminished. As a climax to the difficulty, at the same time that the equilibrium between specie and paper is disturbed in all parts of Europe, a revolution has taken place in the monetary system of the western nations by the disappearance of silver, and its substitution of gold. This does not take place without giving rise to serious perturbations. Let it be called to mind what passed three centuries ago at the epoch of the discovery of the mines of Potosi. A scarcity is produced in the metallic circulation at the moment when most of the western nations were endeavoring to re-construct their monetary system, shaken by the efflux of silver and the invasion of gold. The several difficulties which are born of an exclusive employment of the precious metals in exchanges manifest themselves all at once. Hence the duration and intensity of the crisis. The crisis, in a word, is the competition of all the States of Europe for the precious metals. All have entered into industrial undertakings, all demand credit and resources, and at the decisive moment the mechanism of our system of circulation fails us, and proves its insufficiency. It is found that gold is not the last term of civilization, and that nations in progress must discover some other instrument of circulation and exchange, at the peril of retrograding from crisis to crisis to their point of departure.—*Paris La Press, Nov. 13.*

Kenosha and Rockford Railroad.

The books of subscription for the Kenosha and Rockford Railroad have been opened, and the following named gentleman appointed Directors: Wm. B. Ogden, of Chicago; John Bradley, of Janesville, Wis.; E. G. Ayre, of Harvard, Ill.; Josiah Bond and Samuel Hale, of Kenosha, Wis.;

John A. Cornwell, of Caladonia, Ill.; Thomas Paul, of Chemung, Ill.; John M. Capron, of Alden, Ill.; R. P. Lane, G. Haskell, Anson S. Miller, C. H. Safford, Seely Perry, Jason Marsh, D. G. Penfield and C. Briggs, Rockford, Ill.; Elisha A. Kirk, of Guilford, Ill.

American Railroad Journal.

Saturday, December 6, 1856.

Chicago, St. Paul and Fond du Lac Railroad.

We give in another column an interesting notice of this road from a Wisconsin Journal.

The line of this road is composed of three divisions—the first extending from Chicago to Janesville; the second from Janesville, following up the valley of Rock river, to Fond du Lac on Lake Winnebago, and the third from Fond du Lac to Lake Superior.

The first division of 92 miles is completed and in successful operation. Its route is not inferior to that of any road running into Chicago. Its direction is coincident with the great route of the emigration to the largest body of unoccupied land now open for settlement in Minnesota and Northern Iowa. This division will be carried in a north-westerly direction to the Mississippi river, by the Milwaukee and Mississippi and the Milwaukee and La Crosse railroads. It will be the great north-western arm of Chicago, through which that city will be connected with the best section tributary to her. The first division also traverses a very excellent portion of Northern Illinois inferior to none in its ability to sustain a railroad, as is shown by the receipts of the first month after the road went into operation which exceeded \$50,000.

The second division of the road follows up the valley of the Rock river, which is admitted to be the most productive portion of Wisconsin, as it is the best cultivated and most densely settled. In the absence of coal, water power possesses very great value in Wisconsin. This is furnished in abundance by the Rock river. Its whole course is consequently studded with thriving villages which are rapidly swelling into the dimensions of cities of considerable importance. These attract to themselves the trade of a wide belt of country on both sides of the river. The Valley division of the road will thus meet on its line the trade of a wide area of country, which will supply a lucrative local traffic, as well as a heavy one in direction of Chicago. A very lucrative source of traffic will be the lumber trade. Through Lake Winnebago and its tributaries, the central and most flourishing portions of Wisconsin are to be supplied from the extensive forests of the northern portion of the State. Some idea may be formed of the probable extent of this trade from the enormous amount of lumber received at Chicago, which exceeded 400,000,000 feet the past year.

Of this division, 20 miles on the northern end, extending from Fond du Lac to the line of the Milwaukee and Lacrosse Railroad, is built, and has been for some time in operation, the company have recently taken measures to provide the money from local subscriptions, and otherwise, to build the portion of the road from Janesville to the line of the Lacrosse road. A large amount of work has been done upon this portion of the line, and the

whole will undoubtedly be completed in all of next year.

At Fond du Lac, the *third* or northern division commences. It is this portion of the line that has secured the recent grant of land by Congress, for a railroad to Lake Superior. This grant, by a recent act of the State legislature, and the proceedings thereupon, passed to the hands of the Chicago, St. Paul and Fond du Lac Railroad Company. It is intended that it shall inure to the benefit of the whole line from Chicago to Lake Superior. Of this division, 40 miles are already in progress from means furnished by the people upon its line. This section is well settled, and is abundantly able to supply the means for building the road. Upon the route are several important and rapidly growing towns lying upon Lake Winnebago and Fox River.

After passing Lake Winnebago, the line of the road bears north-west toward Wolf river, the valley of which it follows to its source. Soon after reaching this river, the line enters upon the public lands. The length of the northern division being about 250 miles, it will be entitled to about 1,000,000 of acres of land. It is as yet undetermined whether the road will run directly to Lake Superior, striking it at two points, Marquette and Ontonagon (for the construction of which forks, or branches, provision has been made by land grants to the State of Michigan), or whether the road will incline further west, striking Lake Superior somewhere near La Pointe. Whatever route may be adopted, the lands will supply ample means for the construction of that portion of the road lying at present through an uninhabited country. The total cost of 250 miles will not exceed \$30,000 per mile; or \$7,500,000. The lands, at seven dollars per acre, will very nearly produce this amount. With a railroad traversing them, they will undoubtedly sell readily for a larger sum, and will provide beyond contingency for the completion of the road.

The northern division will constitute the shortest and best route to the mining districts of Lake Superior, which have already assumed a very great importance. The Iron and Copper mines must form the nucleus of a very large population, which must for a long time be sustained by the Agricultural districts lying west of Lake Michigan. There can be no doubt that the south shore of Lake Superior will become the great theatre for mining and manufacturing for the west. The commerce of this great inland sea must be immense. It can only be reached by a railroad lying to the west of Lake Michigan. For such a connection the above road offers the best, because the shortest route between it and the great cities of the west.

The above company has a line of road which appears to be nearly equally valuable in all its parts, though each depending upon some peculiar advantage. We see no reason why the whole road should not be carried steadily forward to completion. The affairs of the company are fortunately in the hands of competent persons, possessing in a good degree the public confidence.

At a meeting of the stockholders, held at Chicago on the 12th ult., the following Board of Directors were elected for the year ensuing, viz:—

William B. Ogden, John P. Chapin, Henry Smith and Mahlon D. Ogden, of Chicago, Ill.;

Nelson K. Wheeler, Deposit, Del. Co., N. Y.; William C. Langley and Charles Butler, N. Y.; William Jarvis, Middletown, Conn.; James W. Hickok Burlington, Vt.; John Bradley, Joseph A. Wood and John J. R. Pease, Janesville, Wis.; A. G. Butler and M. C. Darling, Fond du Lac, Wis.; Joel H. Johnson, Woodstock, Ill.

The Board subsequently elected the following officers, viz.:

WILLIAM B. OGDEN, *President*.

JAMES W. HICKOK and NELSON K. WHEELER, *Vice Presidents*.

CHARLES BUTLER, *Treasurer*.

J. W. CURRIER, *Secretary*.

J. B. REDFIELD, *Assistant Sec'y and Treas'r*.

SAMUEL F. JOHNSON, *Chief Engineer and Sup't*.

To What Do Our People Owe Their Sound Financial Condition?

We copy elsewhere an article from *La Presse*, of Paris, which presents very clearly the reason of the financial troubles which prevail on the continent of Europe, and which are very sensibly affecting the money markets of Great Britain and the United States.

Against all rules of sound sense in monetary matters, it has been attempted to provide the means for the numerous and costly enterprises which have been undertaken in France and the German States, by increasing the volume of the currency in these countries. In a healthy condition of trade, paper money represents capital, because it is received in exchange for some article sold, of equal value. In such case it may be safely treated as capital. But the moment the proper relation between the paper currency, and the business operations of a country, are exceeded, an element of disturbance of greater or less gravity, is introduced into affairs. A fiction becomes the basis of enterprises or undertakings which, as a necessary consequence, must end disastrously.

Business paper is certain to take care of the issues made upon it. So long as none other is discounted, banking cannot be overdone. Its issues indicate truly the amount of the commercial transactions that are taking place. But any excess stimulates enterprises, or undertakings not called for by any corresponding want, or in advance of the ability of the people engaging in, to support them; and the inevitable result is a disaster proportioned to the magnitude of the disturbing cause.

On the continent the burden of carrying out the enterprises undertaken, is thrown, in part, upon the currency. As this has been expanded in an extraordinary degree, extraordinary means have to be resorted to, to sustain it. Hence the continued drain of gold from Great Britain and the United States, far in excess of any legitimate demand arising out of a balance of trade. The continental institutions are compelled to purchase the precious metals at prices exceeding their value, as a means of present support. What is to be the final result remains yet to be seen. But this thing is certain that the penalty paid will be exactly proportioned to the wrong committed. Nothing in business affairs is so dangerous and is so certain to be followed by disastrous results as tampering with the currency.

In the United States, fortunately, our immense system of public works has been constructed,

without interfering in any degree with the currency. We think it may be stated, that in no instances have our banks loaned their capital to railroads. They have uniformly and steadily refused to do so. The result has been that the currency has remained uniform in volume, increasing only with the growing wants of the country. With the commercial and manufacturing classes money has been sufficiently abundant during the periods of the greatest stringency for railroads. All our great interests have remained sound, notwithstanding the enormous expenditures upon public works. These were sustained by the accumulated capital of the country, not by the creation of a currency designed to perform the functions of capital. The country, consequently, finds its works in a great measure completed, and all its interests, particularly its monetary, in the soundest and most normal condition. At the very time that it would be supposed that our people would be the most exhausted, they are found to be the strongest, and never so completely independent of the embarrassments afflicting other countries. Such a state of things is certainly remarkable. It shows the most wonderful progress to be entirely consistent with genuine health in all the departments of business and trade. Our salvation can only be ascribed to our well regulated currency, which has never been allowed to exceed its just limits. Had it, as in Europe, been expanded and made the basis of immense expenditures, there can be no doubt that the most disastrous results would have followed. So long as the currency is sound, every other material interest must remain so. When well regulated, it is the great conservative principle underlying all the operations of society. But when mismanaged, or tampered with, it is the most efficient instrument of ruin.

The London Times Hoax.

We copy in another column, an official contradiction of the ridiculous hoax which recently appeared in the *London Times* in reference to the Georgia Central Railroad.

On Alarm Signals at Crossings.

By T. D. STETSON, *Mech. Eng.*

As a rule without exception, every improvement which proposes to reduce to certainty and to mathematical regularity any of the details of railroad operations, deserves careful attention. A large number of men cannot in any business be inspired each with the zeal and diligence of an owner, and in the working of a railroad, this fact too often becomes painfully felt, both in the disregard of minor economies as in the use of wood, oil, &c., and in the absence of real, earnest care, to avoid more serious losses. The spirit which in some individuals has found delight in driving the pilot of an engine into the bowels of terrified animals on the track is, fortunately, not the one generally pervading the hearts of the hardy, fearless, and manly class who become locomotive engineers. But whatever may be the merits of these men, and whatever the influence of the system adopted with regard to responsibility for accidents, it is in the nature of the case impossible for an engineer or fireman or both, occupied as they necessarily are with their other duties, to give the signals in every case at the proper time. To alarm the careless traveler, or countryman who absorbed in his own thoughts, or in the dis-

cussion of "Free Territory," "the Trinity," or "the Constitution of Matter" unsuspectingly approaches a crossing, it is imperatively necessary not only to possess means for giving a loud signal, but never on any occasion to neglect to, at the proper time. But to take a train safely and economically over a slippery and uneven track, with bad rails, many curves and ever varying grades, with wet wood and a scanty supply of water, (except in its pores), with tubes leaking, with a sooty coating on the bonnet, and snow accumulating in the ash-pan; with pumps freezing unless continually worked; with a new time table to learn, and with a few minutes lost time to make up, generally requires all the skill possessed by any two men who may chance to be placed together on a foot board without expecting either to devote nearly his whole time to ringing or blowing alarm signals. This is not an unusual state of things, and although success in getting through on time under such circumstances it may be confessed *would* be a little extraordinary, it is difficult to say how much of the apparent inefficiency of the engine in such cases is due to the embarrassment occasioned by the necessity for working the bell or whistle.

The bell is at best but a very inadequate alarm. It can be heard by those who see the train. It can fulfil the letter of the law, but is usually far less loud than the roar of the wheels. It is useful in signalling to passengers the moment for starting, etc., but it must be seriously doubted whether it ever averted an accident at an highway crossing. The whistle on the contrary rouses the sleepy or drunken traveler a half mile distant and penetrates through buffalo robes or carriage tops with a vigor almost irresistible. The quantity of steam expended in making a loud, long signal of this character in approaching every crossing, although it has probably never been measured, is far too small to be a subject of consideration, and the simplicity of the movement required to start or stop this powerful blast is admirably adapted to the introduction of mechanism.

These remarks have been called out by the success of a recent trial on a locomotive on the Harlem railroad of an *automatic whistle*, or, rather, whistler, invented by an ingenious mechanic, Mr. JAMES HARRISON, JR., of this city, formerly of Milwaukee. The device, which consists of a screw slowly rotated by the motion of the engine, and provided with stops which act on a lever so as to sound the whistle at any point required, has been proved by some two months use to be perfectly accurate in signaling at the proper points, and to contain in a simple form and without involving any serious expense or care, the qualities required in a perfectly practicable and convenient *automatic signalling machine*. The motion is derived from an axle of the truck, is capable of being set by a single movement, with perfect accuracy at the starting, forward or back, so as to give the signals later, or earlier, as may be desired. The screw is of sufficient length to serve at one setting for the whole run out and back, on any route of ordinary length. The Susquehanna Division of the New York and Erie road, the longest route within the knowledge of the writer, which is traveled by the same locomotive, is 140 miles in length, but it is rare that a distance of more than 120 miles out and back, is required. It is

found that a screw cast hollow for lightness, with a diameter of 9 or 10 inches and a length of from 18 to 30 inches is of ample size to give the movements strongly and with absolute certainty for a whole round trip.

It might not be difficult to present from the data furnished by the State Engineer's Report, and by other sources, the whole number of accidents, fatal and otherwise, occurring at crossings, and to exhibit with approximate accuracy the proportion thereof justly chargeable to a deficient alarm signal on the part of the engineer. But without taking the time necessary either to write or to read such a painful catalogue, the actions brought against roads, even the most insignificant in length, and the most carefully operated, for damage at crossings, it may be presumed, have been sufficient to invite at once to this invention some portion of the attention it so well deserves.

The idea is believed to be perfectly new, and has certainly been worked out with admirable care, to provide for all ordinary difficulties. A stout worm halfed upon the axle, and a stout wheel to receive a slow motion therefrom, are, with their stout mountings, all the machinery attached to the truck. The motion is carried up from this *locote* to the top of the boiler by a shaft with sleeve coupling to allow for all twisting and working of the parts. Above this, the parts are light and few, and being well protected from the dust and weather, may be presumed to last certainly as long as the other and more violently strained parts of the engine. Longer experience may develop some new unforeseen difficulties, but it is very rare to find devices which in the first public attempts to accomplish so important and difficult a work provide so simply and fully against every probable source of evil.

Bills to Aid the Construction of the Cairo and Fulton Railroad.

Mr. Cain, chairman of the Senate committee, and Dr. Griffin, chairman of the House committee, on Internal Improvements, have each submitted a bill and a report upon the subject of transferring the lands, granted by Congress to aid in building the Cairo and Fulton railroad, to the company chartered by the State in 1853, for that purpose.

The report made by Dr. Griffin we publish in the paper this morning, and direct the attention of our readers to it. The facts it states are worthy of the grave consideration. They are truthfully, concisely and ably stated. They present the subject in a clear and palpable view. We publish the report that our readers may see upon what high grounds this great public work reposes for public favor. Next week we will publish the report of the Senate committee, and also the bills introduced in both Houses.

Either bill, in our opinion, if passed as it now reads, will give satisfaction both to the company and the country. The committees engaged in framing them, are composed of practical men and their work shows they fully understand both the wants of the country and the company.

We are gratified to be able to announce to our readers, this morning that, after a long night of almost hopeless despair, the cheering rays of a bright morning began to dawn upon us. The sentiment of both Houses favors the most liberal legislation in behalf of the company, and in their wisdom, they see that the burden of the whole enterprise falls upon the company, and that to advance and promote the interests of the State, the company must be aided and sustained.

With this feeling pervading both the people and our legislature, we feel assured there are no fears to be entertained upon the subject. As for ourselves, we are willing to stake our reputation upon

the success of the measure under either bill now before the General Assembly. As we have said before, we regard the provisions of each as founded in wisdom and a thorough knowledge of the subject.—*Little Rock Democrat*.

Some Statistics of Pittsburgh.

We are indebted to the industry of Col L. Egan, (who obtained them from manufacturers and merchants) for the subjoined figures, exhibiting the manufacturing and commercial business of Pittsburgh for a single year. We think they are, if anything, below the mark:

Annual Business of Pittsburgh for one year—Manufacturing and Commercial—From the most authentic reports of Merchants, Manufacturers and Mechanics:

MANUFACTURING BUSINESS.	
Iron and Nails	\$9,637,000
Castings and Stoves	1,250,000
Flint, Window and Vial Glass	2,330,000
White and Red Lead	684,000
Cotton Yarn and Sheeting	1,050,000
Carriages, Wagons and Plows	850,000
Soda Ash	300,000
Springs, Shovels and Axes	1,320,000
Lumber	1,200,000
Sundries	1,450,000
Steam Engines	950,000
Steamers built, 69	1,520,000
Coal Boats, Barges and Freight Boats	865,000
Coal	3,500,000
Flour	1,200,000
Furniture and Chairs	600,000
Clothing	550,000

Manufacturers' sales

There are employed in the iron business 3,500 hands—their wages per month will average \$100,000. In the glass business not more than 1,000 are engaged, and their monthly wages will reach \$27,000.

COMMERCIAL BUSINESS.	
Dry Goods	\$5,400,000
Groceries	6,650,600
Flour, Lard and Bacon	3,764,000
Looking Glasses and Variety Goods	210,000
Upholstery	200,000
Hardware	1,000,000
Leather	450,000
Shoes	900,000
Carpets	375,000
Queenware	100,000
Tin and Copper Ware	150,000
Sheet Copper	450,000
Lead	200,000
Liquor	280,000

\$20,129,000

Manufacturing business

Total business

The Hoax on the London Times.

CENTRAL R. R. & BANKING CO. OF GEORGIA, }
Savannah, Nov. 18, 1856. }

TO THE EDITORS OF THE LONDON TIMES.

Sir—My attention has been called, by highly respectable American citizens in London, to an article published in your issue of the 15th October ult., purporting to give an account of a trip on the railway line from Macon to Augusta, and of certain duels fought and murders perpetrated on the 28th day of August last.

I beg permission to assure you and your numerous readers that the whole account, from beginning to end, is a sheer fabrication. I was in the city of Savannah on the 23th August, and know that there is not a word of truth in the statement.

I have been connected with this company since the day of its organization in the year 1838, and have been its President since the beginning of the year 1842. There has never been a disturbance of any kind at any time on the road. Ladies have constantly traveled over it under the protection of the conductors, and I never knew nor heard of the least affront being offered to one.

Not a single instance of complaint by a passenger, male or female, of any incivility, by employees or others, has ever been made to me during my long service. I take great pride and pleasure in being able to say, truthfully, what I have said: and I ask your permission to add that only one passenger has been killed by accident on the road—192 miles in length—since the company commenced operations.

The same good order which prevails on the road of this company, marks all the other roads of Georgia, and throughout our country generally.

R. B. CUYLER, President.

Wabash Valley Railroad.

We give below a statement from an officer connected with this Road, giving a full account of its business prospects, etc., etc.

The last rail of the Toledo, Wabash and Western Road was laid on the 17th Nov. To-day the last rail connecting the Great Western with our road was laid, and passenger cars commenced their trips, leaving the depot at Toledo for Naples, Illinois, and also for the City of St. Louis.

The Toledo, Wabash and Western Road, starting at the City of Toledo, in Ohio, runs south-westerly along the valleys of the Maumee and the Wabash Rivers, about 220 miles from which point it diverges in a due westerly course to the State line of Illinois, from which point the Great Western Road passes through Springfield, the capital of the State, to Naples, on the Illinois River, a distance from Toledo of 423 miles.

The two roads above named are now under a contract for consolidation, which in due time will be perfected, and the Company so formed will continue their line beyond Quincy, on the Mississippi, a distance of 51 miles further, making the entire distance 474 miles, the longest continuous line of road under the operation of a single company in the United States. At Quincy a line of road will be constructed so as to meet the Hannibal and St. Joseph Road across the State of Missouri, leading to the Missouri River.

The connections of the road with other roads are as follows:

1st. The Pittsburgh, Fort Wayne and Chicago Road meets the South-Western and Western Road at Fort Wayne. You will see by the map that this furnishes a very direct route from Pittsburgh to St. Louis and Springfield and Naples. By this route but one change is necessary to be made between Pittsburgh and St. Louis, either by freight or passengers, and the length of line of the Pittsburgh Road, which will be occupied by the Western travel and business, insure the influence of that road and of the business done from Pittsburgh to the West. So from Philadelphia there are but two changes necessary to be made, viz: at Pittsburgh and Fort Wayne. We are expecting a large amount of business for one road from this source.

2. At Peru, distance 130 miles from Toledo, we meet the Peru and Indianapolis road, connecting us with Indianapolis, and from thence, by two other roads, to the Ohio River. We have already had a very important and valuable traffic from the Ohio River over this route.

3. At Logansport a most important connection will be made with a road now in process of construction to Peoria, in Illinois. This road, I am well assured, will be completed in the course of a year, and this road, leading directly West, furnished the most direct route to the southern part of Iowa.

4. At La Fayette we cross the New Albany and Salem road, and connect with the La Fayette and Indianapolis road.

5. At Attica, by the construction of 81 miles, a connection will be made with the Evansville and Terre Haute road, which connection, it is hoped, will be made in the course of the next year.

6. The Chicago Branch of the Illinois Central crosses this line of the Great Western at Solons, the Chicago and Mississippi at Springfield, and the main branch of the Illinois Central at Decatur, all of which will furnish to our route a large amount both of travel and freight.

7. We are now under running arrangements with the Terre Haute and Alton, by which we have a continuous route by way of the Chicago branch of the Illinois Central to St. Louis.

In addition to the foregoing railroad communications, it is important to observe that the line of our road occupies, without competition of parallel roads, a tract of country of from about 40 miles on one side to an average of about 80 on the other, which must be tributary to its eastern and western route of travel and business.

These are some of the main features of our line, and, after a hard struggle with financial difficulties, with sickness, with the worst kind of weather, we are at last through, and our cars are now making their regular trips.

San Diego and Gila Railroad Company.

At a meeting of the stockholders of this company, holden at their office in San Diego, on Saturday, the 4th October, the following gentlemen were elected as Directors for the ensuing year:

J. W. Robinson, L. Rose, E. W. Morse, O. S. Witherby, J. R. Gitchell, D. B. Kurtz, J. C. Bogart, J. Reiner, E. B. Pendleton, J. Smith, M. A. Franklin, G. Lyons, H. C. Ladd.

And at a meeting of the Directors holden on Monday, Oct. 6th, the following gentlemen were elected permanent officers:

JAMES W. ROBINSON, President.
OLIVER S. WITHERBY, Vice President.
J. C. BOGART, Treasurer.
GEO. P. TABBETTS, Secretary.

Message of the Governor of North Carolina.

Governor Bragg, of North Carolina, sent in his annual message to the Legislature of that State on Wednesday last. The debt of the State in bonds is \$5,038,802 55, and the annual interest paid on that sum \$302,328 15. The receipts of the public treasury, for the two years ending October, 1856, were \$719,171. The ordinary expenses of the State government for the two fiscal years ending the 31st October 1856, will not exceed \$170,000, or an average of \$85,000 per year.

The Atlantic and North Carolina Railroad is under contract from Goldsboro' to Shepherd's Point, and a large portion of it graded. The Western North Carolina Railroad route has been almost surveyed, and that portion of it from Salisbury to the Catawba river, has been located. A further appropriation of 800,000 is required for the Deep River improvement. The whole number of children at school in the State is 140,000. The Governor recommends military schools, and suggests furnishing them with arms by the State. He transmits letters from the Hon. John L. Wheeler, whose slaves were seized in Philadelphia, asking the aid of North Carolina in the suit to recover them. He also transmits anti-slavery resolutions, forwarded to him by the Governor of Ohio, New Hampshire and Massachusetts, giving it as his opinion that it would be totally useless to reply to them. The following passage about federal affairs occurs in the message:

"All we have asked for is to be protected in the rights secured to us by the constitution, to be let alone in their enjoyment, and to be treated as equals among the States and in the common Territories of the Union. More than this we have not sought to obtain. Less, if true to ourselves, we will never submit to take."

"United, as we have been, mainly, in the late contest, we have nothing to fear. For a time madness and fanaticism ruled the day, and the wisest, the best and most patriotic in the land were filled with fear and misgiving. But the result shows that we have as friends a large and influential body of patriotic, conservative, national men at the North, who, in a crisis like the one we have passed, are ready, at every hazard, to stand by the Union and the rights of every section. The task set before them, I regret to say, was one not easy of accomplishment. But well and successfully

have they performed it, and entitled themselves to the thanks and plaudits of all and the eternal gratitude of the South. For the present the contest is ended, perhaps to be renewed in a short time.—Let us hope otherwise, and that peace, order and good feeling may return and abide with us."

Finances of South Carolina.

Governor ADAMS, in his Message to the Legislature says:

Since the 1st of October, 1855, the public debt has been increased as follows: By issue of Bonds to construct New State House, \$250,000; by subscription to Blue Ridge Railroad, \$200,000.

The following table exhibits the debt, liability, and assets of the State:

ACTUAL DEBT.	
3 and 5 per cent. State stock	\$123,407 69
Fire loan bonds	1,689,868 91
Bonds new State House	500,000 00
Bonds Blue Ridge Railroad	400,000 00
U. S. Treasury Surplus Fund	1,051,422 09
	\$3,744,998 69
LIABILITY.	
Guarantor South Carolina R. R. ...	2,000,000 00
Debt and Liability	\$5,744,998 69
ASSETS.	
Capital of Bank	\$2,770,802 53
Sinking Fund	1,490,386 55
Shares in railroads, par value.	1,642,300 00
Cash on 1st October	182,626 66
	\$6,143,114 74

Mobile and Ohio Railroad.

This road is now in operation for 200 miles and appears to be doing an excellent business. The earnings for the month of September and October were as follows—

September—from freight	\$85,168 88
Do. passengers	7,254 00
Total	\$42,422 88
October—from freight	\$62,819 06
Do. passengers	9,248 85
Total	\$72,067 41
Earnings for September, 1855.	\$9,584 59
Do. October, 1855.	24,209 46
Total	\$33,744 05

Land Grants for Railroads.

The Commissioner of the Land Office estimates that the several acts granting lands to States for the benefit of railroad companies, will call for 13,755,560 acres, as follows:—

Miles of road.		Acres.	
Iowa	for 1,125	will receive	8,456,000
Florida	for 630	do.	1,814,400
Alabama	for 1,264	do.	1,213,890
Louisiana	for 626	do.	1,602,560
Mississippi	for 330	do.	950,400
Wisconsin	for 560	do.	1,622,800
Michigan	for 1,075	do.	3,096,000
Total miles of road...		5,610	Total acres. 13,755,560

Michigan Southern Railroad.

The earnings of the Michigan Southern and Northern Indiana Company for October are as follows:—

Passengers and Mails	\$191,020.93.
Freight and Expenses	185,707.96
Total	\$326 728.69
Gross earnings of Oct. 1855, incl. boats.	348,029.63

Showing a decrease of..... \$16,320.94

This is accounted for by the fact that the steamers of this company were withdrawn soon after the 1st of Oct. some three weeks earlier than last year.

The Public Works of Pennsylvania.

In an article on "New and enlarged canals," in our paper of the 8th instant, we gave some particulars concerning the Upper North Branch State Canal, extending from Pittston to the New York State line, 94 1-5 miles, then nearly water tight and ready for navigation.

Since that date, boats loaded with anthracite coal have been passed up the canal from Pittston—the first boat arriving at Towanda on Saturday, the 15th instant, and at Elmira on Monday, the 17th instant—and boats loaded with semi-bituminous coal have also been passed up the canal, from the Barclay Company's depot at Towanda.

The lateness of the season will, of course, prevent shipments over the canal this year; but the fact that, at last, the Upper North Branch Canal is water tight and navigable, will admonish all who mean to ship coal and other tonnage upon it, to be in readiness with boats and mule power, by the opening of navigation in the ensuing spring.

At the New York State line, the North Branch Canal connects with the Junction Canal, which extends thence to Elmira 18 miles, where it unites with the canals belonging to the State of New York.

Between the anthracite coal fields of Pennsylvania and Western New York, the completion of the North Branch Canal opens the third avenue of direct communication.

From Scranton, via Great Bend and Owego, coal is sent in cars by rail to Ithica at the south end of Cayuga lake, where it is dumped into boats and borne thence to points along the New York lakes and canals. Coal from Scranton is also distributed in cars at points along connecting roads of wide gauge.

From Shamokin, via Williamsport, coal is sent in cars by rail to Elmira, where it is dumped into boats and distributed at points along the New York canals. Or if transhipped at Elmira, from cars of narrow gauge to cars of wide gauge, Shamokin coal may be sent from Elmira in cars to Dunkirk, Buffalo, Niagara Falls and intermediate points.

From Pittston and throughout the Susquehanna coal region, boats may be loaded and passed to place of destination in Western New York, over connecting canals without transshipment of cargo!

From Pittston to Elmira, by canal, the distance is 102 miles.

From Shamokin to Elmira, by rail, the distance is 138 miles.

From Scranton to Ithica, by rail, the distance is 117 miles.

If well stocked with boats by those whose interest it will be to ship their coal by that route, the State canal will carry a large coal tonnage from the Wyoming mines into Western New York, to points accessible over continuous water routes.

From Pittston, down the Susquehanna river, the State owns a canal reaching to Columbia 160 miles; this canal receives coal tonnage from iron roads leading from the mines to the river, at Sunbury, Treverton, Millersburgh, and Dauphin; this canal, moreover, out of its net earnings pays the interest upon its cost, and contributes, besides, a surplus to the State treasury. And if the new division just completed in the upper Susquehanna valley, like the divisions in the lower Susquehanna valley, should be profitable to the State, the commonwealth will own two hundred and fifty-four consecutive miles of productive canal, following the banks of the Susquehanna river from Columbia to the New York State line! At Columbia where the State canal terminates, the State railroad leading direct from Philadelphia, 80 miles, also terminates; and as this railroad is profitable to the State, apart from the business it derives from the Pennsylvania Railroad, the State should re-model her canal nomenclature and affix the distinguishing name of MAIN LINE to the "Susquehanna Division" and the "Upper and Lower North Branch Divisions,"—from the Juniata river to the New York State line 208 miles, instead of retaining it to the 127 miles of the Juniata Division of canal, the 45 miles of Alleghany Portage Railroad, and

the 108 miles of western division canal, making, between the Susquehanna river at the Juniata junction and Pittsburgh, two hundred and seventy-five miles of canal and railroad in several parts, which are now and henceforth will be inefficient to command through trade against the competition of rival lines outside of Pennsylvania, and which three disjointed "Main Line" divisions, moreover, are not profitable in net revenue to the State treasury.

With a MAIN LINE reaching from Philadelphia, via Columbia, Harrisburgh, Northumberland, Danville, Wilkes Barre, Pittston and Towanda, to the New York State line, three hundred and thirty-four miles in length, and profitable throughout that distance, PENNSYLVANIA, as represented in her public works, would occupy a stronger position than is now accredited to her with a "main line" of which 275 unproductive miles west of the Susquehanna river, bear down and outweigh 126 productive miles east of the Juniata river!

Along the Delaware river the State owns a profitable canal, from Bristol to Easton, 60 miles in length, whereby the Lehigh navigation is placed in communication with tide-water. If, then, the name of MAIN LINE were transferred from three unprofitable divisions now distinguished by it, the words MAIN LINE and the words Delaware Division, would at once and in brief, describe all the paying public works possessed by the Commonwealth!

In measure of revenue, of profit, and, consequently, in degree of genuine rank, the canal along the Susquehanna, from the Juniata river to Pittston, 114 miles, is paramount and superior to the divisions of the Main Line between the Susquehanna river and Pittsburg, 275 miles; for, during the fiscal year ending Nov. 30, 1855, the total receipts upon the 114 miles of the Susquehanna River canal were.....\$339,515 13 For the same period on the 275 miles of Main Line from the Susquehanna river to Pittsburg, the total receipts were.....110,959 76

Excess of receipts upon the 114 miles, over the 275 miles.....\$228,555 87

Upon the 275 miles, the expenditures for maintenance and repairs were threefold more than the receipts, while upon the 114 miles the official figures speak otherwise and thus:

Receipts, as before given.....\$339,515 13 Expenditures, compiled from official report.....87,329 36

Net revenue to the State, over expenses.....\$252,185 77 Cost of these 114 miles to the State, Jan'y 26, 1854.....\$2,495,539 87 The net revenue for the year ending Nov. 30, 1855, therefore, was over ten per cent. upon their whole cost!

From Columbia to the New York State line, 254 miles, there is less lockage upon the Susquehanna river divisions than there is upon a single division of 127 miles along the Juniata. The locks, too, along the Susquehanna above the mouth of the Juniata, conform in width with the locks along the Susquehanna below the Juniata, while the locks along the Juniata are of less width and less capacity.

The State of Pennsylvania owns and manages, through her Board of Canal Commissioners, 745 miles of public works, comprising 125 miles of railroad, and 620 miles of canal. Of these 745 miles, as represented by divisions, 300 miles pay out of their net revenue, more than the interest on their cost—94 miles, just opened for use, promise to pay well—and 351 miles, comprising that part of the so called Main Line west of the Susquehanna river, and the West Branch canal, or, otherwise stated, the works owned and managed by the State, located west of and west from the Susquehanna river, do not pay, out of their net revenue, interest on their cost to the State; although, locally considered, they possess in the main very important facilities and advantages

through which property was enhanced, population increased, and the State thereby reimbursed.

Looking back, then, from to-day's stand point, down the history of the State works, with an appreciation of the demands of local interests in the Legislature, bent sometimes upon winning or thwarting, there is much to commend, and everything to encourage; for, from the past, knowledge may be obtained, and applied even more successfully in the future.—U. S. R. R. & M. Register.

Abstract of the Postmaster General's Report.

On the 13th of June, 1856, there were 25,565 post offices, being an increase of 4,664 in four years.

On the 13th of June there were in operation nearly 8,000 mail routes, the total length of which was estimated at 235,642 miles, costing \$6,035,474. These mail routes were divided as follows:—22,323 miles of railroad; 14,951 of steamboats; 50,453 coaches, and nearly 154,000 inferior grades. The increase during the last fiscal year was nearly 20,000 miles of railroad; 332 of steamboat; 1,250 coach, and 82,000 inferior grades. In Nebraska and Kansas 10,238 miles were added to the length of the routes. Between the 1st of July, 1852, and 1st of July, 1856, the railroad service was increased 10,117 miles, exhibiting the fact that within that time this description of service was more than doubled. On the 1st of December, 1856, the length of the railroad routes had increased to 21,310 miles. The total cost for this service at that date amounted to \$2,403,747. The whole cost of the inland service on the 1st of July was \$6,526,028.

The Postmaster General alludes to the Panama Railroad Company seizing on the occasion of the withdrawal of the Steamers via Nicaragua to force the department to pay what he considers an exorbitant price across the Isthmus, and recommends regular contracts with them not exceeding \$50,000 per annum, and a contract not exceeding \$200,000 per annum via the Nicaragua or Tehuantepec route, so as to give a weekly mail.

The California expenditures for the year 1856 were \$10,500,286, and the gross revenue, including annual appropriations for free matter, 7,620,821. The deficiency is \$2,787,000.

He recommends the abolition of the franking privilege, and compulsory prepayment on all transient printed matter; also the repeal of the act of 1845, which gives the Postmaster General discretionary power to make new contracts for ocean steamship service. He alludes to the fact—embracing the branch from New Orleans to Havana—that there are now four ocean steamship lines running out of New York, at an expense to Government of \$1,498,000 per annum, and says that there is no reason why one part of the country should be preferred to the exclusion of others.

Among other points it is stated that negotiations are in progress with a view to the reduction of the British transit charge on United States closed mails, and the rate of postage between the United States and Great Britain to twelve cents a single letter.

United States Coinage for the Fiscal Year.

The deposits at the Mint of the United States Branches and Assay Office, for the fiscal year ending June 30, 1856, were of Gold \$60,085,906.90, (of which \$59,608,609.50 was from California,) and of silver \$6,637,523.37, (of which \$294,472.55 was parted from the California gold,) making a total of \$65,723,430.25 in precious metals.

The Gold Coinings consisted of 1,582,146 double eagles, 107,490 eagles, 365,670 half eagles, 57,100 three dollar pieces, 377,334 quarter eagles, 792,110 gold dollars, 5,659 fine bars, (of the value of \$21,966,327.16,) 1,065 unparted bars, (of the value of \$3,746,136.52,) the number of pieces 3,288,585, value \$62,156,413.63.

The Silver Coinage consisted of 63,500 dollars, 6,016,500 half dollars, 6,872,400 quarter dollars, 2,880,000 dimes, 4,500,000 half dimes, 722,000 three cent pieces, and 192 fine bars, (value \$30,551.04,) the number of pieces 21,064,562, value (\$6,856,061.04). The Copper Coinage was 1,745,-

584 pieces, in cents, of the value of \$17,455.84.—The whole number of pieces coined during the fiscal year was 26,088,731, of the value of \$67,527,930.56.

An Important Connection.

The stock for the railroad connecting Nashville with the Memphis and Charleston road, at Decatur, Ala., has been all taken, and the building of the road is regarded as certain. This road runs through Columbia, Pulaski, Athens, and thence to Decatur.

Pacific Railroad.

William M. McPherson, Esq., president of the Pacific Railroad, who has just returned from Europe, succeeded in England in making negotiations for about fifty miles of iron for the S. W. Branch, and about forty for the main stem of the Pacific Railroad.—*St. Louis Intel.*

REMOVALS.

CLARK & JESUP have removed their office to
44 Exchange Place.

THE RACINE & MISSISSIPPI R. R. CO. have removed
their office to 44 Exchange Place. 3149

Portable Steam Engine.

An engine of 12 horse power, in complete order, for sale
by **HABICHT & PARISH,**
4149 No. 80 Beaver st.

NEW ENGLAND

Mutual Life Insurance Co.,
BOSTON, MASS.

ESTABLISHED 1843.

Branch Office in Metropolitan Bank Building, 110 Broadway,
NEW YORK CITY.

JOHN HOPPER, Agent and Attorney for the Company.
CAPITAL and accumulation of **PREMIUMS** to meet losses,

\$910,000,

After paying among all holding policies, in cash (not in scrip),
dividends, amounting to
\$181,000.

One-half of the first five annual premiums on life policies
loaned to insurers if desired; the remaining half may be paid
quarterly.

The premiums are as low as those of any reliable Company.
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3. Base 12 ft. Slopes 1 1/2 to 1.	20. " " " " " 1 1/2 to 1	21. " " " " " 1 1/2 to 1	22. " " " " " 1 1/2 to 1
4. " " " " " 1 1/2 to 1.	23. " " " " " 1 1/2 to 1	24. " " " " " 1 1/2 to 1	25. " " " " " 1 1/2 to 1
5. " " " " " 1 1/2 to 1.	26. " " " " " 1 1/2 to 1	27. " " " " " 1 1/2 to 1	28. " " " " " 1 1/2 to 1
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, December 13, 1856.

Pittsburgh, Fort Wayne and Chicago R. R.

We give below a statement in reference to this road, so full and complete, as to leave little to be said as to its commanding position and the relation it sustains to the great routes of commerce and travel for the whole country. It is a link in the shortest route between the great Atlantic cities of New York, Philadelphia and Baltimore: the necessary route between Philadelphia and Baltimore, and one which must soon be the most convenient for New York. These facts being established, its traffic will be measured by that existing between the East and the great commercial centre of the West. Chicago is now the distributing point of merchandize for 3,000,000 of people. It is the route over which passes the great emigration which is filling up the North-west at the rate of 250,000 a year. The tonnage between Chicago and the eastern ports is now counted by millions. Of bread stuffs alone nearly 1,000,000 tons were exported; east, the past year. There is a reciprocal trade of equal or greater value. It is the vast commerce and travel between Chicago and the East, that have swelled at such a rapid rate the immense receipts of the roads (by way of the Lakes) now carrying the greater portion of this traffic. The position of

the Pittsburgh, Fort Wayne and Chicago railroad gives it whatever portion of this traffic it can accommodate, no matter what its future capacity may be. It has the further advantage that one section of the great line of which it is a part, traverses the two most important seats of manufacture in the country—Philadelphia and Pittsburgh, and from which the West is supplied with almost every fabric, and many of the most indispensable, entering into consumption—Philadelphia supplying the textile, together with a great variety of other articles, and Pittsburgh such as are manufactured from metals. The road, therefore, is the great avenue of exchange between sections of country with products most dissimilar, and which by a necessary law are most dependent upon each other. The East is devoted to commerce and manufacturing, the West to agriculture. Their products are mutually exchanged. We know of no road bearing a closer relation to the commerce of the country, and none resting, consequently, upon a firmer basis.

The local traffic of the route from which the receipts have been chiefly derived, is excellent and must steadily and rapidly increase.

Below we give the article referred to.

We have occasionally briefly noticed the progress of the Great Central line of Railroad from Pittsburgh to Chicago, known, since its consolidation on the 1st of August last, as the *Pittsburgh, Fort Wayne and Chicago Railroad*. The recent opening of this road to Plymouth, Indiana, 88 miles from Pittsburgh, by which a new route, substantially, is formed from the seaboard to Chicago, seems to justify a fuller notice than we have yet given of the leading features of the road. The road is 465 miles long occupying the best and most direct route between Pittsburgh and Chicago. It passes through no less than thirteen county towns, and other important towns, in Pennsylvania, Ohio and Indiana. Among these are Rochester, New Brighton and Beaver, in Pennsylvania; Salem, Canton, Massillon, Wooster, Mansfield, Crestline, Bucyrus, Upper Sandusky, Forest, Delphos and Van Wert, in Ohio; Fort Wayne, Columbus, Warsaw, Plymouth and Valparaiso, in Indiana. The road is mainly one of low grades and straight lines, the highest grades not exceeding 47 feet to the mile, and between Wooster, Ohio and Chicago, a distance of 335 miles, there is no grade over 24 feet 10 inches. From Wooster to Chicago, the increase of distance over an air-line is very small, and this mainly occurs in the bends around Lake Michigan. The resources of the road for

local freights, in grain, stock and other farm products, in coal and iron, in lumber and other products of the forest, are immense, and will largely increase for many years. Following, as it does, the routes of the great movement of emigration and travel from the populous States of Ohio and Pennsylvania to the North-West, the position of the road for passenger business is a very superior one. The termini of the road, Pittsburgh and Chicago, are nearly equal in population, each numbering over 100,000 inhabitants. Both are among the most important railway centers in the Union. The mineral products and general manufacturers of Pittsburgh alone amount to nearly \$30,000,000 per annum. On the other hand, Chicago receives and exports about 25,000,000 bushels of grain, and from 300,000,000 to 400,000,000 feet of lumber per annum. Two such termini must of themselves create business relations of great value to the railway lines most directly connecting them. The marked features of the Pittsburgh, Fort Wayne and Chicago Road which entitle it to a prominent place among the leading lines of the country are these:

1. It is a single line, without branches, of uniform gauge four feet ten inches, and for its whole length part of one of the shortest and best through routes by which either of the three great maritime cities New York, Philadelphia and Baltimore, can communicate with Chicago and the North West.

2. By its connection at Fort Wayne, with the Toledo, Wabash and Western Road, it is for 313 miles, part of the best through route from Pittsburgh to the Wabash Valley, Central Illinois and St. Louis; and by the same connection at Fort Wayne, it is for 147 miles, part of a through route from Toledo to Chicago.

3. By its connection at Crestline with the Cleveland, Columbus and Cincinnati Road, it is for 278 miles from Chicago to Crestline, part of a through route of uniform gauge from Chicago to Buffalo, connecting with the New York and Erie Road at Dunkirk.

The first point stated is that which gives the P. H. W. and C. Road, its distinctive character. By its connection with the Pennsylvania Central Road at Pittsburgh, and the unity of interest between them, the two constitute a grand trunk line of 818 miles from Philadelphia to Chicago, and a common route for New York, Philadelphia and Baltimore, to the West and North West. An examination of any new contracted railroad map, will most strikingly exhibit this fact. The position of the united line is certainly a commanding one, and it seems to require but able management to place it among the most powerful railroad interests in the Union. Strange as it may seem, a line of road projected to promote the interests of Pennsylvania, and especially of Philadelphia, becomes the best

route by which either Baltimore or New York, the chief competition with Philadelphia for western trade, can reach the north west.

The following statement of distances is believed to be correct:

	Miles.
BALTIMORE TO CHICAGO.	
Northern Central Road to Harrisburg.....	85
Harrisburg to Pittsburgh.....	248
Pittsburgh to Chicago.....	465—798

The Baltimore and Ohio Road has no direct northern connection leading to Chicago. The business of that road finds its shortest route to Chicago by taking the Pittsburgh F. W. and Chicago Roads either at Alliance or Crestline. The shortest route from Baltimore is via Harrisburg, as above.

	Miles.
PHILADELPHIA TO CHICAGO.	
Philadelphia to Pittsburgh.....	353
Pittsburgh to Chicago.....	465—818

	Miles.
NEW YORK TO CHICAGO.	
New York to Philadelphia.....	88
Philadelphia to Chicago.....	813—906

The completion of the projected Allentown Road in Pennsylvania, a short link of 88½ miles, will materially shorten the distance between New York and Chicago, and save the transit of New York business through Philadelphia, and make the Pennsylvania Road as important an avenue to New York, as it is to Philadelphia.

The new line will be:

	Miles.
NEW YORK TO CHICAGO.	
New York to the Pennsylvania Railroad near Harrisburg, by the N. J. Central, Lehigh Valley, Allentown & Dauphin, and Susquehanna Roads, of uniform gauge, with Pennsylvania Railroad.....	184
Junction of Pennsylvania Road to Pittsburgh.....	240
Pittsburgh to Chicago.....	465—889

The distance from New York to Chicago by the N. Y. and Erie and Lake Shore Roads is 962 miles.

The above figures, therefore, show:

1. That Baltimore is 20 miles nearer to Chicago than Philadelphia by railroad, and 164 miles nearer to Chicago than New York is by the N. Y. and Erie route, 108 miles nearer than New York is by the Philadelphia route, and but 91 miles nearer than New York is by the Fort Wayne, Pittsburgh and Allentown route.

2. That Philadelphia is 144 miles nearer to Chicago by rail than New York is by the N. Y. and Erie route, 88 miles nearer than New York is by the Pittsburgh route, and but 71 miles nearer than New York is by the Pittsburgh, combined with the Allentown and New Jersey Central route.

3. The Chicago is 56 miles nearer to New York by Philadelphia and Pittsburgh, and 72 miles nearer by Allentown and Pittsburgh, than it is by the more northern routes.

These figures would seem to indicate decisively that it is wise policy in the merchants of New York at once to construct and control the Allentown Road.

The earnings of the Pittsburgh, Fort Wayne and Chicago Road for the three months from 1st August to 1st November last, were \$503,985 61, which were made before its connection with Chicago via Plymouth, and while its St. Louis business was mostly destroyed by the obstructions in the route to St. Louis via Indianapolis. These earnings are equal to over \$2,000,000 per annum, or about 16½ per cent upon a cost of \$12,000,000, and are believed to show but inadequately what the road will earn when completed and in full operation. The Chicago connection via Plymouth and La Porte, and the St. Louis connection via Fort Wayne, now completed by means of the Toledo, Wabash and Western Road, will, now that this necessary mixing arrangements are perfected, add largely to the business and earnings of the Pittsburgh, Fort Wayne and Chicago Road.

Arrangements are in progress for the completion of the line from Plymouth to Chicago, during the next year. When completed, the capacity of the road for the cheap and rapid transport of freights, will not only remove the inconvenience

of sending goods West from Pittsburgh during low water in the Ohio, but will, in fact, create a successful competition to that uncertain and circuitous route, for the North western freights, it has usually taken when navigable.

Railroad to the Pacific.

Below, we give a copy of a bill now pending before Congress for the construction of three lines of Railroad to the Pacific.

SECTION 1.—Be it enacted by the Senate and House of Representatives of the United States of America, in Congress Assembled, That for the purpose of aiding in the construction of a railroad and telegraphic communication from the western boundaries of Missouri and Iowa, north of the thirty-eight and south of the forty-fourth degrees of north latitude, to some point on the navigable waters of the Pacific ocean in the State of California, the railroad companies herein named, and their associates, successors, and assigns—that is to say, the Hannibal and St. Joseph Railroad company, and the Pacific Railroad company of the State of Missouri; and the Burlington and Missouri River Railroad company, the Philadelphia, Fort Wayne and Platte Valley Railroad company; (the Mississippi and Missouri Railroad company; the Iowa Central Airline Railroad company;) the Dubuque and Pacific Railroad company; and the North Iowa Railroad company, of the State of Iowa, and their associates, successors, and assigns, to extend their said several roads from their western termini on the western limits of said States westwardly, through the territories of the United States, so as to form a junction with each other at some point near Fort Kearney, or at such point as, after actual survey, may be agreed upon by all the parties constructing their several roads to said junction, and from the place of said junction they may conjointly extend a line westward to the eastern boundary of the State of California, and from thence, with the consent of the Legislature of said State, to some point to be by them selected on the navigable waters of the Pacific ocean, and also connect by means of a branch railroad with the cities of Marysville, Sacramento, Stockton, and San Jose; and, to enable them to construct the same together with a telegraphic line along each, there is, granted to each one of said railroad companies the right of way for one hundred feet in width along the entire line of each of said railroads (with land sufficient for all necessary sites for depots, watering places, and workshops) to the point of junction; and every alternate section of land designated on the maps of the survey of the public lands by uneven numbers, for six sections in width on each side of said roads, for the entire length from their present western termini on the western boundary of said States to said place of junction, and in all cases where the United States shall have disposed of any such lands, or shall from any cause be unable to convey a title thereto, the deficiency may be made up from the nearest vacant lands in like manner, by alternate sections, by the party or parties entitled thereto, from any unoccupied and unappropriated public lands belonging to the United States, within the Territories north of thirty-eight and south of forty-four degrees of north latitude; and from the place of said junction there is hereby granted to said companies, their associates, successors and assigns, or to such of them as shall, within one year from the passage of this act, by an agreement in writing, properly executed between them, and filed in the Department of the Interior, associate for the construction of said road westward to the navigable waters of the Pacific ocean, in the State of California, and the branch to San Jose; every alternate section of land designated on the maps of the survey, when made, by uneven numbers, for thirty sections in width on each side of the length of said road, commencing at the point of junction aforesaid and extending to a point two hundred miles west of the same, and thence in like manner forty alternate sections in width on each side of said road to the western base of the Sierra Nevada range,

and thence through the State of California, in like manner, six alternate sections of land for each mile of railroad, including the branch aforesaid, and in all cases where the United States may have disposed of any such lands, or shall, from any cause be unable to convey a title thereto, or when such land shall be condemned by the United States surveyors as unfit to be surveyed, the deficiency may be made up in like manner by alternate sections, by the party or parties engaged thereto, from the nearest unoccupied and unappropriated public lands belonging to the United States north of the thirty-eighth degree of north latitude: Provided, however, that for such deficiency in the State of California and also in lieu of all mineral lands in said State, (which are excepted from the grant herein made,) such selection may be made from any unoccupied and unappropriated lands of the United States, within the said State of California, lying north of the thirty-seventh degree of north latitude; but the grant of lands herein made to the State of California shall in nowise impair the right of the State of California, first to select such lands as said State is entitled to, and said selections to be made in accordance with the provisions of existing laws. And provided further, that the title to said lands shall vest in the parties aforesaid only as such roads shall be constructed, and no patent shall issue for said lands except as each fifty miles of said roads shall be completed: And provided further, that any of the said companies which shall fail to construct fifty miles of road west of the Missouri river within three years from the passage of this act shall not be entitled to any of the lands, but the lands thus forfeited shall be divided equally among the companies which shall within said time complete said length of road not to exceed six additional sections per mile to each of said roads. And to aid in the construction of a railroad from the city of Sacramento to the city of Benicia, a grant of public lands to the State of California, of the same amount per mile as is granted to aid in building a branch railroad to San Jose, is hereby made for the use of the San Francisco and Sacramento Railroad company, upon the like conditions and limitations, and upon the further condition that the railroad shall be completed on or before the first day of January, 1860. And provided further, that if the said Hannibal and St. Joseph and the Pacific Railroad companies, of the State of Missouri, and the said Iowa Central Airline, the Dubuque and Pacific, and the north Iowa Railroad companies, of the State of Iowa, or either of them, instead of forming a junction with other roads at or near Fort Kearney, as before provided, shall desire to extend their respective roads, or if any two or more of them for one road and twelve alternate sections for two roads united shall unite and conjointly extend one line of road on either of said routes, for the purpose of intersection with the road from Fort Kearney to the Pacific ocean, at some point further west than said Fort Kearney, they are hereby authorized so to do; and the same grant of lands per mile—that is to say, six alternate sections per mile—or any of said roads or companies shall be extended to them respectively or conjointly, for each mile of railroad by them actually built, in the same manner as is provided in case of a junction at or near Fort Kearney. And provided further, that the extent of interest which each of the aforesaid companies shall acquire in the grant of lands herein made for the construction of a railroad and line of telegraph from Fort Kearney westward to the western termini, by complying with the conditions contained in this act, as also the interest they shall thereby obtain in the construction of said lines from Fort Kearney westward, shall be in proportion to the amount of money each company shall actually pay in for the construction of such line or lines of railroad or telegraph.

SEC. 2.—And be it further enacted, That the government of the United States shall at all times have the preference in the use of said roads and of all other roads provided for in this act, for transportation purposes, and also in the use of said

lines of telegraph, and, as compensation for such uses, that is to say, for the use of said railroads for postal, military and all other purposes, and for the use of said telegraphs as well in time of war as of peace, the United States shall pay to the said parties, proprietors of said roads a sum not to exceed five hundred dollars per mile per annum (unless otherwise provided by Congress) for the period of ten years from and after the entire completion of said roads, of at that rate for any portion of the same, should the government wish to use any part of said road before the whole line shall be completed; but should the government transportation and business on said road be so great as at the customary rates of charges on said roads to exceed in value fifty per cent of the sum proposed per annum, estimating the mail service at three hundred dollars a mile annually, then the government will pay for such extra service and additional compensation to be fixed by Congress; but in this allowance the several railroads projected and herein named, till completed to the point of junction, shall be considered as one line of road and telegraph, and the payment to each shall be in proportion to the amount of work which such road shall do, the payment for mail matter be equally divided between them; but should any of them fail, neglect or refuse to unite, then the whole amount shall, in like manner, be paid to the remaining company or companies which shall construct the road as herein directed: Provided, however, that the government shall be forever entitled to the use of said roads and telegraph lines for the purposes herein designated, and at a rate of compensation not greater than that heretofore specified, unless otherwise provided by Congress. And provided further, That all the land hereby granted for right of way and the purposes of depots, watering places, and workshops, shall be exempt from taxation in the Territories while they may remain such.

Sec. 3.—And be it further enacted, That if the parties shall fail to build the railroad and telegraph lines herein before provided for within the period of ten years from the date of the location and establishment of the line which location shall be made within three years from the passage of this act, or shall substantially fail, neglect or refuse to prosecute the work undertaken by said parties in a manner to secure the completion thereof in the time stipulated, or should such parties violate the terms herein prescribed, then all the rights of the said parties to the uncompleted part of the said road or right of way, the property thereon belonging and the lands not patented shall be forfeited, and the United States may and shall enter upon and possess the same. In the event of such forfeiture, to be determined by the Secretary of War, the Secretary of the Interior and the Postmaster General, the said Secretaries and Postmaster General shall proceed to re-let the said roads and lines uncompleted under such forfeited contract, in such manner as in their opinion will secure their earliest completion; and for this purpose they are authorized to transfer everything thus forfeited, to said subsequent contracting parties; the United States to pay nothing more than is herein before appropriated, and reserving all the rights and privileges heretofore specified.

Sec. 4.—And be it further enacted, That all grants and contracts made in pursuance of this act, for the construction and keeping up of said railroad and telegraphic lines, are, and shall be, made on the express condition that said lines of railroad and telegraph shall be constructed in a substantial, thorough, and workman like manner, with all necessary drains, culverts, bridges, viaducts, crossings, turnouts, sidings, watering places, and all other appurtenances, including the furniture of the road, equal in all respects to a road of the first class, when prepared for business, with rails of the best quality, weighing not less than sixty pounds to the yard, and of a uniform gauge; and shall also provide for and require a telegraph line with each road of the most approved and substantial description.

Sec. 5.—And be it further enacted, That there

shall be and hereby are, granted to the States of Louisiana, Arkansas and Missouri, severally, six alternate sections of land for each mile of railroad, to aid in the construction of railroads and telegraph lines from New Orleans, via Opelousas, to Shreveport; from Vicksburg, via Shreveport, to the west boundary line of Louisiana; and from the Iron Mountains in Missouri, via Little Rock to Shreveport; and to the railroads running westwardly from Cairo, Memphis and Gaines' Landing, to the nearest point of junction at or east of Shreveport, deducting so many acres therefrom as may have been granted heretofore for any part of any road or branch herein named. Fifty miles of each of said roads and branches shall be built within three years, and the remainder thereof shall be completed within five years thereafter, or the lands lying upon the unfinished portions of any road or branch shall revert to the United States: The title to the lands shall vest in said States respectively, in the manner prescribed in acts of Congress granting public lands to said States for kindred purposes, and subject to corresponding limitations and restrictions, except as modified or altered by the provisions of this act.

Sec. 6. And be it further enacted, That the several railroad companies authorized, or who may be authorized, by said States of Louisiana, Arkansas and Missouri, severally, to construct railroads along the routes indicated in the preceding section, together with such company or companies as are or may be authorized by the States of Texas or California, severally, to construct a railroad or railroads along the route between San Francisco and Shreveport, or such one or more of said companies as may elect to avail themselves of the privileges herein granted, are hereby authorized to construct a railroad from El Paso or from some point between El Paso and Fort Fillmore, in New Mexico, upon the line separating that Territory from the State of Texas to the State of California, and thence, with the assent of said State, to the city of San Francisco; and two branches, one to San Diego, and the other to a suitable point on the Pacific ocean, or to navigable waters leading thereto. The company or companies electing to build said railroad shall file, within twelve months from January next, in the Department of the Interior, their written acceptance of the grant herein contained, and within three years thereafter shall build and equip not less than fifty miles of said road. And, to aid in the construction of said railroad and telegraph line, there are hereby granted to said company or companies thus filing as aforesaid their acceptance of the provisions of this section, upon the conditions, limitations and restrictions stated in this act, forty alternate sections of land per mile of road lying on each side of said railroad, beginning on the boundary line of the State of Texas in the Territory New Mexico, and extending to the one hundred and eighteenth degree of longitude west from Greenwich, and from thence ten sections per mile to the terminus of said road, and the same quantity of land per mile to aid in the construction of each of the two branches thereof. And all privileges as to right of way, donation of lands and of all other kinds whatsoever, granted to the company or companies authorized by this act to construct a railroad westward from Fort Kearney, are hereby granted to and conferred upon the company or companies that shall undertake to construct a railroad from Texas to San Francisco: Provided, however, that they shall also be subject to the same restrictions, limitations and liabilities, as the company or companies authorized to build said railroad and telegraph line west from Fort Kearney. The pay for carrying the mail, freight, or persons for the United States shall be the same per mile on both routes; and whenever a railroad shall be completed from Shreveport to New Mexico, the pay for carrying the mail, freight or persons for the United States over said road, shall be the same per mile, and subject to the same conditions as stipulated to be paid for carrying the same on the railroad authorized to be built from Fort Kearney to California.

Sec. 7. And be it further enacted, That for carrying freight, mails, and persons for the United States, the railroads herein provided for within the States of Louisiana, Arkansas and Missouri, shall be allowed per mile the same rate of compensation, and be subject to like conditions as directed by this act, to be paid to the railroad companies authorized to build railroads from Fort Kearney east to the Missouri river.

Sec. 8. And be it further enacted, That the Pacific Railroad Company of Missouri may extend its southwest branch railroad from Springfield, with the assent of said States, to such point on the railroad from San Francisco to Texas, as said company, after making the necessary surveys, may select; and to aid in the construction of said Southwest Branch Railroad from Springfield to the Texas and San Francisco Railroad there is hereby granted to said Pacific Railroad Company of Missouri the alternate sections per each mile of said road, together with similar rights, privileges and immunities (except as to the rate of compensation for services to the United States which shall be hereafter fixed by Congress,) and subject to the same restrictions as said main road; deficiencies of land arising from like causes shall be made up in like manner as provided for in this act for the benefit of the road running west from Fort Kearney; fifty miles of said Southwest Branch Railroad shall be built within four years, and the whole within fifteen years from the date of this act. No lands shall be sold by said company prior to the completion of twenty-five miles of the road; and then only so many sections as are granted for such twenty-five miles of road, and so on for each twenty-five miles of road as finished. If said company fails to complete said road within the time specified, the lands herein granted shall revert to the United States: Provided that the company shall not be deprived of lands for so many miles of railroad as it shall actually construct, equip and run, but only of the amount granted to aid in the construction of the portion of railroad remaining unbuild. And provided further, that in no case provided for in this act, shall patents for lands issue in advance of the actual completion of the portion of road in aid of the construction of which they were granted.

Sec. 9. And be it further enacted, that for the purpose of aiding in the construction of a railroad and telegraphic communication between the northern lakes and the Pacific ocean, north of the forty-fourth degree of north latitude, there is hereby granted to the Northern Lakes and Pacific Railroad Company, of which Alexander Ramsey is President, and to their associates, assessors and assignees, the quantity of twenty sections of land per mile, for the length of this line of railroad and telegraph, from such eligible point as may be selected by them for their eastern terminus, near the lake or river St. Croix, on the western boundary of the State of Wisconsin, by way of St. Paul, to the one hundredth degree of longitude, west from Greenwich, and the quantity of forty sections per mile from said last mentioned point, to such point on the navigable waters of Puget's Sound as said company may select for the western terminus of said railroad and telegraph; and there is also hereby granted to said railroad company the quantity of forty sections of land per mile, to aid in the construction of a branch line of railroad and telegraph, commencing on their main line at some suitable point, to be by them selected, west of the Rocky Mountains, and running to the Columbia river, at or near the mouth of the Willamette river, in the Territory of Oregon, and the quantity of twenty sections of land per mile is also hereby granted to said company, to aid in the construction of a branch railroad and telegraph line from the main line of said Northern Lakes and Pacific railroad, at such point east of the one hundredth degree of longitude, west from Greenwich, as said company may select, to some point on Lake Superior to be by them selected. And that to aid in constructing roads to intersect said Northern Railroad, there is hereby granted to the Transit Railroad Company ten alternate sections

of land per mile, on the road from Ninona to St. Peter, and thence northwesterly to intersect said main road to the Pacific, at such point as may be selected after actual survey. And to the State of Iowa and Territory of Minnesota respectively, the same quantity of land per mile on the road, from the mouth of the Fitz dea Morts, to the southern line of Minnesota, between township ranges nine and seventeen, and thence by the way of St. Paul to Lake Superior, on the same terms and conditions as is hereinbefore provided in regard to the branch road from Springfield to the Northern Pacific Railroad; but all the grants of land provided for in this section are to be taken with all the conditions, limitations, restrictions and reservations, and the selections shall be made in the same manner as are prescribed and provided for in the grants herein made to aid in the construction of lines of railroad between the thirty-eighth and forty-fourth degrees of north latitude.

SEC. 10. And be it further enacted, that the lands hereby granted shall be exclusively in the construction of the roads for which they are respectively granted and selected, and the same shall be applied to no other purposes whatsoever.

SEC. 11. And be it further enacted, that this act shall not be construed as applying to any lands hitherto reserved by the United States for any purpose whatsoever, or to lands in any manner selected or reserved by any competent authority under the provision of existing laws: Provided, however, that the right of way, as hereinbefore provided, is granted through such reserved lands not in the actual occupancy of the United States for purposes inconsistent therewith. And provided further, that no road shall be located through any Indian reservation or territory, except upon the written approval of the Secretary of the Interior, and the consent of the Indian tribe or tribes interested therein previously obtained by the Government of the United States.

SEC. 12. And be it further enacted, that the sections and parts of sections of land remaining to the United States on each side of the roads herein provided for, shall not be sold for less than double the minimum price of the public lands.

SEC. 13. And be it further enacted, that all minerals of gold, silver, copper, tin or quicksilver shall be, and hereby are, expressly reserved and excepted from the grants of land made by this act.

Synopsis of the Report of the Secretary of the Treasury.

In obedience to the act entitled "An act to establish the Treasury Department," approved May 10, 1800, Secretary Guthrie yesterday submitted to the Senate his annual report, of which the following is a synopsis:

The balance in the Treasury on the 1st of July, 1855, was.....\$18,931,975 01

The actual receipts of the first quarter of the fiscal year, 1856, viz: the quarter ending September 30, 1855, were, as stated in my former report:

From customs.....	\$17,085,238 28
From lands.....	2,355,725 87
Miscellaneous.....	333,495 98
	<u>\$19,774,460 13</u>

The estimated receipts for the remaining three quarters were as follows:

From customs.....	\$42,000,000 00
From lands.....	5,644,274 13
Miscellaneous.....	500,000 00
	<u>\$48,144,274 13</u>

Making the actual receipts for the first quarter, and the estimated receipts, for the remaining three quarters.....\$67,918,734 26

Add balance in the treasury July 1, 1855.....18,931,975 01

Giving the estimated sum for the service of said year.....\$86,850,710 27

The actual expenditures of the first quarter of said year, viz: the quarter ending September 30, 1855, were as follows:

Civil, miscellaneous, and foreign intercourse.....	\$5,117,860 25
Interior.....	1,799,642 19
War.....	5,142,111 38
Navy.....	4,282,292 57
Redemption of public debt, interest and premium.....	252,209 71
	<u>\$16,594,116 10</u>

The estimated expenditures for the remaining three quarters were as follows:

Civil, miscellaneous, and foreign intercourse.....	\$18,651,974 85
Deficiency in Post office.....	2,669,368 00
Interior, pensions, and Indians....	3,532,033 92
War.....	8,773,523 31
Navy.....	10,956,030 73
Interest on public debt.....	2,299,800 00
Redemption of debt.....	7,750,000 00
	<u>\$51,632,430 81</u>

Making the actual and estimated expenditures \$71,226,846 91, and leaving an estimated balance in the treasury on the 30th of June, 1856, of \$15,623,863 36.

The actual receipts into the treasury for the fiscal year ending 30th June, 1856, were, for the

1st quarter—From customs.....	\$17,085,238 28
From lands.....	2,355,725 87
Miscellaneous & incidental.....	333,495 98
	<u>\$19,774,460 13</u>

2d quarter—From customs.....	\$13,424,038 57
From lands.....	3,273,868 02
Miscellaneous & incidental.....	195,840 33
	<u>\$16,893,746 92</u>

3d quarter—From customs.....	\$16,737,114 01
From lands.....	1,450,073 01
Miscellaneous & incidental.....	160,113 20
	<u>\$18,347,300 25</u>

4th quarter—From customs.....	\$16,776,472 64
From lands.....	1,837,978 00
Miscellaneous & incidental.....	288,183 52
	<u>\$18,902,634 16</u>

Making.....\$73,918,141 46

Balance in treasury 1st July, 1855, 18,931,975 01

Total sum for the services of the fiscal year ending 30th June, 1856.....\$92,850,117 47

The receipts from customs were.....\$64,022,863 50

The receipts from land were.....8,917,644 93

Miscellaneous and incidental.....997,633 08

\$73,918,141 46

The actual expenditures of the year were as follows:

1st quarter.....	\$16,594,116 10
2d ".....	16,580,880 34
3d ".....	16,993,074 86
4th ".....	22,780,721 22
	<u>\$72,948,792 02</u>

The expenditures were divided as follows:

Civil, foreign intercourse, and miscellaneous.....	\$25,274,330 99
Interior, pensions and Indian....	3,872,826 64
War.....	16,948,196 89
Navy.....	14,077,047 12
Redemption of public debt, interest and premium.....	12,776,390 38
	<u>\$72,948,792 02</u>

Balance in the treasury 1st July, 1856, as appears in detail, per statement No. 1.....\$19,901,325 45

In my last report the estimated receipts into the treasury, for the fiscal year ending the 30th June, 1857, were as follows:

From customs.....	\$64,000,000 00
From lands.....	7,000,000 00
Miscellaneous.....	500,000 00
	<u>\$71,500,000 00</u>

To this add the estimated balance in the treasury, July 1st, 1856..15,623,863 36

\$87,123,863 36

This gave \$87,123,863 35 for the services of the fiscal year ending the 30th of June, 1857.

The estimated expenditures for said year were as follows:

Balance of former appropriations to be expended during the year.....\$16,696,689 99

Permanent and indefinite appropriations to be expended during the year.....7,639,910 14

Appropriations asked for.....45,114,765 45

\$69,451,365 58

Making the estimated expenditures \$69,451,365 58, less \$12,000,000 not expected to be called for during the year, and leaving an estimated balance in the treasury, on the 31st of July, 1857, of \$29,672,497 48, without any estimate for the redemption of the public debt.

The actual receipts into the treasury, for the 1st quarter of said year, viz: the quarter ending the 30th September, 1856, have been as follows:

From customs.....	\$20,677,740 40
From lands.....	892,380 39
Miscellaneous.....	355,310 57
	<u>\$21,925,431 36</u>

Making the actual receipts for the first, and the receipts for the remaining three quarters, as now estimated:

2d quarter.....	17,224,799 47
3d ".....	16,902,539 87
4th ".....	16,902,539 87
	<u>\$72,955,310 57</u>

In all.....\$72,955,310 57

And, with the actual balance in the treasury on the 1st of July, 1856, of.....19,901,325 45

Making the sum of.....\$92,856,636 02

for the service of the fiscal year 1857.

The actual expenditures for the first quarter of the fiscal year 1856, viz: the quarter ending the 30th of September, 1856, being.....\$18,675,113 21

The estimated expenditures for the remaining three quarters of the year, are set down as follows:

In the second quarter.....	18,000,000 00
In the third ".....	17,168,178 76
In the fourth ".....	16,668,121 24

Making the actual expenditures for the first quarter, and the estimated expenditures, for the remaining three quarters.....\$70,511,413 21

Which leaves an estimated balance in the treasury, on the 30th of June, 1857, of.....22,345,222 81

The actual expenditures of the first quarter, exhibit the sum of \$902,096 63 expended in the redemption of the public debt, and in payment of interest and premium. A like account is included in the estimates for the expenditure of each of the remaining three quarters.

The receipts in the treasury, for the fiscal year ending the 30th of June, 1858, are estimated as follows:

From customs.....	\$66,000,000 00
From lands	6,000,000 00
Miscellaneous	955,810 57
	<hr/>
	\$72,955,810 57
To which add the estimated balance in the treasury 30th June, 1857.....	22,345,222 81

Making the sum of..... \$95,300,533 38
for the service of the fiscal year 1858.

The expenditures are estimated as follows:	
Balance of former appropriations, to be expended this year.....	\$15,336,464 60
Permanent and indefinite appropriations.....	7,498,510 14
Appropriations asked for	48,469,848 02
	<hr/>
	\$71,304,822 76

Less the amount that may not be expended during the year, estimated at..... 20,000,000 00
Would leave an estimated balance in the treasury on the 30th of June, 1858, of..... 48,995,710 62

The public debt, on the 4th of March, 1853, amounted to the sum of \$69,129,937 27, and was subsequently increased to liquidate the debt of Texas, by the sum of \$2,750,000, which gives the public debt at \$71,879,937 27. It has since been reduced, up to the 14th day of November, 1856, the date of the Register's last report, to the sum of \$30,963,909 64.

In making this reduction, the sum of \$40,916,027 68 has been paid for the principal thereof, and \$4,609,882 31, for premium on portions of it redeemed, before the maturity, saving the sum of \$14,605,441 39 by paying in advance, and leaving the public debt, on the 15th day of November, 1856, \$30,963,909 64.

In addition to the public debt, as above stated, there is due under treaties with various Indian tribes, payable on time, the sum of \$21,066,501 36. This debt, as it becomes payable, constitutes an item of annual expenditure, and is estimated for, by the Interior Department. It is an incident, growing out of the extinction of the Indian possessory title, to the public lands, and is a charge on the annual sales. Besides this debt, the United States have invested money in stocks, for several of the tribes, to the amount of \$3,511,624 08, and hold the principal of the Smithsonian fund, amounting to \$515,169, under the act of the 7th July, 1838, in stocks for that institution. The United States having made these investments for the Indians, and of the Smithsonian fund, annually provide for the payment of the interest, which interest is or is not received on the stocks. The arrearages of the interest appear, in the tables, to the amount of \$120,704 74 on the stocks held for the Indians, and \$437,731 92 on the stocks of the Smithsonian fund.

The estimated receipts for the fiscal year 1856, with the actual receipts of the first quarter, and the balance in the treasury on the 1st of July, '55, were \$86,850,710 27, and the actual receipts with the same addition \$92,850,117 47, being an excess over the estimates of \$5,999,407 20.

The customs, actual and estimated, were \$59,085,238 28, and the receipts \$64,022,863 50.

The lands, actual and estimated, were \$8,000,000, and the receipts \$8,917,644 93.

Miscellaneous, actual and estimated, were \$833,495 98, and the receipts \$977,633 03.

The estimated expenditures for the fiscal year 1856 were \$71,226,816 91, and the actual expenditures \$72,948,792 02, being \$1,721,945 11, in excess of the estimates.

The sum of \$12,776,390 38 was expended during the year, in payment of interest, premium and redemption of the public debt, making the expenditure upon all other objects \$60,242,401 64; the estimated expenditure for interest, premium and redemption of the public debt being \$10,301,009 71, and the payments \$2,475,390 67 more than the estimate, making the expenditure upon other objects less than estimated.

The Secretary makes important suggestions and recommendations, of which we subjoin those of interest:

For the fiscal year ending June 30, 1856, the domestic and foreign merchandise exported amounted to \$326,964,918, and the imports, for the same time, to \$314,639,942—making the exports \$12,326,066 in excess of the imports. The continued increase of our population, and of imports and exports, with that of our agricultural, manufacturing and mining wealth, and our facilities for internal and external commerce, as exhibited by the combined tables of this report, encourage me, again, to recommend a modification of the tariff of 1846, and a reduction of the revenue from customs. It is assumed as a fact, beyond question, that a tariff on imports is a tax, and that the tax is paid by the consumer of the imports, and that it is undeniable that no tax should be imposed or continued not required for an economical administration of the government, allowing for the fulfillment of all its duties, present and prospective; and that the collection of a greater revenue is a wrong against the people, who pay the tax, and imparts to the agents who administer to the government a tendency to undue power, waste, and extravagance.

In the modification I have heretofore suggested, the propriety of increasing our free list, by admitting the raw material used in our manufactures to free entry, and thereby giving to our capital and labor of our people equal competition with the capital and labor of those countries which have, for the benefit of their manufactures, admitted the raw material, without duty, and have recommended the same article to be admitted free that are admitted free by Great Britain. This would reduce the revenue between \$7,000,000 and \$8,000,000. I have also suggested that some articles of general consumption, such as salt, should be added to the free list, and the tariff on some other imports should be reduced some \$7,000,000 or \$8,000,000.

This, upon the imports of last year, would reduce the revenue to about \$50,000,000, which, with the receipts from the public lands, is deemed all sufficient for the necessary requirements of the government—the average expenditures of the last five years, including the public debt and the \$10,000,000 paid under the treaty with Mexico, having but little exceeded \$48,000,000.

A reference to the table of production, taken from the census of 1840, will show that our agricultural and manufacturing production in that year, amounted to \$1,006,138,599; and a reference to the like tables of production, taken from the census of 1850, will show the agricultural and manufacturing production, for that year, to have been \$2,012,520,539, and the ratio of increase, for the five succeeding years, gives \$2,602,363,924 as the value for the year 1855. Suppose \$1,000,000,000 to be consumed at the places of production, and there is left \$1,602,363,924 of production, as the basis of our foreign and internal trade, and the source from which we derive profitable employment for our registered and licensed tonnage and our railroads. Take fifteen percent. of this for our foreign trade, which is about equal to our exports, and there is left \$1,352,009,336 for our internal trade, constituting the commercial ligament, that binds us together, as one nation and one people.

The effect of reciprocal free trade is shown by our commerce with the British North American provinces; before and since the reciprocity treaty, which went into effect in 1854. In 1853 the exports of American produce to those provinces amounted to \$7,404,087, and our imports from them to \$7,550,718; whilst in 1855, the exports of American produce to said provinces amounted to \$22,714,697, and our imports from them to \$21,310,421.

The total gold and silver coinage of the United States Mint, from 1793—when the mint was first established—to the 30th of September, 1856, has been \$549,341,914.14, and that the entire import from 1830, when the account was first kept, has

been \$293,505,743, and the export \$436,587,354—there being no account of the imports and exports, prior to 1820.

The desideratum of a sufficient uniform currency, of a fixed value, in all the States and Territories, is all that is required, so far as currency is concerned, to secure a sound and healthy foreign and internal trade. A currency, partly composed of bank notes, has a liability, and to some extent a tendency, to excess against which convertibility into gold and silver on demand, is no security; nor is the confining discounts to notes and bills, representing real transactions, a security and never will be, whilst there is such a thing as overtrading and overproduction; and, for the same reasons, a pure metallic currency, would not constitute a perfect security, against a diminished or redundant supply.

The establishment of a pure metallic currency would require the withdrawal of the corporate authority, given by State charters, to 1,338 banks to issue and circulate bank notes as money, and the consequent withdrawal of \$195,000,000, now circulated by them. Congress has no power to act upon the Charters granted by the States, during the continuance of the charters, and the States would certainly not agree to make a surrender of the power to Congress; therefore, a pure metallic currency may be set down as impracticable under our constitution and our laws, to say nothing of the sentiment of our people.

The existing tariff laws might be so modified as to be of more certain and easy execution, and to the prevention of that fluctuation in duties, of which the manufacturers and the friends of protection complain. The greater part of the revenue now collected is from iron and steel and manufactures of iron and steel, silk and hemp and flax and the manufactures of hemp and flax, and the manufactures of cotton, and manufactures of which silk, wool, hemp, flax, and cotton are component parts, and brandies, wines and sugars. The imports of these articles for the first fiscal year 1856 amounted to \$166,089,379, and the duties on them to \$47,168,850 05, as per statement No. 28 of this report.

The amount transferred for disbursement, during the past fiscal year, was \$38,088,118 92, at a cost of \$12,945 87, whilst the premiums paid on sale of treasury drafts, have been \$54,924 16, leaving \$41,978 29 over and above the expenses. It is believed that, with care and vigilance, the transfer of public money will hereafter be made, through the agencies of the treasurer, assistant treasurer, and depositories, without charge and without risk, except under extraordinary circumstances, and in peculiar times. The receipts and expenditures, during the past fiscal year, have amounted, in the aggregate, to \$146,866,933 48, and have all been, in the constitutional currency of gold and silver, without any disturbing upon the currency, the banks, or business of the country. However, the withdrawal and prohibition of small note circulation of the banks is deemed essential, to a sound and staple currency, and to be called for by the best interest of all the States.

Increase of Wealth in Ohio.

In the year 1850, before the completion of its railway system, the State of Ohio had an aggregate amount of taxable property rated at \$439,876,340, and in the year 1850, after the completion of the system, the value of the same description of property, is set down at \$869,877,354, very nearly double. Nothing can more forcibly illustrate the wonderful effects of railway improvements upon the prosperity of the State. Ohio has entered more largely than any other member of the confederacy upon the development of the system of railways.

Knoxville and Kentucky Railroad.

We are gratified to be able to announce says the *Knoxville Standard*, that contracts for the graduation and masonry of the first thirty miles of this important road have been let to energetic and responsible contractors.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence.....	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	64	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.			
Androscog. & Kennebec.....	55	588,042	1,622,905	2,210,947	209,475	110,247	14	14	South Western.....	92	1,097,490	465,500	1,824,920	253,306	141,168	8	
Kennebec & Portland.....	56	1,114,725	1,661,236	2,470,900					Tennessee and Alabama.....	30	246,456		679,906	In progr.			
Portland, Saco & Portland.....	61	1,367,000	119,237	1,486,237	270,214	112,491	6	83	Tennessee and Missouri.....	30	170,931		175,940	In progr.			
Boston, Concord & Montreal.....	98	1,808,066	1,059,512	2,771,510	233,234	120,834			Memphis and Charleston.....	217	2,179,440	2,127,002	4,023,792	311,631	159,573		
Ohio.....	53	2,085,925	899,813	3,179,687	380,221	143,565	2	18	Mobile and Ohio.....	153	2,568,556	1,802,921	4,284,112	199,382	109,236		
Concord.....	36	1,900,000	8,242	1,412,576	835,919	136,454	6	74	Miss. Central.....	188	642,534		628,303	In progr.			
Northern, N. H.....	82	2,763,400		3,016,633	370,529	138,299	2 1/2	89 1/2	N. O., Opelousa & G. W.....	55	2,930,425	671,645	2,657,563	In progr.			
Conant & Passumps. Riv.....	61	1,048,146	767,608	1,790,062	162,687	55,173			Vicksburg, Shreveport & Tex.....	111	1,000,000	1,500,000	2,500,000	In progr.			
Rutland & Burlington.....	120	2,253,376	2,662,396	5,378,428	824,971				East Tennessee and Va.....	16	625,425	928,593	1,553,781	In progr.			
Vermont Central.....	117	5,000,000	3,256,636	2,188,598	489,754	140,377	6	53	Nash. and Chattanooga.....	161	2,319,350	1,497,081	3,843,994	316,090	112,177		
Boston and Lowell.....	27	1,830,000	150,000	4,179,635	339,060	6	7 1/2		Covington & Lexington.....	98	1,302,804	2,235,939	3,738,753	264,978	133,694		
Boston and Maine.....	83	4,076,974	1,618,671	3,463,418	59,917	8,740			Lexington and Frankfort.....	29	439,055	158,099	637,071	93,263	43,635		
Boston and N. Y. Central.....	74	2,240,000	359,132	3,677,154	558,671	219,689			Lexington and Danville.....	42	694,444	52,734	747,178	In progr.			
Boston and Providence.....	68	4,500,000	655,428	4,865,419	1,008,004	404,461	6 1/2	83 1/2	Louisville and Frankfort.....	65	898,236	669,061	1,589,596	244,014	96,902		
Boston and Worcester.....	47	681,950	280,593	997,252	119,221	65,527	3	40 1/2	Atlantic & Gt. Western.....	254	866,939	77,224	613,231	In progr.			
Cape Cod.....	52	1,691,110	273,241	1,802,244	286,583	103,787	5 1/2	43	Bellefontaine and Ind.....	118	1,381,635	2,025,952	2,852,652	298,236	140,823		
Connecticut River.....	90	2,947,737	4,621,016	647,251	305,998				Clev., Col. and Cincin.....	141	4,547,020	1,222,857	4,613,722	1,290,296	732,066	9	106
Eastern, Mass.....	97	3,540,000	153,700	3,765,968	661,168	225,071		72 1/2	Cleveland and Toledo.....	200	2,676,425	2,689,301	5,124,629	736,272	396,986	10	73 1/2
Fitchburg.....	30	800,242	225,585	983,621	In progr.				Clev. and Mahoning.....	103			628,533	In progr.			
North-Eastern.....	21	500,900		533,953	198,431	56,533	6 1/2		Clev. and Pittsburg.....	133	2,780,744	3,043,992	5,637,466	561,877	309,518		
N. Bedford and Taunton.....	37	3,015,100	292,450	3,362,490	635,499	295,738	6	84 1/2	Cin. Hamilton & Dayton.....	90	1,153,900	1,321,213	2,987,757	508,271	278,012		
Old Colony and Fall River.....	57	2,232,541	1,033,679	3,209,727	264,726	87,318			Cin. Wilm. & Zanesville.....	131	1,120,450	1,131,266	2,326,456				
Vermont and Mass.....	155	5,150,000	5,996,420	10,495,905	1,869,673	633,013	7	91 1/2	Columbus and Xenia.....	55	1,484,550	149,000	4,481,733	354,266	187,518	10	12
Western, Mass.....	46	1,141,000	303,665	1,351,271	204,780	76,760	2	42	Dayton, Xen. & Belpre.....	63	437,838	422,558	860,496	In progr.			
Worcester and Nashua.....	43	1,510,020	335,461	1,806,696	311,430	138,057		70	Dayton and Michigan.....	140	1,076,602	393,011	1,186,326	In progr.			
Providence and Worcester.....	72	2,356,000	939,000	3,313,932	730,012	352,709	10	118 1/2	Dayton and Western.....	35	310,000	500,000	733,769				
Hartford and N. Haven.....	122	2,098,110	2,039,665	4,060,869	258,685	119,611			Baton and Hamilton.....	42	454,690	904,489	1,156,135	171,929	65,000		
Hart'd, Prov. and Fishkill.....	120	2,000,000	414,240	2,431,773	339,196	71,427			Little Miami.....	65	2,993,921	1,171,785	3,648,172	681,562	336,708		
Housatonic.....	67	1,031,800	524,244	1,580,723	220,459	93,768			Mad River and L. Erie.....	205	2,451,650	2,672,932	4,444,661				
Naugatuck.....	52	3,000,000	2,376,803	5,376,803	884,906	338,377		26	Central Ohio.....	138	1,520,297	3,485,078	4,283,443	Recently opened.			
N. York and N. Haven.....	60	738,258	785,165	1,460,318	88,007	50,318			Ohio and Penn.....	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	54
N. Haven and N. London.....	68	509,207	873,673	1,594,383	124,044	66,430			Pittsburg, May's & Cin.....	50	371,350	31,000	390,933	In progr.			
N. London, W. & Palmer.....	68	2,122,300	1,073,489	2,597,153	304,230	88,458	2 1/2	25	Sand'y, Mansf. & Newk.....	127	1,350,000	2,206,357	3,552,357	328,958	164,479		
Norwich and Worcester.....	32	439,005	1,625,098	1,840,695	117,716	9,904			Scioto & Hocking Valley.....	135	403,975	509,050	888,858	In progr.			
Albany Northern.....	35	643,330	187,859	974,323	In progr.				Sprng. Mt. Vernon & P.....	113	1,000,000	950,000		In progr.			
Black River and Utica.....	100	1,487,874	1,501,183	2,819,096	172,476	66,333			Tol. Wash. & St. Louis.....	242	2,500,000	4,580,000		In progr.			
Buffalo, Corn. and N. Y.....	92	799,738	2,657,849	3,401,868	288,392	31,896			Cin., Log. and Chicago.....	255	4,198,679	1,006,125	2,080,433	In progr.			
Buffalo and N. Y. City.....	69	1,800,000	1,040,000	2,494,364	679,750	355,763	10		Evansville & Crawfordsv.....	109	706,945	1,177,596	1,844,541	127,400	64,562		
Buffalo and St. Line.....	47	434,111	1,222,393	1,276,706	174,089	69,506			Ind. and Cincinnati.....	88	1,213,723	1,442,559	2,178,461	356,012	193,142	7	60
Canandaigua and Elmira.....	96	1,316,000	2,279,354	3,495,352					Indiana Central.....	66	611,400	1,261,179	1,907,911	350,176	134,375		
Canandaigua & Niagara Falls.....	86	687,000	506,689	1,187,562	135,433	48,649			Ind., Clev. & Pittsburg.....	83	826,826	1,099,400	1,531,226	228,058	93,010		
Cayuga & Susquehanna.....	144	3,758,466	9,250,362	12,737,398	1,812,087	603,946		29 1/2	Jeffersonville.....	60	1,014,252	694,000		206,544	94,318		
Hudson River.....	95	1,675,148	688,949	2,555,986	301,793	116,462		26	Madison and Indianapolis.....	87	1,647,700	1,336,816	1,205,000	286,146	112,880		
Long Island.....	634	24,154,860	14,462,742	28,523,913	6,663,581	3,182,126	8	90 1/2	New Albany and Salem.....	238	2,636,121	5,281,448	6,643,189	645,827	371,492		
New York Central.....	454	10,223,958	25,126,679	33,439,431	5,488,993	2,627,118		61 1/2	Peru and Indianapolis.....	28		583,314		150,000	90,000		
New York and Erie.....	138	5,717,100	4,069,769	8,758,203	1,635,577	234,126		10	Terre Haute and Ind.....	73	974,800	604,355	1,502,166	287,512	139,702	10	
New York and Harlem.....	118	1,633,022	4,069,874	5,470,714	520,153	135,754		1	Chicago and Rock Isd.....	182	3,141,500	2,387,155	5,214,152	In progr.			
Northern, N. Y.....	35	399,000	216,881	723,683	126,540	59,982	3 1/2		Chicago and St. Louis.....	220				1,077,812			
Oswego and Syracuse.....	29	467,200	204,189	749,683	In progr.				Chicago, Burl. and Quincy.....	58	1,639,100	1,684,736	2,884,622	722,580	379,821	20	
Pottsdam and Watertown.....	26	610,000	140,000	896,423	241,149	82,600	7		Central Military Tract.....	88	1,202,500	2,183,050	2,920,241	471,399	219,588		
Rensselaer & Saratoga.....	48	500,000	355,600		71,909	21,089			Chio. St. Paul & Fd du Lac.....	178	2,300,000	1,129,964	3,625,000	In progr.			
Saratoga and Whitehall.....	90	768,399	1,578,804	2,272,777	159,454	22,503			Galena and Chicago.....	259	5,441,500	3,318,639	7,742,614	2,315,768	1,192,042	22	118 1/2
Syracuse & Binghamton.....	27	487,830	337,079	1,109,822	156,363	55,184			Illinois Central.....	627	2,271,050	10,410,392	20,374,446	1,532,118	527,952		
Troy and Boston.....	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	63	Peoria and Oquawka.....	98	569,889	518,454	1,388,342	In progr.			
Watertown and Rome.....	64	1,000,000	1,619,000	2,619,000	161,356	75,634			Ohio & Miss. (Wat. Div.).....	147	1,780,296	3,292,403	4,570,586	Recently opened.			
Belvidere Delaware.....	94	8,000,000	11,407,200	8,686,523	2,017,127	961,941	12	124	Terre Haute and Alton.....	178	2,381,420	1,256,000	3,637,424	In progr.			
Camden and Amboy.....	90	369,320	1,622,181	1,729,642	123,417	50,080			Detroit and Milwaukee.....	185	838,000	1,128,964	1,964,969	In progr.			
Camden and Atlantic.....	30	3,482,850	690,000	4,310,011	861,514	500,747	10	124	Mich. Central.....	282	6,032,444	5,996,013	10,668,155	2,215,283	879,656	10	98 1/2
New Jersey.....	63	2,000,000	2,286,176	3,683,149	393,728	171,603			Mich. South'n & N. Ind.....	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000		
New Jersey Central.....	51	1,157,805	375,000	1,636,550	229,341	96,267	6		Green Bay, Mil. & Ch.....	155	764,075	442,726	1,198,766	In progr.			
Morris and Essex.....	44	1,637,867	342,564	1,988,317	Recently opened.				Milwaukee and Milwaukee.....	100	1,826,423	2,467,889	3,678,767	691,843	417,443	17	78 1/2
Allegheny Valley.....	63	1,700,000	1,940,000	3,640,000	219,253	62,450			Milwaukee & Water'n.....	72	354,861	132,000	514,238	In progr.			
Cataw. W. & Erie.....	56	1,099,500	12,211	1,191,833	146,381	66,994			Milwaukee and Horicon.....	15	554,200		354,109	In progr.			
Cumberland Valley.....	109	8,081,622	3,584,702	6,022,687	528,911	259,263	8	80	Milwaukee & Le Crosse.....	51	1,351,832	532,131	1,883,963	In progr.			
Del. Lack. & Western.....	20	600,000	150,000	750,000					Racine and Miss.....	47	921,966	380,716	1,289,321	In progr.			
Erie and North East.....	33	600,000	1,200,000	1,348,812	89,535	53,335			Hannibal & St. Josephs.....								

Railroad Bonds.

Names of Companies. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	600,000	Do. inconvertible.	7	April, October.	"	1866	97	
Bellefontaine and Indiana	600,000	Do. convertible.	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Ch. Col. & Cin.	7	Feb'y, August.	"	1869	80	
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	78	
Do.	800,000	2d do. inconvertible.	7	March, Sept.	"	1865	73	
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible.	7	20 Jan. 20 July	"	1867		
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	80	
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862.	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.	"	1862	80	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.	"	1861	91	
Cleveland and Pittsburgh	800,000	Do. convertible.	7	Feb'y, August.	"	1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	76	
Cleveland and Toledo	525,000	Do. inconvertible.	7	Feb'y, August.	"	1868	88	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October.	"	1862-72	65	
Do. do.	1,200,000	Do. inconvertible.	7	April, October.	"	1862-72	65	
Covington and Lexington	400,000	Do. do.	6	April, October.	"	1867	76	
Do. do.	1,000,000	2d mortgage, convertible.	7	March, Sept.	"	1883	64	
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October.	"	1875	79	
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Jan'y, July	"	1873	80	
Gaiona and Chicago	2,000,000	Do. inconvertible.	7	Feb'y, August.	"	1863	93	
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	85	
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October.	"	1868	86	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	10 April, 10 Oct.	"	1863	90	
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October.	"	1873		
Indiana Central	800,000	Do. convertible.	7	May, Novemb.	"	1866		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	78	
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	85	87%
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1865	70	71
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	77	80
Michigan Central	1,000,000	No mortgage, convertible.	8	April, October.	Boat.	1860	100	100%
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	100%
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	94	
Do. do.	650,000	Do. 2d do. 1858	8	April, October.	"	1863	93	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	85	87
New Albany and Salem	500,000	Do. 1st section	10	April, October.	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. com. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible.	8	Jan'y, July	"	1873		95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867		90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		92%
Do. do.	2,000,000	Income, convertible.	7	April, October.	"	1872	72%	77%
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	96%	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August.	N.Y.	1875		82%
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steuenville and Indiana	1,500,000	Do. convertible.	7	Jan'y, July	"	1866		80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	100	
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	77	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August.	"	1870	72%	73

Names of Companies. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage.	6	April, October	Balt.	1885	83	83%
Do. do.	1,123,500	Do.	6	Jan'y, July	Balt.	1876		86%
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	94%	98
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	104	105
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	97%	95%
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	94	96%
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	95%	94%
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August.	"	1871	85%	86
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	99%	99%
Do. do.	2,000,000	2d do. do.	7	18 June, 18 Dec.	"	1860	86	90
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	64	66
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October.	"	1875	93%	94
Do. (Free Land)	8,000,000	M'ge 345,000 acrs. priv. 7 shars	7	March, Sept.	"	1860	103	106
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	88	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	79	80
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-69	82%	86
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	91	
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	85%	
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	85%	86
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102	103
Panama, 1st issue	900,000	Convertible till 1859	7	Jan'y, July	"	1866	98	100
Do. 2d do.	1,475,000	Do. till 1859	7	Jan'y, July	"	1866	98	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		91
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89	91
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October.	"	1870	80	80%

CITY SECURITIES.	Int'st payable.	Off'd.	Ask'd.	CITY SECURITIES.	Int'st payable.	Off'd.	Ask'd.
New York, 7 per ct. 1857	{ Feb'y, May, August, and November.	100	102	Milwaukee, 7 per ct. coup. X	Divers	76	80
Do. 5 do. 1858-60		93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	72	75
Do. 5 do. 1870-75		89	91%	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	82	85
Do. 5 do. 1890		89	91%	Philadelphia, 6 per ct. 1876-98	Jan'y, July	80%	80%
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	100	102	Pittsburgh, 6 per ct. coup. X	Divers	74	76
Alleghany, 6 per ct. coup. X	Jan'y, July			Quincy, 8 per ct. coup. 1868 X	Jan'y, July		
Baltimore, 6 per ct. 1879-90 X	Quarterly.	94	97	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug.		85
Boston, 5 per ct. coup. X	April, October.			Rochester, 6 per cent. coup. X	Divers		96%
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	99%	100	St. Louis, 6 per ct. coup. Long X	Do.	77%	78%
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do. do.		101	Do. do. Municipal X	Do.	79%	80%
Cincinnati, 6 per ct. coup. X	Divers	89	90%	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	72	73
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	87	89%	S.F. & P. 7 p. cp. 1865, pay N.Y. X	May, Novemb.		80
Do. 7 per ct. coup. 1880 X	Jan'y, July		100	Do. 10 p. ct. cp. 1871 X	Do. do.	88	90
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August.	100	102%	Do. 10 do. pay N.Y. X	Jan'y, July		
Indubue, 8 per ct. cp. Long X	March, Sept.	101		Do. 6 per ct. pay N.Y. 1876 X	Do. do.	59	
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July		93	Wheeling, 6 per ct. coup. X	Divers		67%
Louisville, 6 per ct. cp. 1880-83 X	Divers		80	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	78	80
Memphis, 6 per ct. coup. 1882 X	Jan'y, July		70	Zanesville, 7 do. X	April, October	96	100

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending December 3, 1856.

BONDS.	
\$2,000 Conv. & Lex., 7 per cent, 2d Mortg.	65
3,000 Ohio and Miss. 7 per cent 2d Mortgage	50
1,000 Cin. and Chic., 3 per ct. Real Estate	18
2,000 Little Miami, 3 per ct. 1st Mortg.	50
5,000 Indianapolis, 7 per ct. 1st Mortg.	78
5,000 Hillsboro' & Cin., 7 per cent, 1st Mortg.	45
1,500 Covington & Lex., 6 per cent, 1st mort.	40
350 Indianapolis & Cin. 7 per ct. Dividend	70
2,800 Cin. Wilm. and Zanesv. 7 per ct. Income	16
1,000 Cin. Wilm. and Zanesv. 7 per ct. 2d Mortg.	35

STOCKS.	
300 Shares Ohio and Mississippi	6
150 " Little Miami	72%
40 " Do. do.	50%
100 " Do. do. 3d do.	91%
30 " Columbus and Xenia	85
100 " Cincinnati and Chicago	2%
162 " Do. do. 130d.	3
65 " Mad River & Lake Erie	76
223 " Indianapolis & Cincinnati	67
76 " Cincinnati, Hamilton, & Dayton, 160d.	65
18 " Ohio Central	12%
79 " Marietta & Cincinnati	14
20 " " " 80d.	16
100 " " " 80d.	18
300 " Junction (Ind.)	6%
12 " Indiana Central	50

By KIRK & CHEEVER.

For the week ending December 2, 1856.

BONDS.		Per ct
Little Miami, 6 per ct. Mort.		50
Covington & Lexington, 2d Mort. 7 per ct.		65
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)		50
Indianapolis & Cin., 2d Mort. 7 per ct.		79
Cin., Ham. and Dayton, and Mort. 7 per ct.		88
Hillsboro' & Cin., 7 per cent, 1st Mortg.		47
Covington & Lexington, 10 per ct. Income		68
Indianapolis and Cincinnati Dividend		70
Columbus and Xenia Dividend, due Jan'y 1, 1861		85
Little Miami, Dividend Scrip, issued June, 1856		81

STOCKS.	
Bellefontaine and Indiana, 25.-Cin., Ham. and Dayton, 64.	
-Col. and Xenia, 85.-Cincinnati, and Chic., 3.-Covington & Lexington, 15.-Dayton & Western, 19.-Eaton and Hamilton, 20.-Indiana Central, 48.-Indianapolis and Cincinnati, 68.-Little Miami, 88.-Mad River & Lake Erie, 15.-Marietta and Cincinnati, 14.-Ohio and Mississippi, 6.-Hillsboro' and Cincinnati, 14.-Peru and Indianapolis, 8.-Cincinnati, Wilmington and Zanesville, 10.-Cin., Ham., & Indianapolis, 10.	

Extract from De Coppel & Co.'s Money's Circular for the European Steamer of the 10th inst.

[TRANSLATED.]

NEW YORK, Tuesday, Dec. 9, 1856.

During the three days which succeeded our last advises of the 1st inst., our stock market presented a state of great activity, accompanied by an upward movement, slow, but apparently founded upon a solid basis. A combination of circumstances took place to favor this movement; the message of the President of the United States, issued on the 1st December, spoke as regards politics, as well domestic as foreign, in the most pacific manner; the brilliant report of the Secretary of the Treasury showed the finances in a state of rare prosperity, and presented between the importation and exportation for the fiscal year, a balance of about \$12,000,000 in favor of the commerce of the country; the news from Europe by the steamer from Liverpool of the 22d November, was decidedly more encouraging; all these causes were of a nature to influence a belief in a more decided general upward movement, the first indications of which were already being felt, when the failure of Messrs. JACOB LITTLE & Co., announced on the 5th inst., suddenly arrested this movement and threw our stock market into some perturbation. This house which for a long time played an important part on our stock market as operators, for a fall on a very large scale, had, it is said, stock deliveries to make for more than ten millions of dollars. This failure had the effect of causing great irregularity in prices, and on some railroad shares sudden oscillations, whilst State Stocks in general, and Illinois Central Bonds especially, experienced a decided rise. On the whole our subjoined table of daily quotations shows variously some advance and some decline on the prices of last week. Some days will probably elapse before these abnormal causes cease to make themselves felt in our market. The rise has been general and transactions large in State Stocks. The chief busi-

ness has been in Missouri 6s at an advance of $\frac{1}{4}$, Tennessee 6s of $\frac{1}{2}$, Virginia 6s of 1, Indiana 5s of $1\frac{1}{2}$, and in California 7s, 1875, of 6 per cent. The rise of about 10 per cent., on these latter since a fortnight, is due to the fact that the funds destined to pay the interest of January next have already been placed in the hands of the agents at New York; the favorable news in general as to the stability of affairs in California has doubtless contributed equally towards this movement. In regard to City and County Bonds, besides some transactions in Milwaukee City 7s, and Montgomery County 6s, we have nothing to notice. There have been for some time more sellers and buyers of this class of securities. There has been a moderate business in Railroad Bonds, with the exception of Illinois Central Constructions, in which the transactions have been large, closing at a rise of $2\frac{1}{2}$ on last week. At private sale very little has been done, and we only know of a few small transactions in Burlington and Missouri first mortgage, in La Crosse and Milwaukee first mortgage, and in the various issues of the Milwaukee and Mississippi Railroad. We introduce in our quotations the first mortgage bonds of this last company on the Wisconsin Southern Branch, and give below some details concerning the state of advancement of the construction on this branch, as well as on the principal line. The transactions in Railroad stocks have been very large, with less activity at the end of the week, and lower prices. The principal business has been in New York Central, at an advance of $1\frac{1}{2}$; Reading, of $1\frac{1}{4}$; Chicago and Rock Island, of $5\frac{1}{2}$ per cent; in Erie, at a decline of $\frac{1}{2}$ per cent; in Cleveland and Toledo, of $\frac{3}{4}$; in Michigan Southern, of $\frac{3}{4}$; in Michigan Central, of $\frac{1}{2}$, and in Cleveland and Pittsburg, at a decline of 2 per cent. Panama has risen $\frac{3}{4}$, and Illinois Central $\frac{1}{2}$ per cent., for loans on call. Paper, 8s12 per cent., according to class and length.

DE COPPET & CO.

Extract from Cammann & Co.'s Money Circular for the European Steamer of the 10th inst.

NEW YORK, Tuesday, Dec. 9, 1856.

The favorable tenor of the recent accounts have, apparently, dissipated all apprehension of an immediate monetary crisis in Europe, and strengthened the confidence which was previously felt in a continuance of the present easy condition of money matters on this side. Our stock market has, consequently, had an improving tendency, and the accompanying quotations are generally, and, in some cases, materially higher than those contained in our report of 25th ult. There is an increased activity in investment securities of current descriptions, but the attention of operators is still attracted, principally, towards dividend-paying railroad stocks. State Stocks have been in demand, and are higher and firmer. The transactions in Railroad Bonds have been to a fair extent. The only material improvement is in Illinois Central bonds— $2\frac{1}{2}$ per cent. on Construction, and $2\frac{1}{2}$ on Freeland. Erie 1875's have declined 1 per cent. In Railroad Shares the business of the fortnight has been large, with considerable buoyancy in prices, which was checked, on 5th inst., by the suspension of a leading firm, who, for some time past, have been operating for a decline; to an extent sufficient to exert an important and, at times, a controlling influence on the market. Prices have since been unsteady, and close with an average decline of 1s2 per cent. from the highest points, which were reached on the day previous to the suspension. Our present quotations, however, show an advance of 2 per cent. in New York Central, $2\frac{1}{4}$ in Reading, 6 in Chicago and Rock Island, 1 in Panama and 1 in Michigan Central. Of Illinois Central the sales have been rather limited, at 116s117. There is a full supply of money, at 7 per cent. on call and 8s9 per cent. for first-class paper, although, during the last few days, the banks, in consequence of a drain of specie to other cities, have been rather stringent. The Foreign Exchange market has been rather

firm for this mail, with considerable activity in Sterling and Francs. CAMMANN & CO,

American Railroad Journal.

Saturday, December 13, 1856.

Railroad to the Pacific.

We copy in another column a bill now before Congress, professing to provide for the construction of three railroads to the Pacific.

A measure of greater magnitude can hardly occupy the attention of Congress. If passed, it would take from Government nearly all the arable domain it possesses. To this there may be no objection; but would the passage of the bill secure the construction of the proposed roads? When the deserts are reached, will any company go further? As no penalty is attached for stopping, would they not all abandon the works, as soon as the outlay exceeded the income from the lands along the line?

Again: before making extensive appropriations to any route, would it not be well to see whether a railroad can be built upon it. The practicability of the routes proposed is a matter taken for granted; a position which Congress, no more than individuals in similar circumstances, have a right to assume. In a matter of such vital importance as are the proposed works, our people cannot afford to make mistakes which may result in loss of confidence and courage, and postpone for years their completion.

The public lands can undoubtedly be made a substantial basis for at least one road. We shall discuss this matter more at length in our next issue.

Philadelphia Railway Agency.

This Agency was commenced in 1852, by the late O. A. Norris, and continued by him until his death, in 1854. Mr. THOMAS M. CASH, his successor, whom we have frequently met both in this city and Philadelphia, is a gentleman well qualified to fill the place occupied by Mr. Norris.

By an Advertisement of Mr. CASH in another part of the Journal it will be seen that in addition to his ordinary business, which we understand is in a most flourishing condition, he has leased a large building in Walnut st., Philadelphia, which is fast becoming one of the principal business streets in that city, in which he proposes to establish a depot for the exhibition and sale of every description of machinery; and if sufficient inducement is held out by the manufacturers of the same, proposes to erect a steam engine of sufficient power to run any machinery that they may desire to exhibit in motion—thus making his establishment an attractive resort for American manufacturers, as well as those who are desirous of purchasing.

Mr. CASH is we believe the sole agent in Philadelphia for the sale of the celebrated *Lowmoor Tyres*, made by the Lowmoor Iron Co. of England, of which Messrs. W. Balley Lang & Co. are the accredited agents in this country.

Messrs. M. & J. Wing, proprietors of the Jericho Works, Sheffield, Eng., manufacturers of steel, files, saws, etc., have appointed Mr. CASH as their Philadelphia Agent.

Car Wheels, in rough or on axles, from the celebrated Works of Messrs. Whitney & Sons of

Philadelphia, and Messrs. Bush & Lobdell of Wilmington, Del., and other celebrated makers.

Mr. CASH is also agent for the Railway Turning and Sliding Tables, and Pivot Bridges which are manufactured upon a new and economical plan by Messrs. William Sellers & Co. and are fitted with Parry's Anti-Friction Box, thus enabling one man, to turn the largest table together with engine and tender, without the intervention of gearing—and being made of iron are not liable to get deranged.

Mr. CASH also proposes when established in his new store, to keep constantly on hand a full assortment of samples of articles required by railway companies, car builders, machinists and others, a full description and enumeration of which will be found in a circular recently issued by him for general circulation. Those desiring a copy can be supplied, together with any farther information, by addressing THOMAS M. CASH, 12 & 14 Walnut St., Philadelphia.

Chicago, Alton and St. Louis Railroad.

We give in another column the circular addressed to the bondholders in this road for the purpose of securing their assent to the proposition submitted some time since for the adjustment of the affairs of this company, and to relieve it from its present embarrassments.

The Locomotive.

No. 9.

By THEODORE KRAUCH, Civil and Mechanical Engineer.

Passing from the fire box to the smoke chamber are the flues; round tubes of iron, brass or copper, to allow the escape of the gases produced by combustion. The end of the tube entering the sheets is by some builders bevelled off and a steel thimble driven on to make the joint quite tight. Others again bevel the sides of the hole in the flue sheet and finish it up with an iron thorn, after which the tube and thimble are fitted. Thus the joints are secured and the head of the boiler is grasped by the tubes as in the case of an ordinary dovetail, in addition to the fastenings of stay-bolts as in the other walls of the fire box. There could exist no objection to this arrangement, were it not that, by this process, the ends of the boiler are drawn in towards each other, and the very effect is induced that we seek to prevent—namely, the loss of steam by leakage, produced by the unequal expansion of the metals used. This may be illustrated by a sudden extinguishing of the fire, when the flues will jut out in consequence of the concavity in the sheet, the thimbles will become loosened and slip out of the tube. If the thimbles are of soft iron a slight extension of the tube will reduce the diameter and the thimble is driven in, hence does not press so powerfully against the sheet, but leaves a leaky joint. This danger will not exist where steel or hard iron are used.

For the construction of the flues, it has been found most profitable to use brass in coke burning locomotives, while copper and iron will answer for wood burners.

The diameter of the flues and the length depending on the results of experience and the demands on the engine are, the former $1\frac{1}{2}$ to $2\frac{1}{2}$ inches; the latter varying from 10 to 14 feet. The number is from 100 to 300 according to the amount of indirect heating surface required. A

locomotive on the Great Western railroad in England contains 300 tubes with a flue heating surface of 1,750 sq. ft. One built by Bury exceeds this figure, reaching the enormous amount of 2,136 square feet.

The distance between the flues must be regulated by experience. At present the minimum is $\frac{1}{2}$ inch. The phenomena attending the production of steam will account for this regulation to a certain extent. As soon as this production commences, the water is agitated by the rapid ascension of the steam particles to the surface, and the water line will be an artificial one standing apparently 2 or 3 inches higher than in reality. The same agitation is going on around the flues and when the generation of steam is most rapid, it would be found, if the flues were too near together, that the water would be repelled, leaving the space between quite dry, and thereby producing a most injurious effect. Besides which they would oxidize, in consequence of electric and chemical action.

It is worth while to consider the causes affecting the durability of the tubes and the laws regulating their dimensions. The attrition of the ashes of coke sometimes destroys one-half the weight of the tube; so that, where this fuel is used, the diameter must be the largest practicable. Sometimes, too, in small tubes the particles of coke will be obstructed in their passage through and thus interfere with the draft. The friction of the air will be increased by diminishing the size of the flues and multiplying their number, while a compensating advantage will be the increase of heating surface.

It frequently happens that a flue bursts, either in consequence of the steam pressure, or by friction, or by ordinary wear and tear of use. The accident is not dangerous or of great importance. The engineman will be admonished by the noise or the indication of his steam gauge. The exchange of the damaged flue is not immediately necessary; both ends may be closed by wooden blocks, the combustion of which will be prevented by the water pressing against them.

The incrustation of the boiler is a danger to which it is frequently subjected. These deposits are generally gypsum or carbonate of lime; nearly all water contains some earthy or saline particles, which cannot be evaporated, but which remain in the boiler; the amount, of course, varies. They do not often exceed 0.001 or 0.002 of the volume of water, an amount that seems, at first thought, small but which is really considerable. Thus, for instance, a locomotive boiler evaporating 150 cub. ft. per hour, consumes daily an average of 600 cub. ft.; the precipitation in this proportion will reach nearly 30 pounds. Hence the necessity of frequent cleansing the boiler, an operation easily performed by opening the blow-off cocks which are attached to the lowest part of the boiler just over the line of the grate. Some engines contain, besides, four two-inch screws, one to each corner of the fire box, also an opening in the front tube sheet near the bottom of the boiler.

But notwithstanding the care used in blowing off the boiler, it will be found that some of the injurious particles remain and settle as incrustations. This deposit will be the most rapid, when the production of steam reaches the maximum. This incrustation affects not only the eva-

poration of the water but the quality of the metal, because being a poor conductor of caloric, the metal covered by it is exposed to the injurious action of the heat, since the water cannot come in direct contact with it. An explosion at such a point is not uncommon.

To prevent incrustation in boilers, several means have been tried. Throwing a quantity of clay into the water will prevent the formation of scales—so also will the intrusion of potatoes; shavings of mahogany in a basket hung in the tender will have a good effect; others again use a dose of sal ammoniac or soda transforming them to soluble salts; but it is said these alkaline substances injure the iron of the boiler. In France, at this time, they are using starch.

A recently invented mechanical contrivance has completely and beautifully accomplished the desired purpose, by simply heating the water before use and placing the proper chambers and surfaces to receive the solid matter before the water enters the boiler. In the stationary high pressure engine, the water is heated by the exhaust steam. In the locomotive, superheated steam is used, and the apparatus, a simple dome in form, is placed on the top of the boiler. This apparatus is known as WEISSENBORN'S Incrustation Preventor.

The flue sheet is made of iron considerably thicker than the other parts of the boiler—the object being to furnish a good foundation for the fastenings of the tubes; especially has the sheet near the fire box to submit to the direct action of the fire.

The forward end or flue sheet of the locomotive boiler constitutes the rear wall of the smoke box, and a door for entering to attend to repairs and for cleaning the chamber is placed on the front. The form of the chamber is generally made by simply extending the cylindrical part of the boiler, though sometimes the lower part is changed to a rectangular shape.

The smoke box where not subjected to steam pressure is built of one-quarter inch iron, and is fastened by a heavy circular brace on the interior. To regulate the draft properly, it is necessary to apportion the smoke box in accordance with certain laws—generally its length is one-half the length of the fire box.

The smoke stack or chimney is built to a height corresponding to the height of the bridges and buildings on the road generally 5 or 6 feet above the boiler. The width depends on the dimension of the exhaust orifice, and is generally that of the cylinder. A cylindrical pipe of thin tinued iron plate constitutes the smoke stack for coke and coal burning locomotives. The same character of stack, but surrounded by a conical mantel of tin answers for the wood burner. The space between the pipe and cone retains the ashes and sparks. Both kinds are covered at the top by wire gauze to prevent the egress of cinders. An inverted cone in the top of the wood burner's stack throws back the grosser particles that escape from the fire.

The ash pan of thin sheet iron is directly under the grate; the front side is opened or closed at the pleasure of the engineman to regulate the combustion of the fuel. A back door may be opened when snow enters at the front or when

circumstances require the backward running of the engine. (To be continued.)

Railroad Earnings.

The receipts of the New York and New Haven Railroad Company for November were as follows:

Passengers.....	\$87,017 14
Freight.....	11,000 00

	\$98,017 14
Less due other bonds	24,324 44

	\$73,692 70
For November, 1855	68,280 18

Increase.....	\$5,412 52
The Hudson River Railroad Co.'s receipts for November, 1856, were	\$137,533 66
For November, 1855.....	120,680 84

Increase.....	\$16,952 82
The receipts of the Morris Canal have been:	
Total to Nov. 22, 1856.....	\$299,941 98
Week ending Nov. 29, 1856.....	4,863 15

	\$304,805 13
Total tolls in 1855.....	272,125 28

Increase in 1856.....	\$32,679 90
The earnings of the Mad River and Lake Erie Railroad for the months of August, September and October were	\$224,951 92
Expenses.....	96,194 95

Net earnings.....	\$128,750 97
In corresponding quarter of 1855....	83,627 48

Net gain in 1856 (54 per cent.).....	\$45,129 49
This road has recently come into the hands of new and experienced managers, and the effect is seen at once.	

The first annual report of the Detroit and Milwaukee railroad is published. The earnings of the road have been:

From April 21, 1855, to Oct. 1, 1856.....	\$231,943 61
Earnings for 1854-'5	121,719 22

Difference.....	\$110,224 39
The expenses for same time have been	100,470 15
The earnings of the Oswego and Syracuse railroad were:	

In 1855	\$125,540
In 1856	146,191

Increase.....	\$20,651
The earnings of the Chicago and Burlington Railroad Line for November, 1856, were:	

	Freight.	Passengers.
November, 1856.....	\$120,903 00	\$55,574 16
Do. 1855.....	97,472 83	53,081 89

Gain in 1856.....	\$23,430 17	\$2,542 27
	Miscellaneous.	Total.

November, 1856.....	\$1,472 78	\$177,949 94
Do. 1855.....	1,379 29	151,894 01

Gain in 1856.....	\$83 49	\$26,055 93
The proportion of earnings in November by each road composing the line are as follows:		

	Freight.	Passengers.
Galena and Chic. Union.....	\$13,739 73	\$4,804 48
Chic., Burl. & Quincy ..	96,281 32	43,241 00
Peoria and Oquawka....	10,931 95	7,528 68

Totals.....	\$120,903 00	\$55,574 16
	Miscell.	Total.

Galena & Chic. Union....	\$13 59	\$18,567 80
Chic., Burl. & Quincy ..	1,156 98	140,629 31
Peoria and Oquawka.....	302 20	18,762 88

Totals.....	\$1,472 78	\$177,949 94
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The Western and Atlantic Railroad of Georgia makes a very gratifying exhibit for the year beginning 1st October, 1855, and ending 20th Sept., 1856.

Total receipts \$871,366
Expenses for the same period 380,688

The total cost of the road was about \$5,500,000, showing a net profit for the year of nearly 9 per cent.

The earnings of the Chicago, Burlington and Quincy railroad for five months ending November 30th, are.....\$944,711 48
Operating expenses for same period \$346,102 28
Interest paid on funded debt 63,966 00
410,062 28

Net earnings for five months..\$534,649 15

The earnings of the Cleveland and Toledo railroad in November were:

	Passengers.	Freight.	Total.
Nov. 1856.....	\$69,166	\$38,708	\$107,874
Nov. 1855.....	67,312	28,341	90,653

Increase.....\$17,221

The receipts of the Kentucky Central R. R. Co., (late Covington and Lexington R. R. Co.) for November, 1856, were\$49,613 86
Do. 1855..... 38,986 57

Increase, 28 per cent.....\$10,647 80
and \$2,300 over October.

The earnings of the Illinois Central Railroad in November were:

Freight.....	\$110,676 46
Passengers	100,433 88
Miscellaneous.....	19,706 41

Total.....\$230,816 55

Journal of Railroad Law.

RATES OF CHARGING.

We notice the two following cases not as bearing particularly on the present state of Railroad Law in the United States, but because they are important as showing the statutory provisions in England with regard to railways, and because these provisions have been to some extent imitated and will probably become the basis of essential alterations in our own statutes. These decisions show the practical working of those additional securities, which Parliament has erected against the abuse of the high privileges which are necessarily conferred upon railway corporations.

They are not sufficiently comprehensive to enable us to speak with certainty on the present state of the law under the statutes and charter provisions referred to therein. The first case decides some questions which may arise in our courts, and every point bearing upon the issue was carefully examined, and the judges were unanimous in their ruling.

Crouch against the Great Northern Railway Company. 34 Eng. L. R. 573.

This case which was decided in the Court of Exchequer in January, 1856, is interesting, as it bears upon the liability of railway companies for any unjust discrimination in their tariff of fares.

Crouch was a carrier in London and was in the habit of collecting small parcels to be sent to different persons in the country, and after collecting them, of enclosing the several parcels in one large parcel, and in thus delivering them to the railroad company to be transported, charging his

customers lower rates than would be charged by the railway companies, if such parcels were sent separately. By the charter of the company they were authorized to demand for the carriage of small parcels any sum they should think fit, provided always that articles sent in large aggregate quantities, such as bags of sugar, coffee, meal and the like, should not be deemed small parcels, but such term shall apply only to single parcels in separate packages. By a statute provision all tolls shall be charged equally to all persons and after the same rate. The company directed their agents to charge for packed parcels at five times the rate for ordinary parcels, and by a further order they directed that Mr. Crouch's parcels and all other suspected parcels should be treated thus. The agent of the company was to ask if the parcel was packed; if the packing was admitted, five times the ordinary freight was to be charged, and if the packing was denied the parcels should not be received until proof of non-packing was given.

In the lower court, the question was submitted to the jury, whether there was an increased risk incurred in carrying a packed parcel, and it was submitted on behalf of the Company, that such additional liability was incurred by reason of the goods contained in the parcel belonged to different parties, and, accordingly, the carriers might be liable to several actions at the suit of these people, instead of only one at the suit of the person to whom the goods belonged. But it is very doubtful whether, on the custom of England, separate actions could be maintained, as the relation of employer and carrier would not have subsisted between them and the company, but between them and the plaintiff in this case as actions could be maintained in certain cases, it would not be unreasonable to allow some additional remuneration on account, not of the liability to pay greater damages, for they would be the same in both cases, but to pay the same damages by means of different suits.

In this case the judgment of the inferior court, giving damages to the plaintiff, was affirmed, and it was held in addition that if the plaintiff's declaration had claimed that as a carrier, whose business consisted in collecting goods to be forwarded by the railroad, and that the defendants designedly refused to carry his parcels which they were bound by law to carry, in order to obtain a monopoly and to destroy the plaintiff's business, under such circumstances the jury would be justified in giving very heavy damages.

In the case of *Parker against the Great Western Railway Company*, in the Queen's Bench charter provision in regard to charges on parcels of under five hundred pounds weight, was brought in question.

The decision was here more favorable to the rights of the railway.

Parker sent three loads of goods to the railway station, in each was a package of coffee, the loads was to be forwarded the same distance and by the same train separately, the packages weighed under five hundred pounds, together they weighed more.

COLERIDGE, J., delivered the opinion of the court. It is clear that to be a small parcel within the meaning of the charter, the weight must not exceed five hundred pounds, it must be single and

it must be in a separate package, unless these conditions be complied with, the denunciation of a small parcel, is not to apply to it.

It would seem therefore, that several parcels each being a separate package, cannot constitute one small parcel within the act; and the plaintiff further relies on the fact that the contents of each parcel were of the same class in the classification table, and we assume in the plaintiff's favor, that by this is meant that all the parcels were made up entirely of goods of the same class. The answer to this is, that the classification table has nothing to do with the question of parcel or no parcel. We are therefore of opinion that the defendants were entitled to charge for each parcel separately.

The Coal Trade for 1856.

The *Pottsville Miners' Journal* sums up the anthracite coal trade of the present year as follows:

	1855, Tons.	1856, Tons.
Schuylkill Railroad	2,212,784	2,089,808
Do. Canal.....	1,094,765	1,146,021
Lehigh Canal.....	1,274,986	1,180,610
Do. Railroad	9,063	165,740
Pennsylvania Coal Co.....	436,681	552,722
Wyoming Down Canal....	464,639	510,631
Delaware and Hudson Co..	539,375	503,096
Shamokin	116,117	Est. 125,000
From Scranton—East ....	....	Est. 50,000
Total.....	6,147,810	6,323,126
		6,147,810

Increase so far.....175,316
To which add probable increase from the Schuylkill and Lehigh regions for balance of year..... 50,000

Increase in 1856, tons.....225,316
The increase this year was derived from the following regions, in round numbers:

	Increase.	Decrease.
Wilkesbarre.....	100,000	....
Lehigh.....	91,000	....
Scranton.....	80,000	....
Shamokin	10,000	....
Schuylkill.....	....	20,000
Delaware and Hudson Co..	....	36,000
Total.....	281,000	56,000

Making the increase of anthracite in 1856 about 225,000 tons from all sources, new and old, against 685,785 tons in 1855 over the year 1854.

The Southern Pacific Railroad.

San Diego, on the Pacific, is destined to be the southern terminus of the Texan Western railroad. The route appears to be rich in mineral and metallic resources. We learn from the *San Diego Herald* that the discovery of coal near that place is fully confirmed. A bed of good coal, sufficiently thick for working purposes, has been opened. A shaft has also been run down, piercing several small strata, from 16 to 20 inches thick. The discovery is of value in every point of view. It is important to San Diego, and advantageous to the great project of constructing a railroad over the Colorado plain. The *Herald* also informs us that the copper mines of Aja are doing remarkably well, notwithstanding that the copper ore has to be carried in wagons from the Colorado to San Diego. A tolerable wagon road has been made, so that the mail wagons now go through in ten days. This is considered remarkable time for that region of country. These facts are strenuously urged in the South for the speedy building of the Texas Pacific road. San Diego is regarded as a tolerable harbor, and its latitude is such that it would preserve its advantages

throughout the year. It is now regarded as the most prominent rival of San Francisco for the Pacific depot of the great continental railway.—*St. Louis Intell.*

Organization of the Main Trunk Railroad.

The stockholders of this Railroad assembled at Milledgeville on Thursday to elect nine Directors, as required by law.—The following commissioners were present: Messrs. CHARLES SPALDING, J. P. SCREVEN, WM. B. HODGSON, E. R. YOUNG, W. P. PONDER, and C. J. MUNNERYLYN. The amount of stock represented was upwards of eleven hundred thousand dollars, of which five hundred thousand was subscribed by the Governor in behalf of the State. The stock of the State was represented by Col. LAWSON, of Burke, and Col. IRWIN, of Wilkes; Judge HILL not arriving until after the vote had been taken.

The following gentlemen were unanimously elected Directors:

Dr. J. P. SCREVEN, of Chatham;
JOHN STODDARD, of Chatham;
C. J. MUNNERYLYN, of Decatur;
HIRAM ROBERTS, of Chatham;
A. T. MCINTYRE, of Thomas;
E. R. YOUNG, of Thomas;
WM. B. HODGSON, of Chatham;
J. R. STAPLER, of Lowndes;
WM. H. LONG, of Chatham;

At a meeting of the Board of Directors, Dr. JAMES P. SCREVEN was unanimously elected President.

We are gratified at being able to announce the organization of this important Company, and that the voice of the stockholders were unanimous in selecting such an excellent Board of Directors. It is also a matter of congratulation that a majority of the Board of Directors are residents of this county, as this will enable the President to obtain a quorum at short notice in case of emergency.

The organization of the Company having thus been consummated, it only remains for the Savannah, Albany and Gulf, and the Brunswick and Florida Companies to unite in the manner pointed out by the Legislature to secure the early commencement and completion of this great work, which is destined to develop the resources of the Southern section of our State.—*Savannah Republican.*

Canal Tolls on the New York Canals.

The following are the total Canal toll receipts for the years named below:

1847.....	\$3,635,380	1852.....	\$3,118,244
1848.....	3,252,212	1853.....	3,204,618
1849.....	3,268,206	1854.....	2,773,566
1850.....	3,273,899	1855.....	2,805,077
1851.....	3,329,727	1856.....	2,788,316

—Showing a falling off, as compared with 1847, of \$897,064, and a decrease, as compared with the light receipts of last year, of \$66,671.

The Brownsville and Rio Grande R. R. Co.

We notice among other acts of the late called session of the Texas Legislature, that an amendment was made to the act incorporating the Brownsville and Rio Grande Railroad Company, composed of Patrick C. Shannon and his associates, extending the time within which the road is to be completed to eight years, and embodying in the charter of the company a grant of sixteen sections of land, (640 acres each,) to the mile, and also a loan of six thousand dollars per mile from the State at eight per cent. interest when the road is completed. It also grants the right of selecting the lands upon the opening of the work on the road, the patents to be issued upon the completion of each and every eight miles—say of 128 sections. The starting point will be Point Isabel the present location of the Custom House for that district, thence to Brownsville, a little more than twenty-three miles distant; the company having the exclusive right hereafter of extending the road to the Great Salt Lake (Sal Del Bey.) about sixty-eight miles from Brownsville.—*N. O. Com. Bul.*

Purchase of U. S. Stock.

The Secretary of the Treasury gives notice of his readiness to purchase between now and the 3d of March next, unless the amount shall be sooner obtained, \$1,500,000 of the stock of the loans of the United States, and will pay in addition to the interest accrued from the date of the last semi-annual dividend of interest thereon, together with one day's additional interest for the money to reach the vendor, the following rates of premium on said stocks:

For the stock of 1842, a premium of 10 per cent.

For the stock of 1847 and 1848, a premium of 16 per cent.; and for the stock of 1850, commonly called Texas Indemnity Stock, a premium of 6 per cent.

Certificates of stock transmitted to the department must be assigned to the United States by the party duly entitled to receive the proceeds. If sent between the present date and the 1st day of January next, the current half-year's interest must be assigned by the present stockholder, or it will be payable as heretofore, and a corresponding deduction be made from the amount payable for the stock.

Payment for the stocks so assigned and transmitted will be made by drafts on the Assistant Treasurers at Boston, New York, or Philadelphia, at the option of the parties entitled to receive the money.

The Cairo and Fulton Railway.

The Legislature of Arkansas, now in session, has before it a bill donating to the Cairo and Fulton Railroad Company the land appropriated by Congress to that State for the construction of that particular line of road.

The report on the subject submitted with the Bill, says:

That they find in existence, for the prosecution of this work, a corporation, composed of citizens of Arkansas, of practical ability, enjoying public confidence in a high degree.

That they find a practical railroad route, surveyed through the most desirable agricultural region of the State, feasible in all respects, and imperatively demanded, not only by the wants of the State, but by the entire country, connecting as it will, the Atlantic and Pacific States, by conjunction with works already operating, or in process of construction, reaching from our extreme limit, on either hand to either ocean.

That they find at the disposal of the General Assembly, a donation of lands by the General Government, sufficient in value, in connection with other available resources to insure success to this enterprise.

That they find in the legislative history of Arkansas, the record of an attempt to apply those lands to the accomplishment of the trust implied in the grant, embodied in an act of the last General Assembly, proposing a transfer to the company referred to, upon certain conditions.

That they find, with profound regret, a refusal on the part of the proper authorities of that company, to accept the transfer, by reason of impossible requirements and fatal disabilities imposed by that law.

That they find public sentiment acting strongly on the subject, and demanding in unmistakable language, that the terms of the trust be fulfilled by the General Assembly; which sentiment has found fit expression in the message of the Executive, recently read in the hearing of this body, and to which the committee again refer.

That they find Texas pushing her line of railroad up to our southern border, demanding connection with us, and seeking transit across our State to meet the long and grand lines of communication, which Illinois and Missouri are bringing down to our northern confines.

That they find other States, and even infant territories all around us, taking quick advantage of the liberality of Congress and the advances of

capitalists, and threading their almost wild regions of forest and prairie, with railroad and telegraphic lines, while the State of Arkansas has not at this day, a rod of either.

That they find grants of land elsewhere similar to ours, turned to immediate account, as security for large loans to be expended in works of public utility, while the grant of lands to Arkansas is made the source of strife, and the subject of injudicious legislation, until we are almost ready to restore them to the general government, from inability to agree among ourselves how to dispose of them.

That they find from all experience, wherever attempted, that States cannot carry on with economy or success, great improvements, involving professional skill, honest perseverance, and the disbursement of large sums of money; but must, of necessity, rely upon associations of men clothed with proper corporate powers.

That they deem the Cairo and Fulton Railway Company the proper depository of the lands in question, for reasons before given, and because the lands pertain to its located line, and to no other.

On the strength of this the Committee report a Bill granting the lands to the Company untrammelled with any conditions that would impair their value as security.

Rock Island and Chicago Railroad.

The business of the Chicago and Rock Island Railroad Company for the first quarter of the fiscal year is as follows—

Gross earnings of July	\$157,678 57
Do. August	186,818 31
Do. September	220,000 00

Total for three months.....\$564,496 88

Operating expenses—

July.....	\$60,957 76
August.....	65,858 54
September	70,996 41

Total operating expenditures.....\$197,812 71

Interest on bonded debt,	
3 months	35,000 00
Rent Peoria Branch, 3	
months	31,250 00

264,062 71

Net earnings for 3 months, 7½ per cent.\$300,434 17

Compared with the same three months in 1855:

The earnings are as above.....	\$564,496 88
Last year	344,707 33

Increase nearly 64 per cent.\$219,789 55

Since July 1st, the result has been as follows:

Surplus earnings to credit of profit and loss on the 1st July, 1856\$497,279

Earnings of—

July.....	\$157,678
August.....	186,818
September.....	220,000
October.....	230,000
November.....	160,000
December (estimated)	130,000

Total half year.....\$1,084,496

Operating expenses for six months\$397,812

Interest on debt..... 68,985

Peoria rent 62,500

Dividend, Oct. 10... 200,885

730,182

354,314

Amount to credit profit and loss Jan'y 1, 1857\$851,595

The general account of the company is \$6,000,000, of which \$2,000,000 is debt, and \$4,000,000 stock.

Chicago, Alton and St. Louis Railroad Co.
To the Holders of the Mortgage Bonds of the Chicago, Alton and St. Louis Railroad Company.

The undersigned, (in connection with the Michigan Southern and Northern Indiana Railroad Company,) have lately effected an arrangement for the operation of this road. This arrangement has been made with the assent of the principal creditors and stockholders of the Company, and is intended for the benefit and protection of all persons having claims against it. It also contemplates certain forbearance on your part in regard to the collection of the interest on your Bonds, and was not undertaken until the bondholders best acquainted with the condition and necessities of the road, had, to a great extent, expressed their willingness to concur in it.

The particulars and terms of the forbearance desired of you are set forth in the company's application accompanying this circular.

The undersigned are largely creditors of this company; they are interested in or control a very large amount of its stock and securities, of which half a million of dollars are Mortgage Bonds.

They have not heretofore had any part whatever in the management of this road; do not propose to defend that management, and are in no way responsible for it. They are simply creditors, who, finding the operation of the road by which they are secured, embarrassed and unprofitable, have, with the assent of other creditors, taken possession of it, in the hope of saving their own claims and those of creditors generally.

In order to operate this road, so as to effect this result, the undersigned find, that large advances will have to be made, and obligations assumed by them, in addition to their present claims against the company. These they are willing to provide for and look to the road to reimburse them, if they can retain its management, because they are satisfied, that they can operate it, with economy and efficiency, and that if so operated it will ultimately be able to pay all the claims against it.

It is, therefore, as creditors seeking for the good of all other creditors, to put this road in a prosperous and paying condition, that they apply to you for the forbearance necessary to enable them to do this. A forbearance which, under the circumstances, it would seem to be both equitable, and for your own interests to extend.

This road has been completed about two years. Its earnings the first year were \$1,104,779.97; the second year, \$1,002,361.82. A table of the monthly earnings will be found in the note annexed.—These earnings, under ordinary circumstances, should have sufficed to pay the interest on your Bonds. Indeed, for more than a year after the road was opened, its credit was good, and it was supposed that its affairs were prosperous. In fact, however, as we learn, disputes about the control of the road, and the embarrassments consequent thereon, existed from its very opening. The coupons maturing so early as April, 1856, were, to some extent, unpaid, and the company has never since paid the interest on its bonds out of its earnings.

When, therefore, in April last, there was general default in the payment of your interest, steps were immediately taken on the part of various creditors to get control of the road. Their action has just resulted in the arrangement with us above referred to.

Now, if this road should be at once foreclosed and sold under your mortgages, the claims of subsequent creditors and stockholders, amounting to some millions of dollars would be entirely cut off. Such a result would seem particularly hard, when it is considered that the road has really earned enough since opened, to pay the interest on its entire debt; that the present default is the result of differences among the managers of the road, which its creditors could not prevent; and that they took the earliest and best method which was open to them to get control of it—especially as there is now every reason to believe, that in new hands the road will be made to pay all its debts,

and the value and character of your Bonds be speedily restored.

But aside from any question as to the right of prior creditors to sacrifice their security, without affording junior creditors any practicable opportunity to redeem—it would seem as if the arrangement now proposed, was the most desirable one for your own interests that could be made.

It is not supposed that the bondholders desire themselves to own or operate this road. Their interests are supposed to lie in having their securities put in the condition in which they can soonest realize upon them. Now, if your trustees proceed to the sale of this road, we are advised that, from the number of parties and the length of the notices to be given, considerable time must elapse before the road can be sold, even if none of the subsequent creditors or stockholders of the Company should seek to delay such a result. Until sold it is not perceived that you could realize anything from the possession of the road, as you neither have the rolling stock or other advantages with which to operate it meanwhile. If sold, no such great property can be expected to be bought for cash, and you will in that case be obliged either to defer collecting your debts, or else to purchase the road by some arrangement among yourselves. Should you purchase it, you would have then to make the very advances we now propose to make for you—advances which have to be made to keep the road in profitable operation,—and should you in that case (as is likely) apply the first earnings of the road after it came into your hands, to the payment of these new advances, you would be doing just exactly what we propose to do with the earnings. So that assuming that the road could be managed in your hands as well as by us, which from the advantages our experience and connection with such matters gives us, is unlikely, the road, if sold and bought in by you, would begin to earn the interest on your bonds, just so soon and no sooner than we proposed to resume paying it.

In a word, we take the road, we offer to advance what must be advanced to make its operation profitable, repaying ourselves these advances out of the earnings of the road, and next applying the earnings to the payment of interest on your bonds, (in their order,) deferring meanwhile the collection of our present claims against the road; while on your part you are required to give up none of your securities, (for the Coupons funded are to be retained by your Trustees as collateral to the bonds given in lieu thereof,)—begin at once to receive interest on the aggregate of your interest funded, which is nearly equal to two per cent. per annum on your principal debt,—secure the discharge of the local debt of the road,—the payment of the liens on its rolling stock, and the complete repair of the road and its appurtenances; for you will perceive that their own interests will compel the parties who take this road to put and maintain it in condition to do the increasing business which they expect, and on which they rely for the payment of their present claims against it.

That the circumstances of the case admit of no better arrangement than this for you is clear.

That you may understand the necessities of the road, we proceed to give you the items of the advances required, as we find them.

For liens on the lease, and other sums paid to get possession of the road \$201,666 60
For cash due for labor, land damages, wood, oil and lamps, iron, lumber, and hardware, repairs to building and fencing, stationery, printing and advertising 810,794 88

Besides this, it is claimed that the following liens on Rolling Stock are prior to the liens of your mortgages.

Mortgages to Smith & Goodall 140,000 00
Do. to City and other Connecticut banks 55,000 00
Do. to Brown Brothers & Co., (value of property,).... 50,000 00

Total to be provided for.....\$757,461 48

We treat these sums as necessary to be sooner or later paid in cash. This is clearly so as to liens on the Rolling Stock which are prior to, and take preference of the lien of your mortgages thereon. As to the local debts, they are comparatively of small amounts, and all experience in this country shows, that a railroad cannot be operated in this country with safety or profit while debts of that description are unprovided for, no matter into whose hands the road passes.

To these sums there should be added at least, \$75,000 for repairs and machinery now required to put the track and motive power in good order; to say nothing of such additional sums as may be needed for sidings, and station and store houses, &c., as the business of the road increases.

The above items give a total of.....\$832,461 48 say, \$832,000 to be provided for.

Now assuming the earnings of the road to continue at (more than they have averaged) per year.... 1,100,000 00
Allow 60 per cent for operating expenses..... 660,000 00

And there remains a balance of....\$440,000 00

But the interest on the interest proposed to be capitalized (\$1,500,000,) and on the floating debt of the company, which remains to be provided for in addition to the sums to be paid in cash, as above mentioned; say, \$350,000, amounts per year to..... 165,000 00

This would leave profits of operating per year\$275,000 00
which for the three years, for which 3

we propose to fund interest, amounts to.....\$825,000 00

—Not so much as is required to be advanced (independent of construction) as before mentioned.

In regard to this estimation of operating expenses, it should be remarked that although there are but 220 miles of this road, yet the parties operating it are at the expense of operating the whole distance between St. Louis and Chicago, 283 miles. At least two passenger and two freight trains must be run over the road each way daily (since all the connecting and competing roads run that number of trains). With these trains we think the road can hardly be operated for less than about \$2,350 per year per mile, that is \$665,050 for the whole road, or 60 per cent. of the estimated earnings. As, however, it costs nearly as much to run empty trains as full loaded ones, the business of this road may be largely increased without any proportionate increase of its operating expenses, and it might therefore well be, that with receipts of \$1,500,000 a \$1,800,000 a year the road could be run for 50 per cent. of its receipts. Indeed it has been assumed by former managers that it could be operated at that rate. This was, however, on the basis of receipts of \$1,500,000; certainly the experience of the road, so far, does not seem to justify any more favorable estimate of the cost of operating it than the one we make.

It is very probable that in our hands the earning of this road will be greatly increased; if so, payment upon your Bonds can be the earlier resumed. We are prepared to have your extension put on any fair conditions securing the application of the earnings to the purposes above named. Most of our securities on this Road are subsequent to yours. We do not purpose to do anything toward the extinguishment of those securities until we have resumed the payment of the interest on your Bonds. Our motives must therefore be so to operate the Road as to soonest put it in condition to resume the payment of that interest. If we were simply to operate it until we could get back this sum of \$832,000 now about to be advanced, we should have made the advance and given our care to the Road for nothing. It is only by putting the Road in such condition that it will earn more than enough to discharge your claims upon

it that we can secure to ourselves any advantage from the arrangement. Our interests, therefore, are your interests. As soon as the Road can be made to earn enough to discharge the amounts due on your obligations, so soon can we look for some advantage from this arrangement to ourselves, and not before.

As many of the Holders of the Mortgage Bonds of this Road are also Holders of its Floating Debt and Stock we desire to add for their information that we propose, (in case you consent to fund your interest,) to have this Road sold under the present Fourth Mortgage (which is in effect an insolvent assignment made by the Company of all its property for the benefit of creditors) to purchase the Road, &c., at that sale, have the prior lien of the Spencer Lease surrendered, the Company re-organized and a new Fourth Mortgage made to secure the Bonds proposed to be given for capitalized interest, and also such further Bonds as may be needed to fund the balance of the present Floating debt not otherwise provided for, say \$850,000.

The amount of this issue of Bonds, as before remarked, will not be material to the present Mortgaged Bondholders, as they are still to retain the security afforded by the Coupons they now hold, which are not to be cancelled.

That portion of these Bonds not required for interest funded will be offered to the Floating Debt Creditors of the Company, dollar for dollar, in payment of their claims. It being intended that the new organization shall assume all the legal liabilities of the present Company, and that new Stock shall be issued, share for share, to those now holding Stock therein absolutely and bona fide. It is not, however, intended, except in special cases, to issue New Stock in lieu of shares that are or have been held merely as collateral.

October, 1856.

J. A. MATTESON,
ELISHA C. LITCHFIELD,

An agreement on the part of Bondholders to fund their interest as desired will be found herewith. Parties concluding to fund are desired to sign the same, adding the class and amounts of their Bonds, and forward the paper to Mr. LITCHFIELD, at 18 William Street; or to our Counsel, C. N. POTTER, Esq., 61 Wall Street, New York.

Earnings of the Chicago, Alton and St. Louis R.R. as reported.

1854 September	\$119,551 83
October	141,500 18
November	125,956 21
December	110,927 84
1855 January	57,086 43
February	39,751 09
March	84,783 23
April	87,706 14
May	86,469 36
June	84,648 45
July	63,673 43
August	102,725 53

\$1,104,779 77

1855 September	\$91,271 60
October	105,181 01
November	97,405 98
December	81,886 00
1856 January	47,064 96
February	29,661 25
March	67,719 10
April	81,728 63
May	84,845 97
June	80,015 78
July	97,454 96
August	138,176 38

\$1,002,361 82

Checks on Railroad Extravagances.

The Paris correspondent of the London News states that the French Council of State has recently come to a resolution that in future no railway company shall be allowed to issue new obligations, unless it is able to show that it has never hitherto made use of the money raised by obligations in order to increase dividends.—As very few

companies will be in a condition to prove that they have been immediate in this respect, the news has struck terror wherever it is known and believed, and there is little doubt that it has been the immediate cause of the panic which prevailed in the railway market there recently. An opinion is prevalent in some financial circles, that the government is not unlikely to avail itself of the further depression which railway shares are expected to suffer, to carry into execution the scheme which, notwithstanding its rashness, has many ardent partisans, of taking all the railways into the hands of the State. In this case the expropriation would be made at the market price of the day of the transaction, and the shareholders would be paid in rentes, also at the current quotations.

PHILADELPHIA RAILWAY COMMISSION AGENCY, Nos. 12 and 14 Walnut St. TO MANUFACTURERS.

THE subscriber having leased for a term of years a large and substantial building in one of the most prominent business streets of Philadelphia, proposes in addition to his regular business to establish a depot for the exhibition and sale of all descriptions of machinery, and invites the attention of manufacturers generally to this plan of making their goods well known. If sufficient inducement is held out the subscriber will put up a steam engine of sufficient power to run any machinery that the manufacturers may wish exhibited in motion, and it is his wish and intention as far as possible to make his establishment an attractive resort for all those interested in the purchase and sale of American manufactures, and he has no doubt (if assisted by those parties who may wish to extend their business) of being able to establish on a permanent basis an exhibition that will be as attractive (on a small scale) as the yearly exhibitions of Boston, New York, Philadelphia and Baltimore. For full particulars address

THOMAS M. CASH,
No. 22 Walnut st.,
PHILADELPHIA.

English Iron and Metals.

THE undersigned, having the support of some of the leading makers of Iron in England, is prepared to take orders for Manufactured Iron of all descriptions, as well as Pig Iron, Block Tin, Tin Plates, Spelter, &c., and undertake shipment of the same to the United States on the best terms, both as regards prices and freight arrangements.

WILLIAM ELLIS,
Metal Broker, Shipping and Commission Agent,
Dec. 13—6m 64 King William st., LONDON.

TEN PLATFORM CARS,

28 ft. long, 4 ft. 8½ inch gauge, made in the best manner, with brakes, and now ready for delivery.

BOX and PLATFORM CARS, made to order.
WILLIAMS & PAGE,
4150 44 Water st., BOSTON.

Railroad Iron.

THE "MONTGOMERY IRON COMPANY" is prepared to execute orders for RAILS of the usual patterns and weights, and of any required length, not exceeding 30 feet per rail. Apply to
THOS. CHAMBERS, President,
No. 42 Exchange Place, NEW YORK.

REMOVALS.

CILARK & JESUP have removed their office to
44 Exchange Place.

THE BACINE & MISSISSIPPI R. R. CO. have removed their office to 44 Exchange Place. 3149

Wheel Barrows and Hand Trucks.

A LARGE assortment of WHEELBARROWS, including three different sizes, handsomely finished, for stores, shops, gardens, and city use generally. Also a large lot of CANAL and RAILROAD BARROWS, all made in the most substantial manner, to which the attention of contractors is directed. Also, HAND TRUCKS, of various sizes, used in stores and warehouses, for moving boxes, bales, bags, &c., &c.

BLACKSMITHING.

The subscriber informs his friends and the public, that in connection with his Agricultural Implement and Machine Works, he has erected an extensive BLACKSMITH SHOP and is now prepared to turn out Blacksmith work of every description, such as Picks, Crowbars, Miners' Tools and Drills, Stone Cutters, Chisels, Wheelwright work, &c., &c., at the shortest notice. He desires to call the attention of Contractors to the facilities of his establishment, which is the largest in the city.

All orders for Agricultural Implements, Contractors' Tools, Turning, Sawing, Blacksmith Work, &c., &c., promptly attended to.
F. S. BOAS, Reading, Pa.

U. S. MAIL AND EXPRESS ROUTE DIRECT FOR Iowa, Kansas and Nebraska.

CHICAGO, BURLINGTON & QUINCY RAILROAD.

THE ONLY DIRECT ROUTE FROM
CHICAGO TO AURORA, MENDOTA, PRINCETON,
GALESBURG, QUINCY, BURLINGTON, ANY PART
OF SOUTHERN OR CENTRAL IOWA, KANSAS
OR NEBRASKA.

PASSENGER TRAINS leave the Central Depot, foot of South Water street, CHICAGO, daily as follows:—
9.00 A.M.—MORNING EXPRESS.—Connecting at Mendota with Illinois Central Railroad, north for Amboy, Dixon, Galena and Dunleith, south for La Salle, Bloomington, Decatur, Springfield, Jacksonville, St. Louis, Cairo, &c.; at Galesburg with Northern Cross R.R. for Quincy, &c.; and at Burlington with Burlington and Missouri River R.R., and with Packets for points up and down the Mississippi river.

8.45 P.M.—EVENING EXPRESS.—Making same connections as above.

NO TRAIN SATURDAY EVENING.

ONE TRAIN SUNDAY, 8.45 P.M.
BAGGAGE CHECKED THROUGH TO BURLINGTON AND QUINCY.

THROUGH TICKETS can be procured at all the principal eastern railroad offices and in Chicago at the Depot and at the Michigan Central R. R. office, corner of Lake and Dearborn streets, opposite the Tremont House.

SAM'L POWELL, C. G. HAMMOND,
Gen. Ticket Agent. Gen. Sup't.

New York and Erie R. R.

On and after Monday, November 3, 1856, and until further notice,

PASSENGER TRAINS
will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6½ a.m., for Buffalo.
DUNKIRK EXPRESS, at 6½ a.m., for Dunkirk.

MAIL, at 8½ a.m., for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

CHICAGO EXPRESS, at 12 m., for Dunkirk.
ROCKLAND EXPRESS, at 3 p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.

WAY PASSING, at 4 p.m., for Newburgh and Middletown and intermediate stations.

NIGHT EXPRESS, at 4½ p.m., for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c.

D. C. McCALLUM, General Sup't.

Philadelphia, Wilmington & Baltimore Railroad. UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner of Broad and Pine streets, Philadelphia, at 8 30 am. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.	
From New York to Wilmington.....	\$15 50
do do Norfolk.....	8 50
From Philadelphia to Wilmington.....	14 00
do do Norfolk.....	6 50
do do Petersburg.....	9 00
do do Richmond.....	8 50

FARE BY THROUGH TICKETS TO THE WEST.	
From New York to Cincinnati.....	\$17 00
do do Louisville.....	19 00
From New York to Indianapolis.....	19 00
From Philadelphia to Cincinnati.....	16 00
do do Louisville.....	18 00

An extra charge will be made for meals and state rooms on board the boat.

GEORGE A. PARKER, Sup't.

Portable Steam Engine.

A N engine of 12 horse power, in complete order, for sale
by
HABICHT & PARISH,
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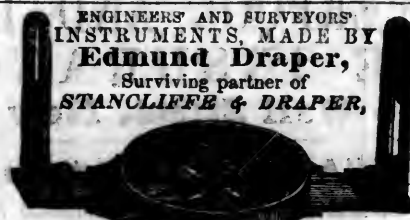
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[WHOLE No. 1,079, VOL. XXIX.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, December 20, 1856.

Internal Improvements of Florida.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

The general assembly, at its last regular session, passed an act providing for and encouraging a liberal system of internal improvements in this State. The system of roads to be aided under its provisions by a guarantee from the internal improvement fund to the extent of ten thousand dollars per mile for iron and equipment, embraces as terminal points the bays of Pensacola and St. Andrews in the western district, St. Marks or Crooked River in the middle district, Fernandina and Jacksonville in the eastern district, and Tampa and Cedar Key in the southern district, and making in the aggregate little less than seven hundred miles of road.

This system, extensive and general as it appears to be, will not reach and benefit, locally and directly, every individual, or even neighborhood of county in the State; and it is a source of regret that it will not. Its benefits, however, will possibly be found to be as nearly equally distributed as the form of the State, the extent of its settlement, and the location of its ports will permit. Of the thirty-two counties organized, twenty, containing more than nine-tenths of our population, will probably be penetrated by some part of the system. Eleven out of the remaining twelve have outlets for their produce by navigable streams or bays, enabling them, without great inconvenience, to reach the Gulf of Mexico or the Atlantic ocean.

The remaining county lies near the line of the Pensacola and Georgia road, and will probably be crossed by a road connecting Savannah and Brunswick with our system east of the Alapaha.

Complete this system, and Florida will be no longer inaccessible. She will be a picture for the admiration of her southern sisters—a State in which no citizen need leave his own country to find his shipping depot or warehouse. The steam car, the steamboat, or the sailing vessel, will visit every county. The salubrity of our climate and fertility of our soil will become familiar to our whole country. Immigration will increase in a ratio hitherto unexampled in our State. Our rich lands will be reduced to cultivation. Our forests, now valueless, will swell our exports by contributing liberally of naval stores and timber. Our extreme south, now inhabited by the red man of the forest, will be occupied by an industrious and frugal population. The cultivation of tropical fruits will raise up a new interest, and add to our list a leading article of export. Every section will develop increased capacity for production, and every interest and every citizen will share in the general prosperity.

That the system of roads destined to confer these and other benefits upon us will be completed at an early day, I entertain no doubt. The act inaugurating the system has been on our statute book less than two years. Work under its provisions commenced with energy a little over one year since. The Tallahassee road, connecting the capital with the Gulf at St. Marks, has been completed, equipped, and is in daily use at large profits. Iron for fifty miles of the Florida road has been purchased, and is nearly all within the jurisdiction of the State. Nearly fifty miles of that road have been graded, ten miles finished, and the line through from Fernandina to Cedar Key under contract to parties of capital and character, and will be pressed forward with energy. The Central, Atlantic, and Gulf road has been located from Jacksonville to Alligator, a distance of sixty miles, and the grading and timbering placed under contract to reliable men. Nearly twenty miles of this line, I am informed, have been graded, and a large number of the cross ties procured. The Pensacola and Georgia road has been located from Tallahassee to Alligator, a distance of one hundred and seven miles, the grading nearly all placed under contract to planters and others, who have the ability to complete the work with promptness. This line, from Tallahassee westward, has been surveyed as far as the Apalachicola river, and will probably be located definitely at an early day. These show that since the passage of the internal improvement bill, about three hundred and seventy-five miles of road have been surveyed, three hundred and thirty-five miles located, three hundred of which have been placed under contract.

Of this, about one hundred miles have been graded, of which more than thirty miles have been finished, and in daily use. It is believed, also, that an amount of capital sufficient to pay for grading and timbering all roads that have been definitely located has been secured, and it can hardly be doubted that the bonds of the companies, guaranteed as provided in the general bill, will purchase the iron and equipments, so that at least three hundred and thirty-five miles of the system may be considered secured. This will connect Fernandina and Jacksonville with Cedar Key and St. Marks, and leave the work necessary to secure the connection with Tampa Bay, St. Andrews, and Pensacola still to be done. It may, I think, be easily shown that the importance of these connections to the full success of the system will force their completion at an early day.

Tampa Bay is exactly on the most direct line of travel and commerce between the Atlantic cities of the United States and the island of Cuba. In addition to this, the road from Fernandina to Tampa must be an important part of the great line from New York to San Francisco by way of the Honduras railroad; thus making Tampa bay the Gulf depot for a great and growing commerce from these points. The acquisition of the island of Cuba—a circumstance which must, in the nature of things, occur at no distant day—will disembarass our commerce with her, and make her one of our richest and most profitable customers. Every road in our system, and every city and town that will be built up by them, will be interested in concentrating these great streams of travel and commerce upon Tampa, because all will share in the benefit; and without the completion of that line, it is not probable that the business could be fully controlled for our State. There is from these two sources an external commerce inviting us to accept it, which would be sufficient to build up a great city. We have only to prepare to receive it. The success of our enterprise requires us to do it, and it will be done.

Pensacola, like Tampa, offers peculiar inducements for the completion of our line westward. It lies at the door of the great West, and is probably the best harbor on the Gulf of Mexico. The South, to secure her commercial independence, needs just such a place, and cannot overlook the advantages of its position. More than nineteen-twentieths of all the goods consumed in the southern States are sold and delivered to the consumers by the merchants of the interior towns and villages. These merchants purchase their stocks in the Atlantic cities, in part upon credit and rely to a considerable extent upon their sales to aid in meeting their notes at maturity. Their sales being generally due at the first of the year, their purchases are made at such times as to cause their maturity at a later date than that, and as the credits are gen-

erally six months, the purchases are made during the months of July, August, and September. During these months our southern Atlantic cities have the reputation of being sickly; and the interior merchant, declining to risk his health in them, goes North for his supplies. This is doubtless one of the principal reasons why the commercial energy of the South has been prostrated—why we as a section are tributary to the North, and are even now, while receiving at her hands insult and injury, paying her more than forty millions annually to conduct our commerce. This should not be so. If our southern Atlantic cities are unhealthy, and we cannot concentrate our commerce upon them, we have other points South that are not. Pensacola would compare favorably at all seasons of the year with New York, Boston or Philadelphia, and could be made available as a great commercial mart, provided a suitable commerce could be concentrated there. Can this be done? Let us examine this point carefully, for it is one of great importance.

For the purpose of this investigation, we will consider the road from Fernandina to Pensacola finished, the road from Pensacola to Montgomery finished, and a road from Pensacola to Vicksburg finished.

Europe is our great customer for raw cotton, and the line of transportation that can place cotton in European ports most safely, cheaply, and expeditiously, will do the business. The two and a quarter million bales of cotton shipped annually from New Orleans and Mobile to European markets pay, it is estimated, an average of 7-10ths of a penny freight, but I will place it at 5-8ths, or 14 cents per pound. This, on a bale of 500 lbs., would be \$6 25; add insurance at an average of \$1 75 per bale, and we have eight dollars as the expense on a bale of cotton from the time it is put on ship board until landed on the wharf in a European port. From Pensacola this bale of cotton could be profitably carried on a road of easy grades to Fernandina for \$1 50. The freight from Fernandina would, in consequence of her fine harbor and deep water, admitting vessels of large class, be cheaper than from our other southern ports, and could, beyond doubt, be brought to an average of 5-16d., or 5-8ths of a cent per pound, being \$3 12½; to which add insurance 87½ cents, and expenses of delivering on board at Fernandina 25 cents, and we have a total expense of \$5 75. From this may be deducted 50 cents per bale for saving in interest and prime, in consequence of the difference in time and less vessel freight, by way of Fernandina; thus showing a saving of \$2 75 per bale to the Pensacola shipper. One dollar per bale would pay to transport cotton from New Orleans and Mobile to Pensacola; and if my estimates are correct, the whole receipts of these great cities could be secured to be transported over our road at a positive saving to the shipper of \$1 75 per bale. But when we consider that the difference between the freight and insurance on a steamer down the river from Vicksburg to New Orleans, and the freight on a railroad from Vicksburg to Pensacola, could not be more than fifty cents per bale, which would probably be fully offset by cost of re-shipping in New Orleans, it is reasonable to suppose that Pensacola, offering a saving of \$2 75 per bale over New Orleans, would get all the cotton from that point, and consequently from above it. The same data is quite as good for the cotton concentrating at that point from Texas, Arkansas, and an extensive adjacent country, transported on the great Central or Pacific railroad, and for the cotton descending by any of the great lines of railroad or of water transportation crossed by this road from Pensacola to Vicksburg.

I will not extend this communication by attempting to enumerate the great variety of products other than cotton which would find their way by the same channel of transportation to Pensacola, and over our line of road to the Atlantic ocean. A glance at the trade of our Gulf cities will readily suggest these.

But however important the freights from Pensacola to the Atlantic might be, those from the

Atlantic to Pensacola would probably exceed them. The light goods of value now shipped to New Orleans, Mobile, Texas, and all western Gulf ports, and thence distributed over the whole Southwest, would hardly fail to pass over this road, even if it should be necessary to reshipe them by water at Pensacola. This route would not only save time and give greater certainty as to the time of arrival, but would make a saving in the single item of *extra insurance* around the peninsula of Florida equal to the entire freight from New York to New Orleans.

The completion of the roads from Pensacola to Montgomery and Vicksburg would add largely to this business. At Montgomery a connexion would be formed with other roads, and through them with the systems of Alabama, Georgia, Tennessee, and other States, many of which roads would serve as distributors for Pensacola. The road to Vicksburg would cross the Alabama river, the Mobile and Ohio road, and the roads from New Orleans penetrating the States of Mississippi and Tennessee. At Vicksburg it would connect with the Mississippi River and its tributaries and the great Central and Pacific road, with its extensive prospective connexions, thus opening up to our great Gulf port thousands of miles of land and water transportation, to serve as distributing agents for her commerce, and bringing into immediate and harmonious connection with our system of roads the great West, with its teeming millions, its untold wealth, and mighty resources.

With these connexions completed, Pensacola, with her advantages of position and climate, could hardly fail to become a city of extensive commerce, second probably to none in the South, if to any in the Union. But these are not all. The tendency is to annexation; and if we look down the stream of time, we may, in imagination, see a period when Cuba and the other West India Islands, with the States of Mexico and Central and South America, may be added to this confederacy, and these vast and as yet undeveloped countries be socially, commercially, and politically identified with the civilization and institutions of the South. Their relation to the Gulf of Mexico will, however, with or without annexation, make them to a great extent our customers, and as their civilization increases and their capacity for production is developed, we may concentrate upon our Gulf ports an amount of business which we have at present no data of estimating. The produce thrown into our ports from these southern latitudes would, much of it, go further North and East in quest of consumers, and with the road from Pensacola in the West, with its feeders from St. Andrews and St. Marks, and the road from Tampa in the south, with its feeder from Cedar Key, with others in prospect, not embraced in our system, all concentrating upon the fine port of Fernandina, with her beautiful and extensive bay, her fine bar and deep water, could not fail to build up at that point the great Atlantic city of the South.

Holding as we do within our borders the fine bay of Tampa, near our extreme south, the bay of Pensacola in our extreme west, and the bay of Fernandina and the Saint John's river in our extreme northeast, with the intermediate Gulf ports of St. Andrews, Apalachicola or White Bluff, St. Marks and Cedar Key, embracing all the shortest and best lines between the Gulf of Mexico and the Atlantic ocean, and with a system so arranged that no change of cars will be necessary to enable either road to deliver freight or passengers at any point embraced, it is certain that, unless we refuse to avail ourselves of these advantages which a bountiful Providence has conferred upon us, and open our ports to an external competition upon terms which would impair our credit and wither our enterprises, we shall make our State the great commercial State of the South, and shall find at an early day that on most of our lines of railroad single tracks, although first-class, will be found insufficient for the business which will be offered.

If in this sketch I have not greatly over-estimated the advantages which we should, as a Com-

monwealth, derive from the completion of our enterprises, I may with confidence assume that it is our interest to complete them; and this brings me to consider the question of our ability to do so. I assume that the guarantees of our general bill will be sufficient for the purchase of the iron and equipment, and that there are yet 365 miles of grading and timbering to provide for. This, at five thousand five hundred dollars per mile, (which is sufficient over such a country, including the laying of iron,) would amount in round numbers to (2,000,000) two millions of dollars. One-fourth of this sum could be paid in stock of the road, leaving fifteen hundred thousand dollars to be provided. Against this the companies on these lines hold lands granted by the federal and State governments, and lying within fifteen miles of their roads, to the extent of about two million (2,000,000) acres. These, at seventy-five cents per acre, would provide the whole amount necessary. But these 365 miles pass through twelve counties, which hold about one-third of the population of the State, and which have not up to this time been called upon to expend one cent upon our roads. They and the towns along the lines are authorized, as corporations, to subscribe, and, with the cities of Fernandina, Pensacola and Tampa, are abundantly able to subscribe the whole amount, if considered necessary.

But if we had nothing but a knowledge of the fact that our 365 miles could be more than doubled in value by connecting with Pensacola and Tampa, it would be sufficient. The work would be accomplished. The completion of three hundred and thirty-five miles, with its benefits and blessing scattered upon the community, would make every man a volunteer, would nerve every arm and inspire confidence in every breast. But it is a work that rises infinitely above a mere question of dollars and cents. It address itself to us as patriots—as lovers of our country. It is a great work, not expected to benefit each man individually alike, but to benefit our beloved State—to make us great and prosperous, and to contribute something to the commercial independence of the South. Can there be those who would for a paltry consideration, either of dollars and cents or of local and individual advantages, embarrass its progress?

In view of our position and the great advantage which it gives us, I would respectfully recommend to the general assembly great caution in granting chartered privileges which, by possibility, may be used as rivals or competitors of our system. A false step now may be fatal to our interest.

The Emigrant Road to the South Pass.

Col. Wm. H. Nobles, the Commissioner appointed by Government to locate the road from Fort Ridgely in this Territory to the South Pass of the Rocky Mountains, arrived in town yesterday.—Col. N. and suite have been absent from St. Paul about five weeks and have located the road westerly from Fort Ridgely about 150 miles to Sheudoka or Hole-in-the-Mountain. Here a depot has been established, and will be the starting point on the resuming of operations in the spring.

The route adopted by the party is represented as a much better one than was anticipated for an emigrant route. The country is almost entirely prairie, but plenty of water was found as often as once in five miles, also a reasonable amount of timber for a prairie country, around the borders of the numerous lakes which everywhere dotted the vast expanse spread out before them.

The whole country, from the Missouri River to the Minnesota, has been burnt over this fall, which made it exceedingly difficult and expensive to get supplies to the teams, as they had to draw hay for more than a hundred miles. This has stopped further operations this winter. A portion of the party has been left at Hole-in-the-Mountain to take charge of the establishment there, and the rest have returned for the winter.

Hole-in-the-Mountain is so called from a deep ravine through the high bluff made by the passage of a tributary of the Big Sioux. The road will

be located through the ravine.—*Minnesotian*, Nov. 25.

New York and Erie Railroad.

The annual report of this company for the fiscal year ending Sept. 30, 1856, has just been completed. From it we learn that the gross earnings have exceeded the common estimates about \$100,000—being an increase of \$860,057 over the previous year; while the increase in net earnings over 1855, has been \$413,293. The net earnings of 1856 are 12½ per cent. on the capital stock of \$10,000,000. The entire cost of operating the road, including taxes, and rent of Union railroad, is a little over 51 per cent. The floating debt has been reduced \$60,473 02. The entire net earnings, amounting to \$1,246,712 96, have been disbursed, with the exception of \$185,170 82. About \$231,000 has been paid for fuel; \$195,936 98 for construction; and \$148,000 advanced to steamers and propellers, and to the Buffalo & New York City Railroad Company; while \$420,000 has been paid into the Sinking Fund, and been invested in the bonds of 1875, below par.

Total earnings for year ending September, 30, 1856	\$6,349,050 15
Transportation Expenses (48.84 per ct.)	\$3,101,053 52
Lake Erie Steamers, 1855.....	18,102 04
New York Central R. Co. Paid excess of emigrant business.....	8,706 11
Delaware, Lackawanna and Western R. Co. Drawback, 1855.....	8,898 60
Fuel burned.....	1,971 27
United States Post Office Department, amount not allowed	20,203 74
Expenses prior to September 30, 1855, paid since.....	21,763 45
Bridge Renewals, proportion for this year	19,937 50
	3,200,636 23

Total expenditure, 49.6 per ct....	3,148,413 92
Interest on Funded Debt	\$1,789,570 00
Interest on Floating Debt	19,397 34
Rent of Union Railroads	83,400 00
Taxes	39,343 62
	1,901,700 96

Net earnings.....	\$1,246,712 96
Which has been expended as follows—	
Bills payable, decrease..	\$60,473 02
Construction, 1856	195,936 38
Fuel, increase over 1855..	231,347 97
Advanced Buffalo & New York City R. R. Co....	48,440 69
Advanced Lake Erie Steamers, 1856.....	15,000 00
Advanced Lake Erie Propellers	39,455 63
Union Railroad Improvement, 1855.....	5,787 85
Sinking Fund	420,000 00
Increase in cash on hand over Sept. 30, 1855 ..	129,697 84
Balance	65,072 98
	1,246,712 96

Between Sept. 30th, 1855, and 31st March, 1856, the road earned \$425,000 net, after deducting all expenses and interest. If the road does as well

during the current six months the earnings, added to the above amount stated to be on hand, would make an ample fund for a moderate cash dividend in April next, unless some further expenditures are required for constructing propellers, &c., and the managers should decide to buy more fuel and pay off the floating debt.

The following is a statement of the earnings and expenses as compared with the previous year:

	1854-5.	1855-6.	Increase.
Earnings, gross..	\$5,488,993	\$6,349,050	\$860,057
Transportation expenses, &c.....	2,861,875	3,343,579	481,504

Net.....	\$2,627,118	\$3,005,671	\$378,553
Interest.....	1,793,698	1,758,957	

Net earnings..	\$883,420	\$1,246,712	\$118,292
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The net earnings show an increase of nearly 50 per cent. on the previous year. The interest on the floating debt, it will be seen, has decreased from \$128,808 in 1854-5 to 19,387 in 1855-6. The detail of the earnings and expenses of the year is shown in the annexed statement:

	Half Year, ending March 31.	Year ending Sept. 30.
EARNINGS.		
From Freight.....	\$1,165,153 25	\$4,545,781 96
Frym Passengers	723,459 24	1,656,674 66
From Storage.....	966 02	3,806 72
From Telegraph	3,181 83	8,139 77
From Rents	6,025 43	14,505 14
From Hire of Cars..	2,151 74	3,473 16
From Mails.....	58,314 42	116,628 84

Total Earnings	\$2,959,251 93	\$6,349,050 15
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	1854-5.	1855-6.
EXPENSES, &C.		
Transportation Expenses	\$1,573,319 98	\$3,101,053 52
Rent of Union R. R.	41,700 00	83,400 00
Interest on Floating Debt.....	19,387 34	19,387 34
Interest on Funded Debt	869,785 00	1,787,570 00
Taxes	29,671 80	59,343 62

Total Expenses..	\$2,533,864 12	\$5,002,754 48
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	1854-5.	1855-6.
RECAPITULATION.		
Earnings.....	\$2,959,251 93	\$6,349,050 15
Expenses, including Interest on Debt, Taxes, &c.....	2,533,864 12	5,002,754 48
Net Earnings.....	\$425,387 81	\$1,346,295 67
Loss.....		

The freight business, it will be seen, yields over 70 per cent. of the gross earnings, and the increase over last year all in that description of traffic, the freight earnings being \$4,545,781 in 1856, against \$3,653,001 in 1855, and the passenger earnings \$1,656,674 in 1856, against \$1,698,670 in 1855. The comparative monthly statement of gross and net earnings is as annexed:

	1854.	Gross Earnings.	Net Earnings.
October	\$589,018 70	\$166,686 55	
November	486,792 85	107,478 47	
December.....	454,971 16	60,504 44	
1855.....			
January.....	427,829 41	26,122 93	
February	340,751 68*	32,279 91	
March.....	507,090 26	37,711 82	
April.....	506,597 42	124,172 68	
May.....	475,127 85	97,408 09	
June	396,867 69	51,534 85	
July.....	372,077 33	4,948 83	
August	434,779 57	68,135 13	
September	547,119 46	161,570 28	
Total	\$5,488,993 37	\$923,574 36	

	1855.	1856.
October	\$598,340 15	\$177,813 48
November	547,587 51	138,335 40
December.....	581,800 48	149,714 80
1856.		
January.....	402,988 63*	34,249 40
February.....	367,915 60*	49,720 63
March.....	460,619 56	43,494 21
April.....	628,073 12	192,850 04
May.....	587,785 21	167,170 03
June	499,782 17	82,631 18
July.....	472,105 02	80,986 23
August.....	540,268 08	149,953 38
September.....	661,784 62	247,317 00

Total.....	\$6,349,050 15	\$1,346,295 67
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* Loss.

The detail of the transportation expenses is as follows. It shows very liberal charges for repairs of equipage, tracts, structures, &c., amounting to \$1,186,316, and indicating that the road and machinery have been well kept up:

OFFICE AND STATION EXPENSES.	
Year ending Sept. 30, 1856.	
Office Expenses and Stationery.....	\$54,544 33
Agents and Clerks.....	162,339 97
Labor, loading and unloading.....	183,458 66

COST OF RUNNING.	
Porters, Watchmen and Switchmen..	67,615 51
Wood and Water Station Attendance..	11,281 83
Fuel, First Cost and Labor	472,493 30
Passenger Conductors, Baggage and Brakemen.....	83,591 23
Freight Conductors and Brakemen....	135,740 34
Passenger Enginemen and Firemen....	80,460 71
Freight do. do.	132,041 33

Oil and Waste for Passenger Engines and Tenders	16,080 29
Oil and Waste for Freight Engines and Tenders	28,765 80
Oil and Waste for Passenger and Baggage Cars.....	12,144 55
Oil and Waste for Freight Cars.....	24,548 88

GENERAL EXPENSES.	
Loss and Damage of Goods and Baggage.....	23,265 03
Damages for Injuries to Persons	3,148 00
Damages to Property	3,308 92
General Superintendence.....	67,114 87
Contingencies.....	142,234 02

REPAIRS OF ENGINES AND CARS.	
Engines and Tenders, Passenger	121,041 04
Do. do. Freight.....	228,651 04
Passenger and Baggage Cars.....	70,450 71
Freight Cars	155,391 99
Tools and Machinery in Shops	28,306 71
Incidental Expenses about Shops.....	27,337 54

REPAIRS OF TRACK AND ROADWAY.	
Road-bed	30,717 39
Track	464,291 94
Fences, Gates, &c.	6,416 60

REPAIRS OF STRUCTURES.	
Truss Bridges.....	22,273 72
Passenger, Wood and Water Stations ..	24,704 91
Engine and Car Houses, Machine and Workshops.....	5,851 65
Rents (Dwellings).....	418 13
Telegraph	470 74

INCIDENTAL.	
Superintendence and Office Expenses..	1,069 90
Contingencies	26,030 29

MISCELLANEOUS.	
Ferry	119,709 53
Expenses of operating telegraph	39,462 21
Express Expenses.....	24,279 41

Total.....	\$3,101,053 52
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Memphis and Charleston Railroad.

The Memphis and Charleston railroad is now open to Corinth, a distance of ninety-five miles from Memphis. The eastern section is open westwardly to Buzzard Roost, leaving a gap of staging of only forty miles. This is rapidly closing up, and we may look for the completion of the road by March or April.

Port Dalhousie and Thorold Railroad.

A subscription list of £100,000 has just been completed in London towards the construction of a railway 24 miles in length, by the side of the Welland Canal, connecting Lake Erie with Lake Ontario. The Welland Canal was originally formed to prevent the Erie Canal, which unites Lake Erie with the Hudson and New York, from diverting the western trade of Canada from its natural outlet to the Atlantic, by the St. Lawrence. Subsequently the construction of the New York Central Railway, on the banks of the Erie Canal, has given new speed to that route, which enables it again to draw away the traffic in question, or at least that light and valuable portion of it which is suitable for railway conveyance. To regain it the Provincial Legislature have authorized the Port Dalhousie and Thorold Railway to extend their road to Lake Erie, on the banks of the Welland Canal; and the Hon. William Merritt, who was in England in 1828 as the agent of the latter enterprise, has again just visited London, and returns in the *Perse*, having succeeded in raising the required capital from among the original shareholders of the Welland Canal, the members of the Canada Company, the shareholders of the Grand Trunk Railway, and others. The total cost of the line is to be about £175,000, currency.—*London Times*.

Detroit and Milwaukee Railway.

The St. John's *Democrat*, of the 9th, speaking of this road, says "we are assured by Railroad men who ought to know, that if the weather is not very inclement the track will be laid to St. John's in the fore part of next month—it is probably up to Ovid Station at this writing. The Engine house here is up and partly enclosed. It is calculated to accommodate four engines. Preparations are also being made for the erection of the Freight House, Passenger House, Turn Table, &c. The buildings are all on a liberal scale for size and finish, and when completed will add materially to the appearance of the village. The deep cut at this place is nearly down to the grade. It will be finished by the time the tracklayers get here."

New York Central Railroad.

From the annual report of this company, which was presented to the Board of Directors on the 10th inst., we learn that the amount of its capital stock now paid in is \$24,136,660 69. The total amount of its funded debt is \$14,763,897 29. The road has no floating debt. The acceptances which have from time to time been given by the company during the past year have all been paid in cash as they matured. The average rate of interest on the funded debt is less than 6¼ per cent.

Earnings, Receipts and Payments.

	Earnings.	Receipts.
From Passengers...	\$3,207,378 32	\$3,229,751 80
From Freight	4,328,041 36	4,371,389 20
From other sources.	171,928 50	171,928 50

Total.....\$7,707,348 18 \$7,773,069 50

Payments other than for Construction.

For Transportation Expenses, viz:	
Passenger business	\$2,061,192 84
Freight business.....	2,036,674 34

\$4,097,867 18

Interest.....	\$931,576 95
Debt Cer. Sinking Fund.....	111,182 38

\$1,042,759 33

For Dividends, viz:—

No. 5, Feb'y, 1856, 4 per cent.	\$959,782 00
No. 6, August, 1856, 4 per cent.	959,782 00

\$1,919,564 00

Transportation expenses for the year ending Sept. 30th, 1856, 52.71 per cent. of the gross earnings, for the same period.

Net earnings for the year ending Sept. 30th,

1856, \$2,566,721 67, equal to 10.697 per cent. on the amount of the capital stock of the company upon which dividends are payable.

Details of Earnings for the year ending Sept. 30th, 1856.

Through passengers.....	\$997,734 62
Way passengers.....	2,147,043 70
Through freight.....	2,226,451 64
Way freight.....	2,083,800 58
Express	80,389 14
Transportation of mails.....	87,537 82
Rent, storage, use of engines and cars, and other earnings.....	84,390 68

Total.....\$7,707,348 18

Passengers Carried.

	Through.	Way.	Total.	Passengers.
Oct.	17,251	261,487	278,738	15,842,847
Nov.	12,331	220,064	232,395	18,208,813
Dec.	7,399	207,865	215,264	12,235,125
Jan'y	5,946	158,246	164,192	9,332,306
Feb'y	5,349	130,053	135,402	7,695,948
March ...	10,663	154,622	165,285	9,394,431
April....	16,547	212,336	228,793	13,004,084
May	14,052	203,781	217,833	12,381,141
June	14,735	203,941	218,676	12,429,056
July	14,495	250,330	264,825	15,052,052
August..	15,574	235,994	251,568	14,298,564
Sept.	20,993	283,386	304,379	17,300,222

Totals .155,245 1,522,105 2,677,350 152,174,399

Tonnage of All Classes of Freight.

	Through.	Way.	Total.	Mileage.
Oct.	23,571	52,939	76,510	13,617,889
Nov.	25,226	49,701	74,927	14,818,979
Dec.	23,414	52,781	76,145	14,036,171
Jan'y	9,000	36,551	45,551	7,768,539
Feb'y	14,102	24,664	38,766	6,913,759
March ...	14,861	34,918	49,779	8,520,208
April....	13,173	44,306	57,479	9,133,794
May	29,379	38,106	67,485	15,014,845
June	31,827	40,639	72,466	14,748,607
July	21,495	36,034	57,529	11,873,652
August..	26,695	35,965	62,660	12,853,221
Sept.	20,545	76,270	96,815	16,394,114

Total...253,288 522,824 776,112 145,733,678

Comparative Statement of Earnings from Passengers, Freight and other sources, during the months of October and November, 1855 and 1856.

OCTOBER.					
Yrs.	Pass'grs.	Freight.	Mail.	Miscel's.	Total.
'56.	\$356,101	\$522,073	\$7,457	\$27,932	\$913,565
'55.	354,926	372,543	6,807	2,145	736,422

Inc..	\$1,175	\$149,530	\$650	\$25,787	\$117,143
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NOVEMBER.

NOVEMBER.

Estimated in part for 1856,					
Yrs.	Pass'grs.	Freight.	Mail.	Misc'l's.	Total.
'56.	\$261,415	\$473,352	\$7,457	\$3,185	\$745,411
'55.	269,966	\$97,221	6,807	946	674,941

Inc.	\$76,131	\$650	\$2,239	\$70,470
Dec. \$5,551.				

Increase for two months\$247,618

Earnings from Passengers, Freight, and all other sources, for the years ending September 30, 1853, 1854, 1855 and 1856.

Yrs.	Pass'grs.	Freight.	O'r sources.	Total.
1853.	\$2,829,669	\$1,835,572	\$122,279	\$4,787,520
1854.	3,154,514	2,479,820	287,000	5,918,334
1855.	3,243,229	3,189,803	131,749	6,563,581
1856.	3,207,378	4,328,041	171,929	7,707,348

Increase over previous years.

'54 o'r '53.	\$321,845	\$644,248	\$164,721	\$1,130,814
'55 o'r '54.	90,715	709,782	*155,251	645,246
'56 o'r '55.	*34,850	1,138,438	40,179	1,143,767

Inc. 3 y'rs. \$377,710 2,492,469 \$49,649 \$2,919,828

* Decrease.

COST OF OPERATING THE ROAD.

	Amount.	Passengers Transportation.	Freight Transportation.
Office expenses, stationery, &c.	\$4,044 85	\$1,770 13	\$2,274 72
Agents.....	140,406 96	65,144 94	75,262 01
Clerks	65,688 71	14,590 38	50,998 33
Labor, loading and unloading freight.....	163,434 86	....	163,434 86
Porters, watchmen, and track watchers.	94,848 37	51,072 19	43,776 18
Switch tenders	71,448 31	38,472 17	32,976 14
Wood and water station attendance.	51,330 01	27,638 85	23,691 16
Conductors and baggagemen.	88,469 35	60,054 96	28,414 39
Brakemen.	60,819 13	28,537 71	32,281 42
Enginemen and firemen	166,060 79	70,204 46	95,856 33
Fuel, cost & labor preparing.....	768,583 21	413,852 49	354,730 72
Cost of oil and waste for engines & tenders.	62,851 05	32,634 26	30,216 79
Do. for freight cars	29,105 68	....	29,105 68
Do. for passenger & bagg. cars.	33,745 38	33,745 38	....
Loss and damage of good and baggage..	50,464 97	7,210 74	43,254 23
Damages for injuries to persons...	71,501 97	38,501 06	33,000 91
Damages to property, including damage by fire, and cattle killed on road	9,173 43	4,939 54	4,233 89
For salaries of Treasurer, Secretary, Superintendent, Compt'r and Asst's	33,408 16	17,989 01	15,419 15
For law expenses.	18,380 09		
Other expenses and contingencies	124,422 89	70,453 65	53,969 24
Total	\$2,089,708 07	\$976,811 92	\$1,112,896 15
Cords of wood used			174,046
Tons of coal used			4,066
Gallons of oil used			83,810½
Pounds of Waste used			157,590
LOCOMOTIVE ENGINES OWNED BY THE COMPANY.			
In use and in good repair			121
" " requiring slight repairs			49
" " heavy repairs			13
Not in use, in good repair, (none).			
" " requiring slight repairs			7
" " heavy repairs			19
Worn out, (none).			....

NUMBER OF CARS OWNED BY THE COMPANY.

	In good repair.	Requiring slight repairs.	Requiring heavy repairs.	Total.
First class passenger cars, viz:				
On 8 wheels, seats for 40 to 60 passengers	102	14	5	121
On 8 wheels, seats for 60 passengers and over.....	53	8	..	61
Second class cars	4	..	..	4
Emigrant cars	40	22	13	75
Baggage, express or mail cars	45	13	8	66
Covered freight and cattle cars, 8 wheels, 1,786	75	10	1,871	
Open or platform cars, 8 wheels	375	25	..	400
Other freight cars on 4 wheels	66	..	..	66
Gravel cars on 4 wheels	205	..	..	205
Other service cars, on 8 wheels.....	80	..	..	80
	2,755	157	36	2,958

VALUE OF MATERIALS ON HAND.

174,215 cords of wood.....	\$574,909	50
3,308 gallons of oil	2,905	25
1,631½ tons of iron rails.....	75,465	80
155,137 pounds of chairs	5,025	00
41,900 pounds of spikes.....	1,732	50
17,400 number of ties.....	3,677	40
386 tons of iron and other metals unwrought	43,256	84
564 tons of iron and other metals, worked and partly worked	53,719	60
796,050 feet of lumber.....	15,513	88
Framed or worked lumber.....	2,085	00
Engine, tender and car wheels.....	45,799	97
Lumber, nails, &c, for fences.....	1,915	61
Paints, coal, scrap iron, cotton, waste, and other materials.....	56,645	55

Total.....\$881,615 90

BUILDINGS, SHOPS AND FIXTURES.

	Number of Buildings.	Brick or Stone.	Wood.
Passenger houses	10	..	66
Freight "	17	..	55
Repair shops	13	..	13
Water stations	59	..	49
Engine houses	14	..	11
Wood sheds .....	..	..	122
Dwellings	9	..	69
Turntables .....	..	..	25
Tool houses .....	..	..	15
For lumber .....	..	..	2
Blacksmith shops	1	..	8
Stables .....	..	..	10
	123	..	442

Aggregate number of stalls for locomotive engines.....196
 Aggregate length of wood sheds most of them substantially roofed, feet.....27,555

The Income Account shows a balance for the year ending September 30th, 1856, of \$1,301,036. It is claimed that an item of \$549,464 87, part of the value of fuel and other supplies, should be added to the above balance to show the actual result of the business of the road.

Delaware Railroad.

The road opened by the Delaware Railroad Company, from the Delaware to the Chesapeake bay, is now completed to the Nanticoke river, at Cannon's ferry, which is located in the south-western corner of the State of Delaware, contiguous to the counties of Dorchester and Somerset, in Maryland, which are divided by the river. The road was to

be opened for travel yesterday. The Delaware Railroad commences at Wilmington, runs to New Castle, and from thence along the central table land of the State to St. John's town, in Sussex county, where it diverges along the grade of the Nanticoke to Cannon's. The road will open up a fine country, as it extends below the parallel of Cape Henlopen, to which a lateral road will be run.

Superior Court.—The Matter of H. Dwight.

The Merchants' Bank of New Haven against Henry Dwight, jr.

This was a suit brought in the Courts of this State to recover the amount of a note for about \$58,000, made by Benjamin Godfrey & Co., and indorsed by the defendant. He was arrested in the cause by an order made on affidavits sworn to by N. Peek, the President of the Merchants' Bank, and others, in which they attempted to establish that no such firm as Benjamin Godfrey & Co. existed; that Dwight had no authority to use the name in negotiating the note in suit; that the firm was insolvent, and, therefore, that Dwight fraudulently contracted the debt sued upon.

A motion was made before one of the judges to vacate and discharge this order of arrest, which motion was denied, and from this decision the defendant appealed to the full bench, and the appeal was argued before the six Judges by James T. Brady for the plaintiffs, and by E. W. Stoughton for the defendant Dwight, the appeal being heard upon the very voluminous and contradictory affidavits.

The opinion of all the Judges was recently pronounced by Chief Justice Oakley, unanimously reversing and vacating the order appealed from, and discharging the defendant from arrest. The Court held that the evidence established that the firm of Benjamin Godfrey & Co. did exist, and that Dwight had full authority to use it. The Court also held that the Bank in taking the note did not rely at all upon the pecuniary responsibility of Dwight and on the collateral securities he delivered at the time of making the loan. The Chief Justice also stated that it was quite apparent that the President of the Bank made the loan to Godfrey & Co. in form only, because by a provision of its charter it could not loan beyond a certain sum to Dwight.

The Court, therefore, discharged the defendant, holding that he had not been guilty of any of the fraud charged against him.

Business of the Illinois Central Railroad.—The Percentage of the State.

Mr. Moore, State Treasurer, has furnished the Springfield Register the following statement of the gross receipts of the Main Line and the Galena Branch of the Illinois Central Railroad, for six months ending October 31, 1856:

Freight	\$301,793.51
Passengers	540,170.18
Extra baggage	1,976.74
Express	9,499.12
Mail Service, Two Quarters.....	22,655.16

Total.....\$936,094.71

Deduct for Discount on Currency.... 14,041.41

\$922,053.30

Five per cent. of this sum, amounting to \$46,102.66, has been paid into the State Treasury, against \$31,529 paid on the first day of June last.

This is a handsome increase on the previous six months for the main line. When the per centage on the receipts of the Chicago Branch, to be increased under contract to seven per cent., is added to the State profit upon the road hereafter, it will be perceived that its income from this source is likely to be much larger than was anticipated by the most sanguine when the enterprise was commenced. The immense sales of the Company's lands to actual settlers, amounting at the close of November to more than ten millions of dollars, are an unmistakeable indication that the increase of the business of the road will be vastly more rapid

hereafter than at any previous period in its history. And this is all the more evident when it is considered that these sales, great as they are, are but the measure of general prosperity of the State.—Chicago Press.

Hannibal and St. Joseph Railroad.]

The completion of the Toledo, Wabash and Western road gives a fit occasion to notice the progress of another important work not much known to the public as yet, because it is going on quietly on the strength of its own ample means.—The Hannibal and St. Joseph Railroad (with the addition of a short link soon to be built) will form a continuation of the Toledo and Western, and also of the Central Route of the Middle States, due west across Missouri to its western boundary. It will reduce the journey across Missouri, which now takes two or three days by land and four to six days by the tortuous channel of the river, to about eight or ten hours.

Dividing North Missouri about equally, it will become the main outlet of that fertile region (whose wheat, hemp and tobacco crops will furnish a vast and increasing annual freight,) and will be the directest line of communication between all the Northern and Middle States, and the rising country beyond the Missouri. Over 600,000 acres of land granted by the General Government to the Hannibal and St. Joseph Railroad Company have been surveyed and mapped under the direction of Col. E. B. Talcott, the eminent engineer of the Illinois canal, and have been duly certified to the Company by the Land Department and portions of them will soon be offered for sale. The rich and long settled hemp lands near the Mississippi are, now worth from \$40 to \$60 per acre, and much of this land along the route having equal fertility will, when opened to a market for its products and duly improved, be no less valuable. The mortgage bonds of the company to the extent of \$4,000,000, estimated with other resources to provide for the whole cost of construction and equipment, were taken last winter by some leading houses in this country and Europe, and so well satisfied were they of their value, that the payments have been very largely in advance of the calls of the Company, nearly one-half of the whole subscription being already paid in, and the bonds taken for investment. These bonds will be received at par in payment for the lands of the Company, which, at a low valuation, will be more than sufficient to absorb the whole of them. The cars are now running on about 30 miles of the eastern end of the route, and all the iron for the whole line is purchased. About 50 miles more are graded, and will be in operation next summer, and the road will be finished early in the year following, and with it a continuous line of over 1,400 miles from New York.—St. Louis Intel.

New Railroad Projects in Europe.

The Paris correspondent of the New York Commercial says that "a new and gigantic railroad scheme has just been proposed to the Emperor. The road is to commence at Honfleur, near Boulogne, and Marseilles, thus passing diagonally through the whole extent of France. It is proposed to call it the Imperial Railway. It is alleged that it will not require the construction of any important work of art, its course being carried almost constantly along the courses of rivers. At the head of this project are the Duke de Padone, the Prince of Wagram, the Duke of St. Simon, and the Duke de Tarente.

"The Credit Mobilier of Paris has not received the contract of the Russian Railroad, but a society formed of Messrs. Steigetz, (Russian banker,) Baring, (English,) Pereire and Hottingem, (French) The first emission of stock will be three hundred millions of francs—60,000,000 dollars. The seat of the society will be at St. Petersburg, but it is said that the imperial decree in regard to this important concession will not be published until January. The grand manufactory lately established in Russia by the deceased Duke of Leuchtenberg has been bought by this company for their works."

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	1,538,100	2,973,700	6,019,929	470,647	110,247	6	64	Brunswick and Florida, Ga.	30	300,000	300,000	550,000	In progr.	141,168	8	---
Androscog. & Kennebec	55	588,042	1,622,905	2,210,947	209,476	110,247	none	14	South Western	92	1,097,498	465,500	1,624,920	253,506	141,168	8	---
Kennebec & Portland	56	1,114,725	1,661,236	2,470,600	---	---	none	6	Tennessee and Alabama	30	246,488	---	679,808	In progr.	---	---	---
Portl., Saco, & Portsmouth	51	1,367,000	119,237	1,486,327	270,214	112,481	6	83	Tennessee and Misiss.	---	170,931	---	175,340	In progr.	---	---	---
Boston, Concord & Montreal	93	1,808,092	1,069,512	2,777,310	253,234	122,854	2	13	Memphis and Charleston	217	2,179,440	2,127,002	4,023,796	311,631	168,572	---	---
Ohio	53	2,085,925	899,318	3,179,687	380,221	143,656	2	74	Mobile and Ohio	153	2,568,555	1,802,921	4,536,412	199,932	168,236	---	---
Oneida	35	1,500,000	8,242	1,412,576	335,949	136,454	2 1/2	89 1/2	Miss. Central	188	642,534	---	623,308	In progr.	---	---	---
Northern, N. H.	82	2,768,400	none	3,018,638	370,829	138,299	2 1/2	89 1/2	N.O., Opelousas & G.W.	55	2,930,425	871,645	2,657,638	In progr.	---	---	---
Conn't & Passumps. Riv.	61	1,048,145	787,608	1,780,062	162,687	55,173	none	4	Vicksburg, Shreveport & Tex.	---	111,760	---	107,895	In progr.	---	---	---
Rutland & Burlington	120	2,233,376	2,662,396	5,378,428	394,971	---	none	---	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.	---	---	---
Vermont Central	117	5,000,000	3,550,236	8,468,366	820,119	214,793	none	---	East Tennessee and Va.	16	625,425	938,591	1,033,781	In progr.	---	---	---
Boston and Lowell	27	1,830,000	325,635	2,188,596	489,754	140,377	6	5 1/2	Nash. and Chattanooga	161	2,819,330	1,497,081	3,843,694	318,090	112,177	none	---
Boston and Maine	83	4,076,974	150,000	4,179,638	854,426	389,068	6	77 1/2	Covington & Lexington	98	1,302,804	2,235,939	3,738,753	264,978	188,664	---	---
Boston and N.Y. Central	74	2,240,800	1,618,671	3,463,818	69,917	8,740	none	5	Lexington and Frankfort	29	430,055	168,939	637,071	93,263	43,086	6	---
Boston and Providence	65	3,160,000	359,132	3,677,154	558,671	204,689	6 1/2	83 1/2	Lexington and Danville	---	694,444	52,734	747,178	In progr.	---	---	---
Boston and Worcester	68	4,500,000	655,428	4,865,439	1,008,004	404,461	6 1/2	89 1/2	Louisville and Frankfort	65	898,236	698,061	1,689,566	244,014	96,902	0	---
Cape Cod	47	681,890	280,698	997,252	119,221	65,527	5 1/2	43	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.	---	---	---
Connecticut River	52	1,691,110	273,241	1,802,244	286,563	102,787	5 1/2	43	Bellevue and Ind.	118	1,881,635	2,025,925	2,852,662	298,293	140,823	none	---
Eastern, Mass.	60	2,683,400	2,947,737	4,621,136	647,281	305,968	39 1/2	72 1/2	Clev., Col., and Cincin.	141	4,547,020	122,857	4,613,722	1,290,296	732,065	9	106 1/2
Fitchburg	267	3,540,000	158,700	3,765,998	651,163	225,071	---	---	Cleveland and Toledo	200	2,076,425	2,689,301	5,124,629	736,272	396,986	10	75
North-Eastern	30	800,242	225,686	968,621	In progr.	---	---	---	Clev. and Mahoning	103	---	---	623,633	In progr.	---	---	---
N. Bedford and Taunton	21	500,000	none	533,963	198,421	54,583	6 1/2	---	Clev. and Pittsburg	133	2,780,744	3,043,992	5,537,466	581,877	309,518	56 1/2	---
Old Colly and Fall River	87	3,015,100	2,032,650	3,362,949	453,499	296,738	6 1/2	84 1/2	Cin. Hamilton & Dayton	60	2,183,900	1,821,218	2,987,767	608,271	278,012	63	---
Vermont and Mass.	77	2,232,641	1,939,670	3,209,727	284,726	87,313	none	6 1/2	Cin., Wilm. & Zanesv'e	131	1,120,450	1,181,266	2,529,459	In progr.	---	---	---
Western, Mass.	155	5,150,000	5,966,420	10,496,905	1,869,673	693,013	7	91 1/2	Columbus and Xenia	55	1,484,550	149,000	1,481,793	356,366	187,518	10	82
Worcester and Nashua	46	1,141,000	205,565	1,351,271	294,780	75,760	2	70	Dayton, Xen. & Belpre	63	437,838	422,658	860,498	In progr.	---	---	---
Providence and Worcester	43	1,510,020	338,461	1,806,696	311,490	138,087	10	118 1/2	Dayton and Michigan	140	1,076,602	898,011	1,185,826	In progr.	---	---	---
Hartford and N. Haven	72	2,350,000	939,000	3,318,932	730,012	352,799	10	118 1/2	Dayton and Western	35	310,000	500,000	733,769	In progr.	---	---	---
Hartf'd, Prov. and Fishkill	122	2,008,110	2,030,665	4,069,869	258,685	119,611	none	---	Boston and Hamilton	42	454,690	904,489	1,163,136	171,929	65,000	20	---
Housatonic	110	2,000,000	414,240	2,431,773	339,196	17,427	none	---	Little Miami	65	2,963,921	1,171,785	3,643,172	681,662	336,708	84	---
Naugatuck	57	1,031,800	524,244	1,580,723	220,459	93,768	none	---	Mad River and L. Erie	206	2,461,650	2,672,932	4,446,661	In progr.	---	---	---
N.Y. York and N. Haven	62	3,000,000	2,376,803	6,376,803	884,306	338,877	none	36	Central Ohio	138	1,520,927	3,485,078	4,283,443	Recently opened.	---	---	---
N. Haven and N. London	50	738,258	735,165	1,450,318	88,007	30,318	none	---	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	602,117	9	54
N. London, W. & Palmer	66	509,200	1,073,673	1,584,383	124,644	66,480	none	---	Pittsburg, Mayv'e & Cin.	50	371,350	31,000	399,933	In progr.	---	---	---
Norwich and Worcester	66	2,122,300	873,499	2,997,153	304,236	88,458	2 1/2	25	Sand'y, Mansf. & Newk'	127	1,550,000	2,206,367	3,652,367	329,958	164,479	none	---
Albany Northern	32	439,005	1,025,088	1,840,695	117,716	9,904	none	---	Scioto & Hocking Valley	135	403,975	509,050	888,858	In progr.	---	---	---
Black River and Utica	35	443,330	317,859	974,323	In progr.	---	---	---	Spring Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
Buffalo, Corn. and N.Y.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none	---	Tol., Washab. & St. Louis	242	2,500,000	4,530,000	---	In progr.	---	---	---
Buffalo and N.Y. City	92	798,439	2,537,849	3,401,868	238,392	31,896	none	---	Cin., Log. and Chicago	255	4,198,679	1,006,125	2,080,433	In progr.	---	---	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,150	355,763	10	---	Evansv'e & Crawfordsv.	109	708,945	1,177,596	1,844,541	127,400	64,552	7	60
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,506	none	---	Ind. and Cincinnati	88	1,213,723	1,442,369	2,178,461	356,012	193,142	7	---
Canandaigua & Niagara F'a	91	1,315,000	2,279,854	3,496,832	135,433	48,489	none	---	Indiana Central	66	611,400	1,261,179	1,907,911	386,176	184,875	46	---
Cayuga & Susquehanna	35	687,000	506,689	1,187,562	182,487	603,946	30 1/2	---	Ind., Clev. & Pittsburg	83	826,825	1,099,400	1,831,225	228,058	93,010	none	---
Hudson River	144	3,758,466	9,250,362	12,737,898	1,612,087	603,946	30 1/2	---	Jeffersonville	66	1,014,252	694,000	1,206,544	296,544	94,318	none	---
Long Island	95	1,875,148	668,949	2,555,986	301,793	116,462	26	---	Madison and Indianapolis	87	1,647,700	1,536,816	1,205,000	296,148	112,880	none	---
New York Central	534	24,164,860	14,462,742	28,523,913	6,663,881	3,162,126	8	91 1/2	New Albany and Salem	288	2,535,121	5,281,948	6,643,189	645,827	371,402	none	---
New York and Erie	464	10,023,958	25,126,639	33,439,431	4,489,993	2,627,118	none	61 1/2	Peru and Indianapolis	73	---	858,314	150,000	90,000	none	16 1/2	---
New York and Harlem	138	5,717,100	4,069,769	9,788,203	1,635,577	234,126	none	16 1/2	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	159,702	10	---
Northern, N. Y.	118	1,333,022	4,406,874	6,470,714	520,153	136,754	none	1	Chicago and Rock Is'd	182	3,141,500	2,387,155	6,214,152	In progr.	---	---	104 1/2
Oswego and Syracuse	35	399,000	216,681	723,683	126,540	59,982	3 1/2	---	Chicago and St. Louis	220	---	---	1,077,312	In progr.	---	---	---
Pottamdam and Watertown	29	467,200	294,139	749,683	In progr.	---	---	---	Chicago, Burl. and Quincy	59	1,639,100	1,684,736	2,584,622	722,580	379,821	20	---
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7	---	Central Military Tract	68	1,202,500	2,133,050	2,920,241	471,399	219,688	---	---
Saratoga and Whitehall	48	500,000	395,600	719,909	71,909	21,089	none	---	Chic. St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Syracuse & Binghamton	80	768,369	1,578,804	2,272,777	159,484	22,503	none	---	Galena and Chicago	259	5,441,500	3,318,089	7,742,614	2,315,789	1,192,402	22	117 1/2
Troy and Boston	27	437,830	737,079	1,109,822	156,363	55,184	3 1/2	63	Illinois Central	627	2,271,050	19,416,392	20,744,446	1,532,118	527,962	---	118 1/2
Watertown and Rome	97	1,370,378	700,979	2,068,063	404,374	172,474	3 1/2	---	Peoria and Ogawka	93	569,889	818,454	1,388,342	In progr.	---	---	---
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	101,125	75,634	none	---	Ohio & Miss. (West. Div.)	147	1,780,295	3,292,403	4,370,556	Recently opened.	---	---	---
Camden and Amboy	94	8,000,000	11,407,200	19,636,523	1,817,367	961,941	12	124	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.	---	---	---
Camden and Atlantic	60	369,320	1,522,131	1,729,642	122,417	50,080	none	---	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.	---	---	---
New Jersey	30	8,482,850	690,000	4,310,011	861,514	500,747	10	124	Mich. Central	282	6,032,444	5,996,013	10,688,155	2,215,283	879,656	10	98
New Jersey Central	63	2,000,000	2,266,178	8,683,149	398,728	171,603	---	---	Mich. South'n & N. Ind.	475	6,928,900	6,319,224	11,645,208	2,410,000	875,000	10	88
Morris and Essex	53	1,167,895	375,000	1,636,580	229,341	96,267	6	---	Green Bay, M.L. & Ch.	155	764,078	442,726	1,198,766	In progr.	---	---	---
Albany Valley	44	1,637,867	342,564	1,988,317	Recently opened.	---	---	---	Milwaukee and Miss.	106	1,826,422	2,467,889	3,678,757	691,843	417,443	17	78
Catskill, W. & Erie	63	1,700,000	1,940,000	3,640,000	191,253	62,450	---	---	Milwaukee & Water'n	72	354,861	132,000	414,238	In progr.	---	---	---
Cumberland Valley	56	1,099,500	12,211	1,191,833	146,381	66,994	---	---	Milwaukee and Horicon	15	554,200	---	354,				

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October		1866	97	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July		1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July		1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August		1869	80	
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Div'rs		1861-64	78	82
Do.	800,000	2d do. inconvertible	7	March, Sept.		1865	72	74
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July		1867		90
Do. do.	465,000	2d do. do.	7	May, Novemb.		1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July		1868	75	
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.		1862	80	
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August		1861	91	
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August		1860	93	
Do. do.	1,200,000	Do. on Branches	7	March, Sept.		1873	75	80
Cleveland and Toledo	625,000	Do. inconvertible	7	Feb'y, August		1863	88	
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October		1862-72	65	
Do. do.	1,200,000	Do. inconvertible	7	April, October		1862-72	65	
Covington and Lexington	400,000	Do. do.	6	April, October		1867	75	
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.		1863	64	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October		1875	79	82 1/2
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July		1873	80	
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August		1863	92	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.		1875	85	86
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October		1868	86	
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.		1863	90	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October		1873		75
Indiana Central	600,000	Do. convertible	7	May, Novemb.		1866		90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July		1860-61	77	81
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.		1866		85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.		1874	86	87 1/2
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August		1865	70	71
Little Miami	1,500,000	Do. inconv.	6 1/2	May, 2 Nov.		1863	77 1/2	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100	101
Do. do.	600,000	Do. do.	8	March, Sept.		1869	100	100 1/2
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		99
Do. do.	650,000	Do. 2d do. 1858	8	April, October		1863	92	
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.		1877	85	87
New Albany and Salem	500,000	Do. 1st section	10	April, October		1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.		1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July		1873	95	
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August		1867	90	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July		1865-66	92 1/2	
Do. do.	2,000,000	Income, convertible	7	April, October		1872	77 1/2	
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	96 1/2	
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		82 1/2
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.		1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July		1865		80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.		1866	100	
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August		1862-77	77	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August		1870	72	73

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82 1/2	82 1/2
Do. do.	1,125,500	Do.	6	Jan'y, July	Balt.	1875	86 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.		1867	103	
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.		1859	97 1/2	98 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.		1863	94 1/2	96 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August		1875	93 1/2	94 1/2
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August		1871	87	87 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July		1862	87	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August		1869-70	99	99 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.		1860	86	90
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.		1870	64 1/2	65
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October		1875	93 1/2	93 1/2
Do. (Free Land)	3,000,000	Mfgs 345,000 acrs—priv. 7 shars	7	March, Sept.		1860	103	106
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.		1860	88	94
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.		1861-72	78	80
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.		1855-60	82 1/2	86
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July		1873		94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August		1861	91	
Do. Goeben Branch	1,500,000	Do. do.	7	Feb'y, August		1868	81	83
New York Central	8,287,000	No mortgage, do.	8	May, Novemb.		1863	85 1/2	86
Do. do.	3,000,000	No m'ge conv. from June 87-89	7	15 June, 15 Dec.		1884	102	103
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July		1866	98	100
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July		1866	98	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July		1860	89 1/2	91
Do. do. 1849	3,469,000	Do. inconvertible	6	April, October		1870	80 1/2	81

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES.	Int't payable.	Off'd	Asked
New York, 7 per ct. 1857	Feb'y, 100	102		Milwaukee, 7 per ct. coup. X	Div'rs	76	80
Do. 5 do. 1858-60	May, 93	95		New Orleans, 6 per ct. ep. R.R. X	Do.	72	75
Do. 5 do. 1870-75	August, 89	91 1/2		N. Orleans, 6 per ct. ep. municip. X	Jan'y, July	80	85
Do. 5 do. 1880	November, 89	91 1/2		Philadelphia, 6 per ct. 1876-98	Jan'y, July	90 1/2	90 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August, 100	102 1/2		Pittsburgh, 6 per ct. coup. 1863 X	Div'rs	74	
Alleghany, 6 per ct. coup. 1871-81 X	Jan'y, July			Quincy, 8 per ct. coup. 1863 X	Jan'y, July		
Baltimore, 6 per ct. 1879-90	Quarterly, 94	97 1/2		Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	85	
Boston, 5 per ct. coup. 1871-81 X	April, October, 99 1/2	100 1/2		Rochester, 6 per cent. coup. X	Div'rs	98 1/2	
Brooklyn, 6 per ct. coup. Long X	Jan'y, July			St. Louis, 6 per ct. coup. Long X	Do.	78 1/2	
Clev'rd, 7 per ct. ep. W.W. 1879 X	Do. do.			Do. do. Municipal X	Do.	80 1/2	
Cincinnati, 6 per ct. coup. 1873-77 X	Div'rs, 89	90		Sacramento, 10 p. ct. ep. 1862-74 X	Do.	72	75
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July, 100	100		S.F. & C. 7 p. ct. ep. 1864, pay. N.Y. X	May, Novemb.	80	
Do. 7 per ct. coup. 1880 X	Jan'y, July, 100	100		Do. 10 p. ct. ep. 1871 X	Do. do.	86	90
Detroit, 7 per ct. ep. W.W. 1873-78 X	Feb'y, August, 101	102 1/2		Do. 10 do. pay. N.Y. X	Jan'y, July		
Evansville, 6 per ct. ep. W.W. 1877 X	March, Sept., 93	93		Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	69	62 1/2
Jersey City, 6 per ct. ep. W.W. 1877 X	Jan'y, July, 80	80		Washing, 6 per ct. coup. X	Div'rs	87 1/2	
Louisville, 6 per ct. ep. 1880-83 X	Div'rs, 80	80		Do. 6 p. ct. ep. Mun. 1874 X	March, Sept.	78	80
Memphis, 6 per ct. coup. 1882 X	Jan'y, July, 67 1/2	67 1/2		Zanesville, 7 do. X	April, October	96	100

Cincinnati Stock Sales,
By HEWSON & HOLMES.

For the week ending December 10, 1886.

BONDS.	
\$9,000 Little Miami, 6 per ct., 1st Mortg.	80
4,000 Cov. & Lex., 7 per ct., 2d Mortg.	66
4,000 Ohio and Miss., 7 per ct., 1st Mortgage	70 (& Int.)
2,000 Cin. and Chic., 10 per ct. Real Estate	30
5,000 Marietta & Cincinnati, 7 per ct. 1st Mortg.	75
2,000 Ohio and Miss., 7 per ct. 2d Mortg.	50
1,000 Hillsboro' & Cin., 7 per ct. 1st Mortg.	47
725 Little Miami, Dividend Scrip, June issue	62 1/2
40,000 Cin., Wilm. and Zanesville, 7 per ct. Income, hypothecated.	15
500 Union Township, Union Co., Ohio, past due	26
STOCKS.	
216 Shares Ohio and Mississippi	6
100 " Do. do. 30d.	6 1/2
40 " Do. do. 10d.	6 1/2
100 " Little Miami, ex div.	87
12 " Do. do. do.	87 1/2
60 " Indiana Central	49 1/2
200 " Cincinnati and Chicago	2 1/2
40 " Mad River & Lake Erie	16
90 " Junction (Ind.)	7 1/2
100 " Indianapolis & Cincinnati	66 1/2
50 " Do. do. b15d.	66 1/2
26 " Bellefontaine & Indiana	30
50 " Peru and Indianapolis	9
18 " Covington and Lexington	18
108 " Dayton and Michigan	6
40 " Marietta & Cincinnati	14
7 " Cincinnati, Hamilton, & Dayton	65

By KIRK & CHEEVER.

For the week ending December 9, 1886.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	
Covington & Lexington, 2d Mort. 7 per ct.	65	
Ohio & Mississippi, 2d Mort. 7 per ct. (Eastern Division)	49 1/2	
Indianap. & Cin., 2d Mort. 7 per ct.	79	
Cin., Ham. and Dayton, 2d Mort. 7 per ct.	83	
Hillsboro' & Cin., 7 per ct. 1st Mortg.	47	
Covington & Lexington, 10 per ct. Income	58 1/2	
Indianapolis and Cincinnati Dividend	70	
Columbus and Xenia Dividend, due Jan'y 1, 1881	88	
Little Miami, Dividend Scrip, issued June, 1886	81	
STOCKS.		
Bellefontaine and Indiana, 25—Cin., Ham. and Dayton, 62 1/2		
Col. and Xenia, 85—Cincinnati, 2 1/2—Covington & Lexington, 15—Dayton & Western, 19—Eaton and Hamilton, 20—Indiana Central, 48—Indianapolis and Cincinnati, 67 1/2—Little Miami, 88—Mad River & Lake Erie, 15—Marietta and Cincinnati, 14—Ohio and Mississippi, 6—Hillsboro' and Cincinnati, 14—Peru and Indianapolis, 8—Cincinnati, Wilmington and Zanesville, 10—Cin., Ham. & Indianap., 10.		

Marie & Kany's Money Circular for the
European Steamer of the 17th Inst.

[TRANSLATED EXTRACT.]

NEW YORK, Monday, Dec. 15th 1886.

Our last advices were dated 9th inst. The Stock market has not yet recovered from the disturbing effects of the heavy failure mentioned in our last circular, and there has, consequently, been less business done. The favorable news per Atlantic and Africa, and a few exceptional causes, such as the New York Central Report, an abstract of which we give herewith, and some European orders for Illinois Central securities, contributed to put stocks up temporarily; but the rise proved of short duration. An increased pressure for money for three days past has tended to neutralize, or, at least, to postpone the favorable effect of the late foreign advices. This stringency is usually experienced in December, as the domestic exchanges at this period are generally, adverse to New York, and the preparation for the annual settlements of accounts, and the redemption of public loans give a great activity to the movements in money—the effect of which, on its value, is about the same as an actual scarcity. State Stocks—Small sales, without material change in quotations, excepting California 7s, 1875, which are 3 per cent., lower. City and County Bonds—We have a few sales to notice in Milwaukee City 7s, Sacramento 10s, Peru 10s, and San Francisco 6s. Railroad Bonds—Dull. Erie 3d mortgages have been sold at 1/2, and Erie 1871s at 1 1/2 advance; Illinois Central Bonds are without change. There has been some demand for La Crosse and Milwaukee 1st Mortgage Sinking Fund Bonds at former quotations, and some sales of Michigan Central 8 per cent., 1869, and Delaware, Lackawanna and Western 1st Mortgages,—the last at an advance, close at a decline. Money is in brisk demand, and rates have advanced; on call, in request at 7 per cent; first-class paper, 9a10; second-class

paper, 12a15; Stock contracts, 15a18 per cent. Exchanges—A large business has been done; London heavy at $\frac{1}{4}$ per cent., decline, chief sales at 108 $\frac{3}{4}$ a109; France steady, 5,18 $\frac{3}{4}$ a5 20; on Germany, rather weak. MARIE & KANZ.

Robert Benson & Co.'s London Circular, received per "Africa."

LONDON, Nov. 20th 1856.

We have to notice a continuance of that returning confidence to which we alluded in our last circular, and greater care in our Money Market although there has been no reduction made in the minimum rate of discount at the Bank of England. This improvement has arisen chiefly from the more cheerful accounts from Paris, and a strong belief that we shall now see the specie reserves of the Bank of England generally increase. Although the Directors have not made any reduction in the rate of discount they have modified their recent resolution, and reverted to their usual practice of making advances on Government Stocks during the closing of the books for the payment of the next dividend. In the general discount Market the current rates are rather under those of the Bank.

Our Stock Market during the week have been buoyant. In our last circular we quoted Consols at 93 $\frac{1}{2}$ for Money, and 93 $\frac{3}{4}$ a $\frac{3}{4}$ for 4th December. They have with slight variations continued to improve, and we now quote them 94 $\frac{1}{4}$ a $\frac{3}{4}$ for Money, and 94 $\frac{3}{4}$ a $\frac{1}{2}$ for 4th December.

There has been considerable animation in the Market for American Securities, and an active demand for some of the leading Railroad Bonds. Erie Bonds of 1863 have changed hands at 84 $\frac{1}{2}$. 1862 Bonds at 82. 1871 Bonds at 79 $\frac{1}{2}$, and the Sinking Fund Bonds at 83. New York Central 6 per cent Bonds at 81. Michigan Central Bonds of 1869 at 94. Illinois Central 7 per cent, Construction Bonds at 84. Freedland Bonds at 95, and the shares of this company at 13 $\frac{1}{4}$, 13 $\frac{1}{2}$ and 14 premium. State Stocks are rather firmer in price. Pennsylvania 5 per cent Stock has been done at 75, and Maryland Sterling 5 per cent Bonds at 89 $\frac{1}{2}$.

The Manchester Market is very quiet, without any particular change to notice. In Liverpool the sales of cotton for the week will be about 34,000 bales, the market very flat, and American freely offered, but no general decline submitted to.

Our Corn Market has been drooping, and to-day prices are under those of last Friday about 2s. per quarter for wheat, and 1s. per barrel for flour. We quote fine American red wheat 64a66s. per quarter of 62 lbs. White 68a74s. Flour, best brands 38a39s. good 34a36s. per barrel. Indian Corn has been slow of sale. Yellow 34a36s. pure white 38s. per 480 lbs.

The price of Rails is rather higher. We quote £7 5s.a£7 10s. for four months.

ROBERT BENSON & CO.

Extract from De Coppet & Co.'s Money's Circular for the European Steamer of the 17th inst.

[TRANSLATED.]

New York, Monday, Dec. 15, 1856.

Since our advices of the 9th inst., and the irregularities on the Stock Exchange then noticed, our Stock Market has recovered a more steady tone, with some tendency at first towards a rise, which was more decidedly manifested on the receipt of the news by the steamer from Liverpool, of the 29th November, bringing accounts of a marked improvement in the money markets as well of England as of the Continent. Subsequently, stocks are again weak under the influence of a very active demand for money for the last two or three days. This stringency is principally due to a greater caution observed by our Banks, owing to the amount of specie exported last week, and to the calling in by the Bank Depository, of the City funds of certain temporary loans that it had made upon the strength of these deposits, which were intended to effect a payment now maturing.

This latter cause can only be temporary. We approach, nevertheless, the end of the year, a period when the numerous settlements contribute generally to a more active demand for money. On the whole there has been a fair degree of activity during the week in our Stock Exchange Securities, particularly in Railroad Shares. Investment Stocks have also participated to a moderate degree in this animation, the last steamer having brought some orders for European account. State Stocks have been dull and the business only for small amounts, and without wide fluctuations. California 7s, '75, declined 1. Indiana 6s are quoted ex-interest. City and County Bonds—There has been some little revival of demand, embracing a larger number of these securities, although in small amounts. The principal transactions have been in Milwaukee 7s, the low price of which, considering the confidence they inspire, attracts attention. We notice besides, some transactions in Sacramento 10s, Wheeling 6s, Henry County (Iowa) 8s, Davidson County (Tenn.) 6s, and in some others. Railroad Bonds—Illinois Central Constructions have been active, closing at $\frac{5}{8}$ decline. At the Stock Exchange some business has been done in Erie 7s, 1871, and in Northern Indiana, Goshen branch bonds. At private sale there has been more activity, and we remark some transactions in La Crosse and Milwaukee, first mortgage, in Milwaukee and Mississippi, first mortgage, (on third section, and on Southern Wisconsin Branch, in Galena and Chicago, second mortgage, and in Delaware, Lackawanna and Western, first mortgage. There have been no important fluctuations in prices. Money is in very active demand at 7 per cent. for loans on call. Paper, without change, from 8a10 per cent., according to length and class.

DE COPPET & CO.

American Railroad Journal.

Saturday, December 20, 1856.

New York & Erie, and Central Railroads.

We publish this week abstracts of the reports of these two great New York Companies, showing the result of their operations for the year ending Sept. 30, 1856. Their gross earnings for the year compared with those for 1855, have been as follows:

	1855.	1856.	Increase.
N. Y. & Erie...	5,488,962.	6,334,010.	8,450,057.
Central.....	6,568,881.	7,707,388.	1,143,507.

The increase of the Erie has equalled 15 per cent. over the receipts of the previous year: of the Central, 17 per cent.

The coming year will unquestionably show a much more marked difference, reaching as high, probably, as five per cent. in favor of the Central. Such a result is mainly due to the superior connections, and a more commanding influence which attracts to the latter the greater proportion of the long traffic and travel. The business of this road keeps pace with, and marks much more accurately than the Erie—the progress of the railway system and population of the West. The Erie, by its exceptional gauge, is, in a measure, isolated from the railways of the country, and equally lacks the sympathy and cordial co-operation of the roads most important to its success. We should say that the policy of the company was hardly as comprehensive as are its interests. Its managers have probably not forgotten their former reverses, and now err as much on the side of timidity as they once did on the side of recklessness.—The consequence is, that they are being rapidly left behind by their great rival.

As a greater offset to the above, we can say that

we believe no road in this country is managed with more fidelity and economy.

Railroad Earnings.

The gross earnings of the Hartford, Providence and Fishkill road for the year ending October 1st, 1856, were \$340,598 05; expenses, \$171,160 24; net earnings from operating the road, \$169,437 81. The following is a statement of the financial condition of the company on the 1st of October, 1856:

Assets.....	\$4,285,170 11
Liabilities.....	4,090,907 25

Excess of assets.....\$194,262 86

The running expenses have been near 50.3 per cent. of the gross receipts.

The Erie railroad receipts were:

November, 1856.....	\$517,911 47
Do. 1855.....	547,581 51

Decrease.....\$29,670 04

This decrease is the result of the Engineers strike, and is less than might have been anticipated.

The earnings of the Michigan Central Railroad in November were.....\$321,295 11
November, 1855.....305,095 73

Increase.....\$16,199 38

The earnings of the Pittsburgh, Fort Wayne & Chicago Railway Company for the month of November have been as follows:

Freight earnings.....	\$72,448 27
Passenger earnings.....	67,414 61
United States Mail Service.....	3,883 54
Express earnings.....	3,956 35

Total earnings.....\$147,704 72
Earnings for November, 1855.....107,457 96

Increase, 37 $\frac{1}{4}$ per cent.....\$40,246 76

The earnings of the month were diminished by the burning of two bridges, on the 31st of October and 1st of November respectively, which interrupted the business of the line for five days, or one-fifth of the month.

The receipts of the Cleveland, Columbus and Cincinnati railroad were for

November, 1856.....	\$114,848 67
Do. 1855.....	113,746 05

Increase.....\$1,102 62

The earnings of the Indiana Central Railroad for November, were:

	1856.	1855.
Passengers.....	\$25,122 31	\$23,903 67
Freight.....	18,039 54	8,073 80
Express.....	400 00	1,649 79

Total.....\$43,561 85 \$33,627 26
Increase, 30 per cent.....\$9,934 59

The earnings in November of the Norwich and Worcester railroad were.....\$25,203 24
November, 1855.....25,056 20

Increase.....\$157 04

The earnings of the Galena and Chicago R. R. Company for November were:

November, 1855.....	\$237,832 01
Do. 1856.....	222,502 82

Decrease.....\$15,329 19

The business of the Rock Island road for the first week in December was \$27,700 against \$25,700 last year. The week was very stormy, and much business was kept away from the road.

The earnings of the Michigan Central Railroad Company for the month of November, 1856, were:

	1856.	1855.
Passengers.....	\$158,698 46	\$138,040 65
Freight.....	174,951 46	159,160 93
Miscellaneous.....	7,634 19	7,894 19

Total.....\$381,293 11 \$305,095 73
Increase.....\$16,198 38

The earnings of the Bellefontaine and Indiana and the Indianapolis, Pittsburgh and Cleveland Railroads for October, 1855 and 1856, were:

Bellefontaine and Indiana, Oct., 1856..	\$43,998 53
Bellefontaine and Indiana, Oct., 1855..	29,500 05

Increase nearly 50 per cent.....	\$14,498 43
Indiana, Pittsburgh and Cleveland, Oct., 1856.....	\$34,489 35
Indiana, Pittsburgh and Cleveland, Oct., 1855.....	25,953 67

Increase nearly 33½ per cent..... \$8,535 68

The revenue of the Baltimore and Ohio Railroad for the month of November has been as follows:

	Main stem.	Wash'ton branch.	Total for both roads
For Pas'srs..	\$54,037 93	\$23,125 68	\$77,163 61
For Freight.	327,997 41	9,597 92	347,595 83

Total...\$392,035 34 \$33,723 60 \$424,758 94

The revenue of the Road during November, as compared with the corresponding month of last year, was as follows:

	Main stem.	Wash'ton branch.	Total.
1856..	\$392,035 34	\$32,923 60	\$424,758 94
1855..	363,564 45	35,554 95	399,119 40

Inc.. \$28,470 89 Dec. \$2,831 35 Inc. \$25,739 54

The receipts during the past two months of the present fiscal year, compared with those of the same months for the two previous years, have been as follows;

	1856.	1855.	1854.
October....	\$471,391 13	\$423,436 34	\$359,610 52
November..	424,758 94	399,119 40	347,677 96

Total....\$896,150 07 \$822,556 24 \$707,288 48

The following is the November statement of the receipts of the Pennsylvania Railroad:

Month ending Nov. 30.....	\$353,122 83
Same month last year.....	410,350 78

Decrease.....	\$57,727 95
Receipts from Jan. 1, 1856, to Dec. 1, 1856.....	\$4,413,199 76
Same period last year.....	3,880,775 00

Increase.....\$532,424 76

The earnings of the Stonington Railroad were, respectively, in

November, 1856.....	\$20,080 68
November, 1855.....	19,524 60

Increase.....\$556 08

The annexed comparative statement shows the wonderful progress of the Reading Railroad during the past twelve years:

	1843.	1855.
Coal Tonnage.....	218,711	2,218,292
Merchandise Tonnage...	17,534	154,334
Through Passengers.....	26,424	111,822
Gross Receipts.....	\$394,313	\$1,321,793
Net Income.....	179,395	2,593,915
Capital and Debt.....	7,145,412	19,014,180
Number of Coal Cars....	1,592	5,000
Number of Locomotives..	39	141

The Reading road now exceeds in business and gross receipts any railway in the world of equal length.

Baltimore and Ohio Railroad Disbursement of Loans from Revenue.

A committee of the Board of Directors of the Baltimore and Ohio Railroad was appointed a few weeks ago, agreeably to a resolution of that body, to digest and agree upon some plan having for its object a division of the surplus profits of the road among the stockholders. The following is a synopsis of the report prepared by them, which was submitted to the Board at its regular monthly meeting on the 10th inst. The committee says:

We have found the net balance of undivided profits arising out of the resources of the road from 1833 to 1856, inclusive, to be.....\$5,135,045 subject to the following charges:

Amount of loan to the Central Ohio R. R. Co.....	\$400,000
Amount due from North-western Virginia Railroad Co. .	573,012
Amount of subscription to the Pittsburg & Connellsville Railroad Company .	35,000
	<u>1,208,012</u>
	\$4,127,033

The committee further says:

All expenses incurred in building the road, arching tunnels, and in road equipments; purchase of right of way; real estate for depot accommodations; building of station houses, water stations, bridges, locomotives, cars, etc., are classified as "Construction," and charged to "Capital."

The cost of repairing the road, bridges, locomotives and cars, whether damaged from use or from accident—in short, all expenses incurred to make good that which had been impaired in the using, and all expenses incidental to the use of the work, such as the watching of bridges, watching of tunnels, watching of cuts, the removal of land slides, and all outlays of money in conducting the trade of the road, have been classified as "Expenses," and charged to "Revenue."

The cost of a railroad or a canal is fairly represented by the capital stock, the bonded debt, and whatever amount of net earnings have been used in its construction; to determine otherwise is only to raise hypothetical questions in accounts and refined distinctions which confuse and mislead, rather than enlighten the judgment.

There has been received from tonnage and passengers, from the 22d of May, 1830, to the 30th of September, 1856.....\$27,659,149
And for dividends on stock owned by the main stem in the Washington branch road.....1,301,969
Rent from Washington branch for depots and shops.....30,000

Making a total of.....	\$28,991,118
And there has been paid in the same period for expenses, including all repairs.....	\$15,486,095
For interest chargeable revenue.....	3,855,596
For dividends, including cash, stock and bonds.	4,524,472
	<u>23,856,073</u>

Showing the net balance of undivided profits to be.....	\$5,135,045
From which deduct amount due by North-western Virginia R. Co.....	\$573,012
Loan to Central Ohio R. R. Co.	400,000
Subscription to the Pittsburg and Connellsville Railroad stock.....	35,000
	<u>1,008,012</u>
	\$4,127,033

The report then goes on to state that the company was compelled to use this revenue for purposes of improvement on the road in consequence

of inability to sell their bonds, except at ruinous rates, and speaks of this fact having attracted attention as early as 1841, and having been made the subject of comment in the reports of Mr. M'Lane, then President of the company, and Mr. Latrobe, its Chief Engineer. The amount of the profits absorbed in capital up to 1856, is set down by the report at \$7,874,614—or, in other words, this amount, instead of being divided among the stockholders, was re-invested in the road. It is proposed to set aside the sum of \$113,333 annually as a sinking fund. The report further states:

That without any increase in the revenue, the company can pay all its expenses—maintain a thorough system of repair—pay all interest on its bonds, including the new issue—pay six per cent. to the stockholders—institute a sinking fund ample for the payment of the bonded debt as it may fall due, and still have a clear annual surplus of \$306,941, sufficient for any contingency that can possibly arise.

But two months of the current year have passed, and the excess of revenue over the corresponding months of last year amounts to considerably over \$100,000, with reasonable prospects for a much larger proportionate excess for the remaining ten months.

After setting forth the brilliant prospect of an immense increase of business upon the road, the report says:

Having established the ability of the company to pay the stockholders in the manner proposed, a portion of the sum withheld from them up to this time, we shall now examine the reasonableness of the claim.

That the President and Directors had the legal right to seize upon the net profits, and use them in building and equipping the road, can hardly be questioned by any one, and it is equally certain that they have a right to repay the stockholders by an issue of stock or bonds.

The following are the resolutions to be submitted to the action of the Board:

Resolved, That a reimbursement to the several stockholders of this company, of three million five hundred thousand dollars of the undivided profits heretofore used in objects of capital, be, and the same is hereby ordered to be paid to them according to the shares respectively held by each, payable at the office of the company, on and after the 26th day of January, 1857, in scrip, fundable in bonds of the company, dated the 15th day of May, 1857, bearing interest at the rate of six per cent. per annum, payable on the 15th days of November and May in each year. Which said bonds shall be convertible into stock of the company at their par value at the pleasure of the Board of not less than two-thirds of the whole number of the Directors, or on a vote of a majority of the stockholders in a general meeting assembled, on thirty day's notice of such meeting being given, for the purpose of deciding such option.

Resolved, That the sum of one hundred and thirteen thousand three hundred and thirty-three dollars annually, beginning with the year 1857, be, and the same is hereby appropriated and set apart as a sinking fund for the redemption of the mortgage debt of the company. Which said amount, and all interest that may from time to time accrue thereon, shall be invested in any of the debt aforesaid, when it can be obtained at or below par, and that whenever any of the bonds of this company shall come into the hands of the trustees hereby appointed for the management of said fund, they shall cause to be written or stamped indelibly thereon the words, "Belonging to the Sinking Fund of the Baltimore and Ohio Railroad Company, and not to be re-issued." And that the President and Treasurer of this company are hereby constituted and appointed trustees for management of the same.

The report is signed by John H. Barnes, Columbus O'Donnell, S. W. Smith, and John Coates.

Pittsburg.

The people of this great manufacturing and flourishing inland town are fully aroused to a proper sense of the pecuniary loss and injury inflicted upon them by the suspension of river navigation on the Ohio, and are directing their counsels and energies to the conception, with a view to immediate action, of some feasible plan to remedy the evil. Pittsburg, like every other active, busy place has a due appreciation of the great blessings to be derived from an unrestricted, direct and cheap communication with all the great marts of commerce. At this particular time, when all communication with the West and South by water is entirely cut off by the low stage of the river, she is suffering severely from the immense aggregate of means locked up in manufactured articles, waiting for means of shipment to market. The amount of manufactured articles ready for shipment at this moment in Pittsburg exceeds \$4,000,000.

The advantages and resources of Pittsburg as a commercial and manufacturing place will be properly understood and estimated from a statement of two or three facts connected with its business. The annual business of the place amounts to \$48,785,000. Of this total, the manufacturing business was \$28,656,000, and the commercial business \$20,129,000. Among the articles manufactured there were Iron and Nails, \$9,637,000; Castings and Stoves, \$1,250,000; Glass, \$2,330,000; Steamers built, \$1,520,000; Steam Engines, \$950,000, etc.

Atlantic Telegraph.

The London papers received by the Africa announce that the subscription of £350,000 required by the Atlantic Telegraph Company had been closed, the applications considerably exceeding the specified amount. The shares are £1,000 each, and an immediate call of 20 per cent. had been made upon them. Of the 350 shares, 88 had been taken on American account. It is understood, the London Times states, that application will be made to the United States government for an annual grant, equal to four per cent. on the capital, as has been accorded by the British treasury. The company possess an exclusive privilege from the British colonies of Newfoundland and Prince Edward Island, and also from the State of Maine, for bringing submarine cables to those shores.

White's Iron Bridges.

We are requested to copy the following letter: *Sunderland, near N. Brunswick, N. J., Aug. 3, 1856.*
M. M. WHITE, Esq.

Dear Sir—In answer to your inquiries as to the stability and character of the Iron Bridge which you built for me, to be erected on the line of the Arica and Tacna Railway in Peru, S. A. I have great pleasure in reporting its perfect success. It was erected in January, 1855. The month following it was tested by placing in its centre thirty tons of railway iron, and then running on it a train of cars loaded with twelve tons of railway iron on each car. It was then run over, as it has been repeatedly since, at high speed, thirty to forty miles an hour, without showing the slightest sign of desarrangement or undue movement of its parts.

The engines now running on that road are heavy, (23 tons with coke and water); the tenders are the largest I know of, carrying 8,000 Imperial gallons of water, and when loaded weighing not less than 24 tons.

The bridge was arranged to have a camber of four inches; it was keyed up nearly five inches. The first trains run over it, gave it a permanent deflection of one inch reducing the camber to 3½

inches. This camber it retained at the time I left Peru in April last. During the whole time I had charge of this work, there was not a blow struck in repairs or keying up; every key and nut remained exactly as it was when erected. During the first nine months I run over it 47,000 tons of dead weight. I consider this bridge most perfectly arranged in all its parts. In erecting it, I did not have to alter a rod or a bolt or anything about it, as I found all the pieces most mathematically correct, and all the iron of the best quality. The skill and accuracy with which you fitted all the parts of this structure (as it was not erected until I erected it, some thousands of miles away from this country) deserves all praise.

Yours sincerely,

W. W. EVANS,

late Eng'r Arica & Tacna R. R.

This bridge was built by M. M. White of this city and shipped in December, 1853. It is a single span of 100 feet clear space; levels taken on the upper chords, January 14, 1856, April 17, 1856, and May 10, 1856, show the camber to have retained its exact position to within less than one-sixteenth of one inch.

Richmond and Danville Railroad.

We find in the Richmond Examiner of the 12th inst., an abstract of the report of the President of this road to the stockholders for the fiscal year ending Sept. 30th, 1856. From it we learn that the road is now completed, and in successful operation throughout the whole extent of the line from Richmond to Danville. The track was laid to Danville about the first of last May, and business was commenced at that point in July. A few more section houses and two engine sheds are all that remain to be done in the way of construction.

During the last fiscal year the floating debt of the company has been reduced from \$124,481 to \$78,724, and has since been reduced to about \$45,000, including the balance due for the Belle Isle bridge. The unsold registered bonds have been disposed of.

The gross receipts of the road, for the last fiscal year were.....\$421,762 61
And the expenses 213,593 88

Leaving a net profit of.....\$208,168 73
—being 49.35 per cent. of the gross amount.

The company was unfortunately subjected to two severe and unlooked-for accidents during the heavy snows of last winter, which swelled the expenses of transportation not less than \$8,000; a collision between the up and down passenger trains occurred on the night of January 12th, 1856, by which one fireman was killed, and much damage done to the trains. Within two hours of the same time the large and costly depot at Richmond suddenly fell, scattering its ruins many yards in every direction, and damaging twenty-four freight cars, as well as the freight accumulated in the building. The platforms were cleared of the rubbish, and some cheap coverings erected, under which the business of the road is still transacted with comparatively little inconvenience. This depot may be rebuilt for less than \$15,000, by using the present foundations and old material, though the board have as yet determined upon no plan in reference to it.

The company has failed to recover anything

further from the underwriters in England, and all the original difficulties of that complicated matter remain unsettled.

The receipts of the road will hereafter afford ample resources for necessary and contingent expenses. They will also, it is confidently anticipated, enable the company to pay the interest as it becomes due to the State and other bondholders, and at the same time provide a fund for the payment of the four hundred thousand dollars falling due in 1859 and 1860. After which, handsome dividends may be annually declared, and still leave a surplus for such other purposes as may be deemed necessary.

The length of the road from Richmond to Danville is 142 miles—63 miles of which is laid with flat bar. The President does not advise the substitution of the heavy rail until the debt of four hundred thousand dollars is provided for, nor would he advise it then, except by the application of such surplus as may remain, after paying the stockholders six per cent. dividends. In accordance with this suggestion, he submits an estimate, which assumes the net income of the road from this time to 1860 at \$250,000 per annum, which is fully up to the mark for flat iron.

Fiscal year 1856-57.

Net income 30th Sept. 1857	\$250,000
Deduct interest.....	\$78,000
Deduct floating debt.....	78,000
Deduct 3 per cent. dividend on amount capital, \$1,975,020, paid in—say	59,400
	<hr/> 215,400

Surplus fund 30th Sept., 1857

Fiscal year 1857-8.

Add net profits 30th September, 1858....	250,000
	<hr/> \$284,600
Deduct for interest.....	\$78,000
Dividend	59,400
	<hr/> 137,400

Surplus 30th Sept., 1858.....

Fiscal year 1858-9.

Add net profits 30th Sept., 1859.....	250,000
	<hr/> \$397,200
Deduct interest	\$78,000
Dividend	59,400
	<hr/> 137,400

Surplus 30th Sept., 1859.....

Applicable to redemption of bonds for \$250,000, due that year.....

Surplus 30th Sept. 1859.....

Fiscal year 1859-60.

Add net profits to 30th Sept., 1860.....	250,000
	<hr/> \$259,800
Deduct interest.....	\$63,000
Dividend 3 per cent.....	59,400
	<hr/> 122,400

Surplus 30th Sept., 1860

Applicable to the payment of \$150,000, in bonds due 1st Nov., 1860.

Balance against the company 30th Sept., 1860.....

Fiscal year 1860-61.

Net profits to 30th Sept. 1861.....	250,000
	<hr/> \$237,400
Deduct interest.....	\$54,000
6 per cent. dividend.....	118,800
	<hr/> 172,800

Surplus 30th Sept., 1861.....

The President's estimate contemplates the paying off of the debt of \$400,000 in four years, the payment also of 3 per cent. annual dividends meantime, and a dividend of 6 per cent. in 1861—the aggregate dividends for the five years amounting to the sum of \$356,400.

The comparative monthly earnings of the road for the fiscal years ending September 30th, 1855 and 1856, are as follows:

	1856.	1855.
October	\$41,957 33	\$25,948 78
November	29,118 10	23,448 28
December	28,169 00	16,283 00
January	11,848 38	16,176 62
February	17,250 53	17,788 76
March	33,825 65	27,592 01
April	42,326 02	25,981 20
May	41,904 41	25,968 70
June	36,842 15	32,685 29
July	38,578 57	26,621 98
August	46,111 40	37,868 37
September	53,831 07	39,951 57

\$421,762 61 \$316,309 56

Mississippi and Tennessee Railroad.

The line as located, extends from Memphis, Tenn., to Grenada, Miss., a distance of 97 miles. At the date of the last report of the company, Oct. 8, 1856, the track had been laid as far as Senatobia depot, 37 miles from Memphis, and the entire grading and bridging of 13 miles more, to Sardis depot, had been completed, and was in readiness for the iron, so that the track could be laid without interruption to that point. The following extract from the report of the President to the Stockholders will show the condition of the company at that time. He says:

"The road has advanced to that state when every consideration of interest and pride imperatively demands its speedy completion; and it needs but a little punctuality on your part in paying stock, to insure it. Of the original individual subscription of \$518,000, only \$337,177.50 have been collected, leaving a balance of \$180,722.50 unpaid, the larger part of which has been due over twelve months, a delinquency by no means credible to those in arrears. Of the \$250,000 city of Memphis subscription, \$152,000 have been expended for iron and equipment, leaving \$98,000 of bonds for the purchase of additional rails, necessary to lay the track south of Como. We have also expended for iron \$95,850, borrowed of Mississippi, being part of the \$200,000 loaned your company by the State, under an act approved March 7th, 1856."

The company had purchased and received 4,198 tons of rails, and chairs and spikes nearly sufficient for the same at a cost of \$275,259 66; and 1,500 tons additional had been contracted for, to be delivered in New Orleans by the middle of October. Contracts had been made with Messrs. Keck and Hubbard, of the Fulton Car Works, at Cincinnati, for 36 freight cars, and with a manufacturer in Memphis for 20 more—making with those on hand 88; exclusive of passenger, baggage and gravel cars.

Four locomotives had been purchased and delivered, two of which were paid for exclusively in Memphis bonds, and two were bought on a credit. Of these four, two were purchased of the Taunton Locomotive Works, Mass.; one of Messrs. Richard Norris & Son, Philadelphia; and one of the Tredegar Works, Richmond, Va. Another locomotive had been contracted for with the Taunton Works, and was ready for delivery, but could not be shipped in consequence of low water

in the Ohio. This equipment would probably be sufficient to do the entire business of the road for the next twelve months.

It was estimated that the further sum of \$315,000 would be required to finish the road to Tallahatchie river, and erect the necessary buildings and shops. Of this sum \$105,000 would be required to pay for the 1,500 tons rails last purchased, leaving \$210,000 to complete the various items of the construction account.

Of the prospects of the road when completed, the President says:

"We have scarcely begun the business season, and our earnings for September were \$5,589 62 on thirty-one miles of road, and this was merely incidental, the same train being employed in its construction. Without indulging in over-sanguine calculations, we have every assurance that your road, when completed, will be one of the best paying roads in the country, yielding a generous return for the money expended."

The following is a synopsis of the several acts passed at the last session of the Mississippi Legislature, touching the interests of this road.

The first section of the amended act substitutes five in place of twelve freeholders to condemn land and assess damages for right of way.

The second section empowers the Governor of Tennessee to appoint two directors under the Internal Improvement Act of that State, making eleven instead of nine, as formerly.

Section third empowers the company to contract by special agreement, for the payment of interest at any rate not exceeding ten per centum per annum, upon any debts or obligations hereafter to be incurred.

Section fourth empowers the executor, administrator, or guardian, of any deceased person, minor, or person *non compos mentis*, to contract with the company for the right of way through the land of said persons.

Section fifth grants the right of bridging Coldwater, Tallahatchie, Yokenapantha, and Yallobusha; provided navigation be not obstructed. This was derivable from the original charter, and is, therefore, a work of supererogation.

Section sixth grants the right of constructing a branch road from any point south of the Tallahatchie river, on the main line, through the counties of Panola, Tallahatchie, Yallobusha, Carroll, Holmes, Attala, Yazoo, and Madison, or any of them to Canton, or to any point on the Mississippi Central road, and to increase the capital stock to an amount sufficient to construct and equip the same: provided, no stock subscribed prior to the 8th March, 1856, be applied thereto. Its construction is required to commence in four, and finished in fourteen years from 8th March, 1856. All the powers and privileges of the original and amended charter apply to the branch road, and the privileges of bridging Big Black without a draw is granted.

The other acts referred to, are those authorizing the Board of Police of Panola county, upon an affirmative vote of the people, to loan the Common School Fund of said county to your road, and authorizing the Auditor of Public Accounts to loan four hundred thousand dollars, arising from the sale or lease of the Chickasaw School lands, in equal shares, to the Mississippi and Tennessee, the Mississippi Central, the New Orleans and Jackson, and the Mobile and Ohio roads. This loan is made for seven years at 8 per cent. per annum, payable semi-annually. The act provides that the companies accepting the loan, shall issue, as collateral security to the State, first mortgage bonds, secured on all the property and effects of said company, to an amount equal to the loan, and certificates of stock four times the amount loaned. The failure on the part of the company to meet the interest or principal within sixty days from the time they may be due, entitles the State to enforce the mortgage lien.

The Mobile and Ohio and the New Orleans and Jackson roads having failed to apply for their share of the loan within the time limited, the whole sum is equally divided between your road and the Mississippi Central. Under the provisions of the act, we have applied for and obtained \$95,850, of the \$200,000 accruing to your road from this source. Under the act above referred to, a vote of the people of Panola county was recently taken, and the loan of the Common School Fund authorized. The amount derived from this source will probably be \$15,000.

Since the report was issued, the track has been extended to Panola, 20 miles further, making 57 miles now completed and in use, leaving but 40 miles to be finished to Grenada.

The direct connections of their road now in progress, are the Mississippi Central, from Grenada to Canton, Miss., and thence by the Great Northern road to New Orleans.

The completion of the Mississippi and Tennessee road to Grenada, will doubtless hasten the building of the Mississippi and Mobile road, from Grenada to enterprise, which would form a direct line to Mobile, via the Mobile and Ohio Railroad, already in operation.

The counties directly tributary to this road in Mississippi—De Sota, Canola, Tallahatchie, Lafayette, Yallobusha, Choctaw, Carroll and Chickasaw. But $9\frac{1}{2}$ miles of the road are in Tennessee, viz.: from the State line to Memphis.

By reference to a former report, we learn that the curves are very favorable—having not less than 1,910 feet radius, and on an average but 14 degrees of curvature per mile, while the grades do not exceed $47\frac{1}{2}$ feet per mile, with two-thirds of the whole line literally level.

The general construction account, including graduation, masonry, bridging, cross-ties, buildings, water stations, track-laying, etc., shows the total amount of work done to be \$362,835 99, of which amount \$294,260 52 was paid in cash, and \$61,892 98 in stock, leaving a balance due of \$6,682 49. Work to the amount of about \$20,000 had been done, not embraced in the above statement, and for which no certificates had been given. Besides which there had been expended in maintenance of way, \$8,124 23.

The following is a statement of the receipts and expenses from all sources for the year ending Sept. 30, 1856.

RECEIPTS.

From Passengers.....	\$9,203 53
For Freight.....	9,125 05—\$18,328 18

EXPENDITURES.

For Conducting Trains....	\$3,774 08
For Motive Power.....	3,900 95
For Maintenance of Way....	8,124 23
For Maintenance of Cars....	406 31—\$18,205 57

The Treasurer's Report embraces the total expenditures, disbursements and receipts, the former item amounting to \$914,026 49. The prospective resources of the Company are enumerated as follows:—

Amount individual subscription yet uncollected.....	\$168,822 50
Memphis City Bonds on hand.....	98,000 00
Mississippi State Loan yet not collected.....	104,150 00
Bills receivable on hand.....	18,510 53
First mortgage bonds undisposed of..	400,000 00
Total.....	\$789,483 03

The following is a list of the officers and directors of this road for the ensuing year:

John M. Patrick, James Elder, of Memphis; Henry Dockery, J. C. N. Robertson, of Desoto; F. M. White, D. S. White, Thomas Bradford, of Panama; and Samuel R. Garner and N. Howard, of Yallahusha.

F. M. WHITE, *President*, C. F. VANCE, *Sec. and Treasurer*; MINOR MERIWETHER, *Chief Engineer*; E. M. PATRICK, *Superintendent*; T. W. WHITE, *Attorney*.

Railroad Time--That Red Hand--How they do These Things in France.
(Correspondence of the Evening Post.)

GENEVA, Switzerland, Nov. 6, 1856.

I have just returned from a run of twenty days in the different provinces of France. At Bayonne I went to the station to take the cars for Bordeaux, but by a mistake of my own the cars moved off without me. I inquired the hour of departure of the next train, and found I had to wait four hours! Looking up at the clock, I observed, for the first time, that the dial showed one bright red hand. I asked the keeper of the station what that meant. He explained it; and it is this red hand that I am going to talk about, because it helped me to pass the four hours without ennui.

The system of time adopted in France (and I believe in England) for railroads, is very simple and beautiful. The observatory (or transit) time of Paris is used on all the roads in the kingdom; it is telegraphed occasionally along the railroad lines, and the station clocks are all regulated by it; all have this uniform as well as exact time.—Each station clock carries (or may carry) two minute hands—that is, in addition to the usual hour and minute hands, which are black, a red minute hand is added, which red hand marks the local time, the black marking the Paris or railroad time.

Thus, if the station be four degrees east of Paris, the red hand will be placed sixteen minutes in advance of the black; and if the station be four degrees west of Paris, the red hand will be placed sixteen minutes behind the black hand. In this manner the station clocks indicate the local time and railroad time at every locality in the kingdom where there is a station. The difference of time between Paris and any given locality being once ascertained (an easy matter) it is ascertained for ever, and requires no more alteration.

Two minute hands being set on the same shaft where the railroad time is corrected by telegraph, moving the black hand, the red hand moves with it, retaining each its relative position, and connecting thus by one movement the double time. It is, therefore, no more trouble to adjust daily, if you please, the double than the single time. In addition to this, they are beginning to print the time tables (which are posted up, or sold for a cent,) with double time columns, so that you have before you the railroad time of arrival and departure at each station, and the local time at each station.

This card for a penny is a land-chart, as well as a clock; it gives you the name of each place, the miles you have run, the central and local time, consequently your longitude; and as the movement of the train is exact, the card tells you the hours and minutes, without reference to your watch. Accurate and uniform time being thus supplied to all the stations, it naturally spreads into every city and village, into hotels, warehouses, manufactories, dwelling houses, &c., because it costs them nothing, is accessible to all, and is uniform; uniformity is more important than accuracy.

The public clocks, hotels, &c., begin to put on the red hand, because it is a great convenience, and only costs a few cents.

By this combination of telegraphs and railroads you see set up, as it were in the centre of a country, a great clock, facing all ways, illuminated so as to be visible night as well as day—so large that it can be seen from every city, hamlet and house

in the realm—and this clock marks the time of all railroad movements, and the local time for every place in the kingdom. It is a marvellous clock.

Let your mind dwell a minute on this: take it in, in all its remote effects, and you will perceive the whole industrial and business movements of a nation keeping step to this exact and uniform time; nothing here waiting on something, because of a difference of time; no confusion, no irregularity from uncertainty about time; one-half the nation never too soon nor too late for the other half of the nation, because of the disagreement of time. Consider the sums annually paid for time-keepers (which after all only approximate accurate or uniform time) as some evidence of the value set upon time—consider the positive benefit of uniform time in all co-operative affairs, and the negative benefit of uniform time in the avoidance of accidents and losses—consider the value of minutes in the aggregate to be saved by uniform time in the daily industry of a nation, which is but a combination of individual movements, dependent more or less on each other—look at it backwards and forwards and all around, and you, being an economist, will perhaps be able to tell me what this system of uniform is worth? At all events you will admit, I think, that it is worth trying, when the trial will cost you nothing—and you observe that it is as applicable in America as in Europe, and ten times as easy to introduce in America, because of the superior intelligence and quicker perception of the people.

The plan may be briefly this: place your eastern line where you please, say Boston; fifteen degrees west of that you will adopt as your meridian for railroad time, because fifteen degrees make an hour, and this will give one hour east and one hour west—a breadth of thirty degrees of longitude—within the whole range of which the difference of time between your meridian and any locality east or west will only amount to minutes, and thus every clock within that range will mark the double time. The system is just as applicable beyond this range, east or west, as within it, only when the difference of time exceeds an hour, (east or west,) you begin to count by minutes again on the clock, and have to add one hour to each of these sums of minutes.

This is really a matter of small consequence; it is simple; a child can do it and understand it. At the same time—since adopting a meridian fifteen degrees west of Boston would bring the greater part of the railroad in the United States, and for a long time to come, within the thirty degrees, so that the double time would be accurately carried by each clock within that range, without the trouble of adding the hour—it would be better to do so than to take a more eastern meridian; it would also include all the great towns, cities and railroad centres within the belt. The time could be regulated from Boston, or New York, or Washington, or Cincinnati—anywhere where there is an observatory or a transit instrument, no matter where. It would be the cheapest method of keeping correct time, because only one series of observations would be requisite for the whole country; it is easy to introduce, because it does not need any general agreement of railroad companies to adopt it; let one important line adopt it and publish its plan—all the roads in connection with that one will take their time from it, because it will cost them nothing, and will be for their convenience and interest to do so; the roads in connection with these last will, in turn, do the like, and for like reasons; it will thus spread and become general, because all will see the benefit of it. It will make no change in the running of cars, no alteration of hours, and only require the time-tables to be adjusted to the new meridian, which is but a trifle; the clocks set—another trifle; and the whole reform is introduced. You may put the extra hand to your clocks or not, as you choose; it would be better to do so, and then you may leave the public to do so for itself—and be sure the public will do it, for he is a knowing chap, and not slow to understand his own convenience.

Why, my friends, if the railroads of the United

States were to build an observatory, furnish it, put an astronomer in it at a good salary, to keep time for them on this system, I believe the gains and savings resulting from it, in a single year, would pay the whole cost. In the combined movements of all our railroads, what is the daily loss by any one item—fuel for instance—for want of uniformity in time? But no such outlay is necessary, and if you will submit this plan to a man whose opinion in such matters has weight—Lieutenant Maury for example—get him to perfect it, publish it and sanction it, then introduce his times and tables on one railroad of importance, you may consider the work done in less than twelve months; it will be the system of the United States, and it will not only benefit railroads and all public conveyances, but it will be perfecting the application of telegraphs and railroads to industrial and economical pursuits in the most useful manner. The greatest value of telegraphs and railroads is resolvable into time, and this is an admirable method of perfecting that value by establishing uniform time.

Very truly, my friend, yours,

Journal of Railroad Law.

BAGGAGE.

What constitutes the baggage of a passenger and how far are carriers liable for the loss of valuables entrusted to them?

Originally, it was held that the owner of a vehicle or boat was not answerable, as a carrier, for the luggage of a passenger unless a distinct price were paid for it. But it is now held that the carrying of the baggage is included in the principal contract in relation to the passenger, and the carrier is answerable for the loss of the property, although there was no separate agreement concerning it. A contract to carry the ordinary luggage of the passenger is implied from the usual course of the business, and the price paid for fare is considered as including a compensation for carrying the freight. But this implied undertaking has never been extended beyond ordinary baggage, or such things as a traveller usually carries with him for his personal convenience in the journey. It neither includes money nor merchandise, nor will money even to pay travelling expenses carried in a passenger's trunk be included under the term baggage. It is otherwise, however, as to articles for the personal use, convenience, instruction or amusement of the passenger on the way, and which are usually carried as baggage. Many interesting questions and cases arise under the principles above laid down. The following case illustrates the above points.

HAWKINS, against HOFFMAN, 7 Hill, 344.

The plaintiff was a merchant, dealing in silk trimmings and buttons, and employed one FRANCIS MASON as his traveller, who was furnished with samples of the goods which the plaintiff had for sale. Mason went from place to place making sales for the plaintiff, and as is usual in that business, carried samples of the goods which the plaintiff had for sale. He had a black trunk containing the samples, which were valued at about \$300. He had also a hair trunk and a valise. He was carried by steamboat from New York to Poughkeepsie, and on his arrival went ashore and the trunks and valise were landed and placed on the wharf.

He delivered the hair trunk to a coachman whose carriage stood at the upper end of the wharf and pointed out to him the black trunk.

When the hair trunk had been taken to the coach, Mason returned to look for his valise and found it. He then turned to look for the black

trunk but did not find it. Supposing the coachman had taken it he went to the carriage to enquire and found that the coachman had by mistake taken the trunk of one BRETT. By this time the boat had left on her way to Albany. While Mason was engaged with the coachman and in looking for his valise the steamboat hands had taken the black trunk on board the boat. When Brett missed his trunk the boat was just about to leave. He called to the hands to know if they had taken his trunk on board again and one of them held up a trunk and enquired if it was his, and he answered that it was not. This was in fact the trunk of the plaintiff and it was probable from the evidence that the hands who had assisted in landing the passengers and baggage saw the trunk in question on the wharf, apparently without an owner and supposing that it had been landed by mistake carried it back on board the boat. Mason went to Albany the next day in search of the trunk but it could not be found.

The defendant insisted that he was not liable for the trunk and contents, either as baggage or freight. The plaintiff claimed that it might be considered the necessary baggage of the traveller.

It being admitted that the defendant was common carrier of the lost trunk, it would then be important to inquire whether there was a complete delivery of the property under the circumstances to Mason at Poughkeepsie; if there was a full transfer from the custody of the boatman to the charge of the owner, the defendant's contract was performed, and he was no longer answerable for the property as a common carrier. The case was originally tried in the city of New York, and a non-suit was ordered—this order, it was now moved, to set aside; the opinion was delivered by Judge Bronson.

By the Court.—A contract to carry the ordinary luggage of the passenger is implied from the usual course of the business, but luggage includes neither money nor merchandise. It was suggested that money to pay travelling expenses might perhaps be included, but that may, I think, be doubted. Men usually carry money to pay travelling expenses about their persons, and not in their trunks or boxes, and no contract can be implied beyond such things as are usually considered as baggage. It is going far enough to imply an argument to carry a weight of any kind from a contract to carry the passenger; for the agreement which is implied is much more onerous than the one which is expressed. The carrier is only answerable for an injury to the passenger when there has been some want of care or skill, but he must answer for the loss of the goods though it happened without his fault. Still, an agreement to carry ordinary baggage may well be implied from the usual course of business, but the implication cannot be extended a single step beyond such things as the traveler usually has with him as a part of his baggage.—It is undoubtedly difficult to define with accuracy what shall be deemed baggage within the rule of the carrier's liability.

It would seem from this that the rule would not necessarily be confined to wearing apparel, brushes, razors, writing apparatus and the like. If one has books for his instruction or amusement by the way, or carries his gun or fishing tackle, they would probably fall within the term baggage.—This is the only safe line of distinction, and it is

by principles like these that the question of what constitutes baggage must be determined.

SAFETY AND ECONOMY.

JAMES HARRISON, JR.'S, AUTOMATIC STEAM WHISTLE FOR LOCOMOTIVES. PATENTED APRIL, 1866.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the Whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to
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NEW YORK, December 1, 1866.

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THE undersigned, having the support of some of the leading makers of Iron in England, is prepared to take orders for Manufactured Iron of all descriptions, as well as Pig Iron, Block Tin, Tin Plates, Spelter, &c., and undertake shipment of the same to the United States on the best terms, both as regards prices and freight arrangements.

WILLIAM ELLIS,
Metal Broker, Shipping and Commission Agent,
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TEN PLATFORM CARS,

28 ft. long, 4 ft. 8½ inch gauge, made in the best manner, with brakes, and now ready for delivery.

BOX and PLATFORM CARS, made to order.
WILLIAMS & PAGE,
4150 44 Water st., BOSTON.

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THE "MONTGOMERY IRON COMPANY" is prepared to execute orders for RAILS of the usual patterns and weights, and of any required length, not exceeding 30 feet per rail. Apply to
THOS. CHAMBERS, President,
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CLARK & JESUP have removed their office to
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A LARGE assortment of WHEELBARROWS, including three different sizes, handsomely finished, for stores, shops, gardens, and city use generally. Also a large lot of CANAL and RAILROAD BARROWS, all made in the most substantial manner, to which the attention of contractors is directed.
Also, HAND TRUCKS, of various sizes, used in stores and warehouses, for moving boxes, bales, bags, &c., &c.

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The subscriber informs his friends and the public, that in connection with his Agricultural Implement and Machine Works, he has erected an extensive BLACKSMITH SHOP and is now prepared to turn out Blacksmith work of every description, such as Picks, Crowbars, Miners' Tools and Drills, Stone Outters, Chisels, Wheelright work, &c., &c., at the shortest notice. He desires to call the attention of Contractors to the facilities of his establishment, which is the largest in the city.

All orders for Agricultural Implements, Contractors' Tools, Turning, Sawing, Blacksmith Work, &c., &c., promptly attended to.
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THE ONLY DIRECT ROUTE FROM
CHICAGO TO AURORA, MENDOTA, PRINCETON,
GALESBURG, QUINCY, BURLINGTON, ANY PART
OF SOUTHERN OR CENTRAL IOWA, KANSAS
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PASSENGER TRAINS leave the Central Depot, foot of South Water street, Chicago, daily as follows:—
9.00 A.M.—MORNING EXPRESS.—Connecting at Mendota with Illinois Central Railroad, north for Amboy, Dixon, Galena and Dunleith, south for La Salle, Bloomington, Decatur, Springfield, Jacksonville, St. Louis, Cairo, &c.; at Galesburg with Northern Cross R.R. for Quincy, &c.; and at Burlington with Burlington and Missouri River R.R., and with Packets for points up and down the Mississippi river.
8.45 P.M.—EVENING EXPRESS.—Making same connections as above.

NO TRAIN SATURDAY EVENING.

ONE TRAIN SUNDAY, 8.45 P.M.
BAGGAGE CHECKED THROUGH TO BURLINGTON and QUINCY.

THROUGH TICKETS can be procured at all the principal eastern railroad offices and in Chicago at the Depot and at the Michigan Central R. R. office, corner of Lake and Dearborn streets, opposite the Tremont House.

SAM'L POWELL, C. G. HAMMOND,
Gen. Ticket Agent. Gen. Sup't.

New York and Erie R. R.

On and after Monday, November 3, 1866, and until further notice,
PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6½ a.m., for Buffalo.
DUNKIRK EXPRESS, at 6½ a.m., for Dunkirk.
MAIL, at 8½ a.m., for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.
CHICAGO EXPRESS, at 12 m., for Dunkirk.
ROCKLAND PASSENGER, at 3 p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.
WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.
NIGHT EXPRESS, at 4½ p.m., for Dunkirk and Buffalo.
EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.
These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, for Scranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, &c., &c.
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Philadelphia, Wilmington & Baltimore Railroad.

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Trains will leave the Southern and Western Station, corner of Broad and Prime streets, Philadelphia, at 8 30 am. 12.45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	8 00

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From New York to Cincinnati	\$17 00
do do Louisville	19 00
From New York to Indianapolis	19 00
From Philadelphia to Cincinnati	16 00
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An extra charge will be made for meals and state rooms on board the boat.
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Portable Steam Engine.

A N engine of 12 horse power, in complete order, for sale by
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A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road; offers his services to Railroad Companies and others as Master of Repairs. Address J. M., at the office of the AM. RAILROAD JOURNAL.
NEW YORK, July 21st, 1866.

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October 18, 1856.

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WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
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TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the CAMDEN AND ATLANTIC R. R. CO., 56 Walnut st., PHILADELPHIA, Penna.

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April 30th, 1856.

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At 1 o'clock at the Merchant's Exchange,
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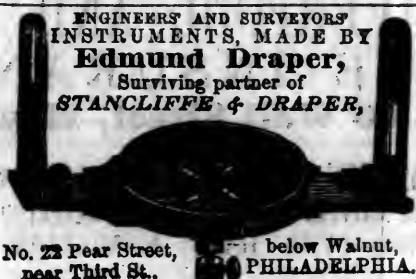
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SHEET NO.			SHEET NO.		
1. General Table for all Bases	13. for Base 18ft. Slope 1½ to 1	14. " 20 " 1½ to 1	15. " 24 " 1½ to 1	16. " 24 " 1½ to 1	17. " 24 " 1½ to 1
2. For Side Hill Cuts and Fills	18. " 24 " 1½ to 1	19. " 24 " 1½ to 1	20. " 24 " 1½ to 1	21. " 24 " 1½ to 1	22. " 24 " 1½ to 1
3. Base 12 ft. Slopes 1½ to 1	23. " 24 " 1½ to 1	24. " 24 " 1½ to 1	25. " 24 " 1½ to 1	26. " 24 " 1½ to 1	27. " 24 " 1½ to 1
4. " 14 " 1½ to 1	28. " 24 " 1½ to 1	29. " 24 " 1½ to 1	30. " 24 " 1½ to 1	31. " 24 " 1½ to 1	32. " 24 " 1½ to 1
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12. " 30 " 1½ to 1	68. " 24 " 1½ to 1	69. " 24 " 1½ to 1	70. " 24 " 1½ to 1	71. " 24 " 1½ to 1	72. " 24 " 1½ to 1

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New York, August 27th, 1864

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2. This Company will, if preferred, take risks on any specific property of Railroad Companies, in the usual manner, and also upon merchandise in their station houses, or in transit upon their roads.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW-YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE

SECOND QUARTO SERIES, VOL. XII., No 52.]

SATURDAY, DECEMBER 27, 1856.

[WHOLE No. 1,080, VOL. XXIX.

MISSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO., No. 9 SPRUCE ST.

New York, Saturday, December 27, 1856.

Rock Island and Chicago Railroad.

The Board of Directors of this road have declared an extra dividend of 12½ per cent., payable out of the surplus earnings, in full paid stock. The entire surplus claimed is about 18 per cent., most of which, as is claimed, has accrued in the past six months. The surplus on the 1st July last was represented to be.....\$497,279 07

The subsequent earnings were:

July.....	\$157,698 57
August.....	187,818 31
September.....	224,750 79
October.....	232,408 58
November.....	160,837 07
December, estimated...	115,000 00

1,077,491 82

Total.....	\$1,574,770 59
Running expenses, interest, October dividend, &c.....	732,112 77

Balance.....	\$842,659 62
Deduct accrued interest and rent of Bureau Valley road.....	118,913 90

Surplus 1st January.....\$728,745 72

This is about 18 per cent. upon the capital

stock. The new stock also bears about 2 per ct. of the usual 5 per cent. cash dividend, to be made 1st April next.

The stock of the company is 'something over \$4,000,000. The amount of dividend, therefor, is about \$500,000.

When net earnings have gone into construction, there is no reason why they should not be divided among the stockholders. But that there have been any such net earnings of this road, as is claimed, the public have no evidence whatever beyond the naked statements of the directors unaccompanied by any of the vouchers ordinarily given in similar cases. By a system of concealment of expenses so much deprecated on former occasions by Mr. FLAGG, Treasurer of this company, when it was for their interest to propitiate public opinion, the company may keep up their enormous dividends, and maintain their popularity, so long as a sale of stock and ability to contract debts, will supply the means to meet expenditures that should be charged in the current accounts. While the net earnings of \$497,297, which remained at the close of last fiscal year were accruing, the cost of the road increased \$1,489,528! This amount was mainly met by issues of stock. Now assuming the road to have been completed when it came into the hands of the company, and Mr. Flagg informs us it was out of debt, we should like to see reconciled this statement of net earnings and of enormous expenditures. The company completely put it out of our power of attempting such a reconciliation by carefully concealing the objects of expenditure both upon the road and running account.

We cannot more appropriately characterize such transactions as the above, than by giving the following extracts from Mr. Flagg's Report as Treasurer, annexed to the company's Report for 1854.

"When a new road is in successful operation, the claims of the stockholders for a dividend of all the earnings beyond running expenses are very strong; and often, the desire of profitable operations by inflating the stock, has a still stronger influence in producing large dividends. As the stock becomes desirable, every requisition for an increased expenditure is promptly met by a new issue of stock. The result is, that at the end of five or ten years, the capital stock on which dividends are to be de-

clared, is found to be double what it was understood to be at the time the road purported to be finished. And the stockholders, after luxuriating for years on 10, 12 and 15 per cent. dividends, with an occasional extra dividend in stock, are informed that a dividend will be paid to them provided they will take the amount out of a new issue of stock or bonds at par.

"The severity of the times, and the illegal issue of a limited amount of stock, has produced investigation and developed the great errors in the financial management of the railroad system generally. Commencing operations at the very time of these developments, shall we be held blameless if we fail to correct the errors which now must be apparent even to those who have been tempted to commit them?

"Freedom from debt, and the liberal earnings of the road, will enable this company to establish a sound financial and working system for the road, which will make the bonds, and the stock also, a solid and reliable security. But in order to do this, a sound system of finance must be adopted and adhered to. When the road is fully equipped for doing the business on the line, the construction account should be closed, with bars not subject to removal; and everything in the nature of repairs should be paid from current receipts, and the dividends should be limited to actual net earnings, after retaining a surplus for depreciation of the work, which is rapid, and increases with the increase of business."

"The great financial error in the railroad system generally seems to be, that the construction account is permitted to run with the road; whereas, when the road is completed and in operation, the construction should be stopped."

"If the course above suggested had been generally adopted fifteen years ago, and firmly adhered to, it would have saved a hundred millions of dollars to those confiding men who have aided these important improvements by putting their money in them. And resting on such a broad and firm basis, the public confidence in the great mass of railroad securities could not have been so completely broken up, and its withering influence extended to twenty thousand miles of these works of conceded utility, interwoven with all the business interests of the country and essential to their success by an over-issue of two millions of dollars, confined to a single railroad, sixty miles in extent."

With the experience before him of the two years that have passed since the above was written, Mr. Flagg could not possibly have more truthfully described the misconduct into which railroad companies are prone to fall, nor its pernicious consequences to the whole railway interest, nor administered a more cutting rebuke to the company in which he is, and has for years been,

a leading director, and the Treasurer. When we witness such lapses in men of such reputed sanctity as Mr. Flagg, we may well despair of anything like honesty in railway management. In the whole history of railway management there have never been more gross instances of misconduct and violations of the most sacred trusts, (for no trust is more sacred than that of a railway director), than have been committed by directors in this company in the face of a public blinded by such extraordinary professions of fidelity and good conduct as those put forth by Mr. Flagg. Look at the Bureau Valley lease—consummated for the benefit of a portion of the directors in the Rock Island company, who were contractors and furnished the means for building the former road, by which the Rock Island company were probably defrauded to the extent of a million of dollars. Not a word do the directors tell as to the cost, earnings and expenses of this road. When privately applied to, they state that they cannot distinguish between the earnings and expenses of the main trunk and branch, as no distinction is kept up between them. Of course, all evidence showing the comparative valuelessness of the Bureau Valley Railroad is studiously suppressed.

The manner in which the late extra dividend was declared, is in keeping with the general policy of the leading directors of this company. By a condition attached to the bonds, these can only be converted on days when their interest is payable, which are, we believe, on the 10th of Jan'y and July respectively. The dividend was declared on the sixth of Jan'y for the avowed purpose of cutting off the bondholders, in violation, in spirit at least, of a part of the benefits which the bondholders supposed their obligations secured to them.

North Carolina Internal Improvements.

We give the following account of the condition of the internal improvements and finances of this State, as exhibited in the recent message of the Governor.

In advance of the report of the Public Treasurer, which will in due time be presented to you, that officer has, at my request, furnished me with the following statement, showing the indebtedness of the State by bonds, the various items composing the same, for what purposes incurred, and the times at which these sums respectively fall due:

For bonds issued on account of the Raleigh and Gaston R. R., due Jan'y 1, 1860.....\$500,000
On bonds issued at sundry times in 1849, under act of 17th Jan'y, 1849, to provide for the payment of the debt of the State to the Bank of Cape Fear, to the Bank of the State and other debts due on account of endorsement by the State for the Raleigh & Gaston R. R., due in 1859.....200,000
Under act to provide for the payment of the debt of the State, passed Jan'y 28, 1851, due in 1861.....40,000
Do. do. 1862.....130,000
Fayetteville and Western Plank road bonds, running twenty years, due in 1869.....26,500
Do. do. due in 1870.....33,500
Do. do. due 1871.....40,000
Do. do. do. 1872.....20,000

The foregoing are registered bonds.

The following are coupon bonds, under act of 27th January, 1849, for construction of Gaston and Weldon R. R., and for improvement of the navigation

of the Neuse and Tar rivers, running ten years, due July 1st, 1864.....41,000
Do. do. do. Jan'y 1, 1865.....67,000
Do. do. do. July 1, 1865.....44,000
On account of North Carolina Railroad bonds, running thirty years, due Jan'y 1, 1883.....500,000
Do. do. due July 1, 1883.....500,000
Do. do. due Jan. 1, 1884.....500,000
Do. do. due July 1, 1884.....130,000
Do. do. due Jan. 1, 1885.....370,000
Do. do. due April 1, 1885.....1,000,000
Fayetteville and Centre Plank road bonds, running twenty years, due Apr. 1, 1875.....20,000
Do. do. due July 1, 1876.....10,000
Fayetteville and Warsaw Plank road bonds, running twenty years, due July 1, 1875.....4,000
Tar river, under act of 14th Feb'y, 1855, bonds running thirty years, due Jan'y 1, 1886.....15,000
Lunatic Asylum bonds, running 10 years, due Jan'y 1, 1866.....40,000
Do. do. due July 1, 1866.....19,000
Atlantic and North Carolina Railroad bonds, running thirty years, due Jan'y 1, 1886.....500,000
Do. do. due July 1, 1886.....33,000
Western and North Carolina Railroad bonds, due Oct. 1, 1886.....200,000
Bonds for money carried to public fund by resolution of General Assembly.....40,360
Bonds for money borrowed of the Literary Board.....15,442
\$5,038,802

By virtue of legislation at the last General Assembly, State bonds for the following amounts are yet to be sold, and the proceeds applied as follows:

Fayetteville and Albemarle Plank road, running 20 years.....\$20,000
Fayetteville and Warsaw Plank road, running 20 years.....6,000
Atlantic and North Carolina Railroad, for balance of State's subscription, 30 year bonds, and which will probably all be called for in the ensuing year.....533,600
Western N. C. Railroad, 30 year bonds, for balance of State's subscription, and which will probably be called for before the meeting of the next General Assembly.....600,000
Insane Asylum, 20 year bonds, will be required at an early day.....21,000

Total.....\$1,180,600

By virtue of an act passed at the last General Assembly, \$20,000 was subscribed to the stock of the Yadkin Navigation Company, of which \$5,000 has been paid; and under the provisions of a similar act, \$20,000 was subscribed to the stock of the New River Navigation Company, of which \$10,000 has been paid, leaving to be paid the sum of.....\$25,000

The payments above were made out of ordinary funds in the treasury, there being no provision for raising the money in any other way; and the above balance must be paid in the same manner, unless other provision is made therefor.

The State is bound as endorser, as follows:

On bonds of the Wilmington and Weldon R. R. Co.....\$250,000
On bonds of Cape Fear and Deep River Navigation Company, falling due in the year 1885.....300,000
On bonds of Chesapeake and Albemarle Canal Co., falling due in 30 years.....250,000
\$800,000

The State is secured by mortgages, according to the several acts of Assembly directing the above endorsement.

From information unofficially received, it is highly probable that the Wilmington, Charlotte

and Rutherford Railroad Company will so far comply with the terms of its charter, granted at the last session of the General Assembly, as to enable it to call upon the State for endorsements of its bonds.

I may also refer you to the charter of the Western N. C. Railroad Co., by which the State is pledged to subscribe two-thirds of the stock for the sections hereafter to be built, should private stockholders subscribe one-third.

To meet her liabilities, besides the means to be derived from taxation and other ordinary sources of revenue, the State owns the following stock and effects:

Raleigh & Gaston R. R., Stock, *par value*.....\$487,500
N. C. Railroad do. do. 2,000,000
Do. preferred, 6 p.ct. do. 1,000,000
Atlantic & N. C. R. R., paid for do. 533,000
Western N. C. R. R., do. do. 200,000

Railroad stocks.....\$4,220,000
Fayetteville and Western R. R. stock, *par value*.....\$120,000
Fayetteville and Warsaw, do. 10,000
Fayetteville and Albemarle, paid for, do. 30,000

Plankroad stocks.....160,000
New River N. Co. stock, *par value*, and paid for.....\$10,000
Yadkin Nav. Co., paid for, do. 5,000
Cape Fear and Deep River Nav. Co., do.....160,000

Navigation stocks.....175,000

The State also holds the bonds of the Wilmington and Weldon Railroad Company, upon which the interest is regularly paid, for.....\$50,000

Also, two bonds of the Seaboard and Roanoke Railroad Company, each for \$5,387 14, dated Jan'y 3rd, 1841, payable in two and four years, interest payable semi-annually.....10,774
60,774
\$4,616,274

The receipts into the Public Treasury for the two last fiscal years, ending the 31st October, 1856, are stated as follows, from the books of that office:

	Fiscal year, 1854-5.	Fiscal year, 1855-6.
Ral. & Gaston R. R. dividends.....	\$30,712 50	\$29,250 00
Fay. and Western Plank road do.	4,800 00	4,800 00
Tax on Attorney's license.....	565 60	535 80
Tax on Bank stock.....	7,973 25	11,182 33
Interest on W. & R. R. bonds.....	3,000 00	.....
Cherokee bonds.....	963 00	1,300 00
Public Tax.....	279,255 68	341,833 84

\$327,270 08 \$391,901 77

The ordinary expenses of the State government for the two fiscal years ending the 31st October, 1858, will not, I think, exceed \$170,000, or an average of \$85,000 per year. They will be more this year on account of your session, and less the next.

From the statements given it will appear that the interest payable, annually, on the present bonded debt of the State is.....\$302,328 15
And upon bonds to be issued under existing laws, the greater part in the present fiscal year.....70,888 00
And unless provision is made for raising it otherwise, there must be paid out of the Treasury, in all probability, for the Yadkin and New River Navigation Companies, the sum of.. 25,000 00

It will be seen, therefore, that the present revenue of the State will fall short of meeting these liabilities, and that further provision should be made for that purpose.

Detroit and Milwaukee Railway.

The Directors of this Company have just issued a report, which is the first made since the consolidation of the Detroit and Pontiac, and the Oakland and Ottawa Railway companies, under the name of the Detroit and Milwaukee Railway Company. The present Directors are as follows:

President—Henry N. Walker; *Directors*—Henry N. Walker, Henry P. Baldwin, Henry Ledyard, Buckminster Wight, Nelson P. Stewart, Edmund A. Brush, Eber B. Ward of Detroit, Harvey P. Yale of Grand Rapids, and Willard McConnell of Pontiac.

The Directors report that since the consolidation they have opened their line to Owosso, 78 miles from Detroit. Messrs. Stewart & Co. are under contract to open the line 34 miles further, (to the west line of Clinton county,) by the 1st of January next. Concerning the balance of the work, the Directors say:

The remainder of the line, from Clinton county to Grand Haven, has been re-let upon very favorable terms, to be opened for traffic on the 1st day of September next.

A sale of \$1,250,000 of the first mortgage bonds has been effected in London, which will furnish the company with the requisite cash means to pay for all the iron and complete the line to Grand Haven, ready for traffic. All of the iron has been purchased; the balance of the money arising from the sale of these bonds is specifically appropriated to meet the payments of the contracts from Clinton County to Grand Haven, and for no other purpose whatever.

The total amount thus far expended \$4,253,085 94
Unfinished contracts..... 2,460,096 28

Total cost to Grand Haven..... \$6,714,181 22

The earnings of the finished portion of the line show very favorably for the local traffic, and make it certain that, as part of a great trunk line, the revenues of the road must be very large. The Directors submit the following estimate:

The receipts for local traffic, estimating the same at the rate we have received since the line was opened to Owosso, will be..... \$697,228

Foreign or through traffic, estimating it to be equal to local, which is much less than on Michigan Central or Great Western, will be..... 697,228

Total estimated receipts the first year after the line is opened..... \$1,397,288

Deduct fifty per cent. for expenses, (although we think they will not exceed forty per cent.)..... 697,228

Leaves net first year the line is opened. \$697,228

This sum will be sufficient to pay all your expenses and interest, and leave sufficient to make a dividend of over eight per cent. half yearly, or sixteen per cent. per annum, upon the entire shares of the Company.

The Company refer at length to the Milwaukee and Mississippi Railroad, the La Crosse and Milwaukee Railroad, and the Racine and Mississippi Railroad, soon to reach the Mississippi river at three different points, as sure to pour upon the Michigan road a vast amount of business, immediately upon its completion.

Mr. Higham, the Chief Engineer, in his Report says:

"West of Owosso to Ionia village, the work of grading, &c., has been steadily progressing. Through Clinton county the grading is about finished and ready for the superstructure, which the contractors have commenced laying. And we hope to have the road open for freight and passengers by the close of this month to St. Johns, and by the end of the year to Ionia county.

From the East line of Ionia county to Grand Rapids, a large amount of the heaviest portions of the grading has been done. This work is progressing, and there is no difficulty in having the road in operation to Grand Rapids in June next, if the contractors use proper diligence."

"From Grand Rapids to Grand Haven the contractors have commenced work, and the whole may be finished to Lake Michigan by the first day of September, 1857. Efficient measures are being taken to have the buildings necessary to accommodate the business of the road, finished by the time the track is laid."

Memphis and Little Rock Railroad.

We find in the *Memphis Bulletin* a report of the directors of this company, from which we are pleased to learn that the long pending difficulty between the contractors and the company has been satisfactorily adjusted without litigation.—The whole matter having been referred, the arbitrators on the 26th of November last, awarded as follows:

"The Memphis and Little Rock Railroad Company shall, in full of all work, labor, materials, engineering, supervision and attention given to the construction of said road, and for the transfer and assignment of the contract to construct said road to said Company, pay the said contractors, the assignees named in said agreement, \$100,000 in the thirty year bonds of said company, at par, of equal character with any bonds issued by said company; \$10,000 in cash, \$2,500 in six months with interest, \$2,500 in twelve months with interest from this date, and \$9,000 in the stock of the company, making \$124,000."

The above award was the result of consultation, compromise and agreement between the parties interested, and was of course adhered to.

In regard to the present state of the work, the report says:

The work which has been done, though defective, will be by no means useless. There are twenty-one miles of continuous grade, claimed to have been finished, the embankment of which will have to be in several places made higher; besides which, there are four and five miles in detached parcels, in a state of forwardness. Mr. Childs, an Engineer employed by the company to examine the work and the line, estimates that it will require \$350,000 of additional available means to make this a first-class road to St. Francis river.—In this estimate he contemplates raising the grade line some two feet average upon much of the work, also giving it better slopes, and 16 feet track where the embankment is heavy. It is believed that an additional \$200,000 cash would make it a good road to the St. Francis. The company do not think it will be necessary to make the road bed above the highest floods, on account of the levees that have been made on the Mississippi river above Memphis. It was not affected by the floods of last spring, though the Mississippi opposite Memphis was nearly at high-water mark.

There has been purchased and paid for, nine hundred and twenty-five tons of Railroad Iron, of which seven hundred tons have been delivered and are on the opposite side of the river, and two hundred and twenty-five tons are in New Orleans awaiting shipment—the low state of the water preventing its delivery at the point required for track-laying. One thousand tons have been shipped, and are on the way, or at New Orleans for delivery to the company. The company have about 10,000 cross-ties, of which 5,400, fit and ready for use, are delivered along the line of the road, ready for track-laying. We have two hand cars for construction, and about \$500 worth of chairs and spikes, which have not yet been paid for.

The amount of individual stock is \$102,000—exclusive of some lists in Arkansas not returned to this office. Of this \$36,000 has been collected; leaving \$66,000 still to be realized. Of this sum

\$17,000 is probably not collectable. The city of Little Rock has voted to subscribe \$100,000, and it is believed that the Internal Improvement Fund of the counties of Crittenden, St. Francis, Prairie and Pulaski, estimated at \$40,000 or \$50,000 will be devoted in the same way. It is also believed that county subscriptions, by the counties on the line of the road, may be obtained to a considerable amount.

In addition to this stock list, the company have a subscription of \$350,000 by the city of Memphis payable in her bonds, which are now endorsed by the State—\$50,000 of which only can be used for construction, the remaining \$300,000 for the iron and equipment. Of these 142 have been received by the company. Three were paid to the contractor; twenty were deposited as security for iron, leaving one hundred and nineteen on hand. These were sold by the President, to one of our own citizens at 90 cents in the dollar, and have been used in the discharge of the liabilities of the company.

This sale was considered advantageous, as no more than 85 could be obtained for them in the bond market.

The engagement was for the sale and delivery of 150 bonds at this rate and on these terms—the payments of the company debts not to exceed the \$50,000 allowable to construction, and the remainder for purchase of iron. The Board of Mayor and Alderman, however, refused to issue the additional bonds, and the engagement for the 150 was cancelled and the transaction closed as to the 119 delivered on the terms agreed upon. The net proceeds were \$107,100. Mr. Walker paid for iron, freight, etc., \$62,497.19. For graduation and other items which will be found in the statement in the appendix, additional sums making the whole \$93,548.95, leaving \$13,551.05, for which the company received paper equivalent to cash, which has been used, or is now held to liquidate, without a cent's loss, an equal amount of outstanding liabilities of the company.

Besides the remaining two hundred and eight thousand Bonds yet to be issued by the City of Memphis, the Company have, as a resource for building the road, an amount of Land, amounting with reasonable certainty to 230,000 acres along the line of the work; while it is believed that, with the proper measures promptly taken, the whole estimated quantity of 480,000 acres of the original donation, may be secured.

The survey made and reported by the Contractors for the Company to the Legislature of Arkansas, and adopted by that body as the surveyed line of the Branch of the Cairo and Fulton Railroad terminating on the Mississippi river, was, at the urgent suggestion of the contractor, ordered by the Board to be so changed as to cross White river at Taylor's Bluff, some seven or eight miles north of the surveyed line, if that was found, upon examination, to be the most practicable route. Much time was consumed by the Engineer in surveying and locating this new line. Meantime our entire Land Grant was suspended at Washington, for the want of a line, and when the new line was completed and forwarded, it was rejected by the Commissioner General of the Land Office, as unauthorized by the law of Arkansas adopting the survey of this Company. Our Land Grant was subjected to losses by this delay. The first survey was thereupon adopted, and such unappropriated United States lands as could be found within the limits and scope of the Grant were plotted down to the Company, amounting to about 80,000 acres.

A large list of lands along the line of the road being suspended from confirmation, for want of satisfactory evidence to the Land Office that they were either swamp or overflowed lands, within the contemplation of the grant of lands made to Arkansas for levee purposes, and if not so confirmed, the alternate sections would revert to the Railroad Company, agents were appointed, under instructions from the General Land Office, to examine and report the amount of lands within the

Railroad Grant, reported as swamp or overflowed lands, but which, in fact, are not of the character contemplated by the Act of Congress passed September 28, 1850.

This survey had to be made within a limited time, and was attended with much difficulty and expense; and for that purpose a competent general agent was appointed, with authority to appoint other agents and servants under him, that the examination might proceed with proper system and dispatch. This service has been performed, and report has been made to the several Land Offices within the districts where the land lies.

Col. Wm. S. Williams, the agent of the Company, reports it probable that 150,000 acres, will be obtained from this source, which, if correct, will increase the amount of land to be derived from the Land Grant along the line of the Road to 230,000 acres. The remainder of the grant, we are advised, may be supplied, in part, from the Branch of the Cairo and Fulton Road, leading to Fort Smith, there being a surplus on that line after filling the grant made to that Branch. There will after all remain a deficiency, which may be remedied by an Act of Congress making appropriation of other lands.

Application should be made to the Arkansas Legislature now in session, to extend the time for completing the First Division of this Road, and to remove the penalties imposed by the last General Assembly of that State. We are convinced that the Governor of the State, and the two distinguished Senators who were so instrumental at Washington in having the Act of Congress passed donating to the State such a munificent grant of land for Railroad purposes, earnestly desire to see this Road built, as part of a system of Railroads adapted to the wants of Arkansas.

Commerce of the United States.

The Report of the Secretary of the Treasury contained the total imports and exports for the last fiscal year, but referred for details to the accompanying tables, not then published. We are indebted to the courtesy of the Hon. P. G. Washington, Assistant Secretary of the Treasury, for copies of these tables, and also for the Annual Statement of Commerce and Navigation, from which we have compiled our usual comparative summary. We have also corrected the discrepancies in last year's table, which grew out of the necessity of adding the items from California after the other returns were completed.

IMPORTS INTO THE UNITED STATES FROM FOREIGN PORTS.

Year ending June 30th,	Dutiable.	Free Goods.
1845.....	\$95,106,724	\$18,077,598
1846.....	96,924,058	20,990,007
1847.....	104,773,002	17,651,347
1848.....	132,282,325	16,356,879
1849.....	125,479,774	15,726,425
1850.....	155,427,936	18,081,590
1851.....	191,118,345	19,652,995
1852.....	183,252,508	24,187,890
1853.....	236,595,113	27,182,162
1854.....	271,276,560	26,327,637
1855.....	221,378,184	36,430,524
1856.....	257,684,236	52,748,074
	Specie and Bullion.	Total imports.
1845.....	\$4,070,242	\$117,254,564
1846.....	3,777,732	121,691,797
1847.....	24,121,289	146,545,638
1848.....	6,360,224	154,998,928
1849.....	6,651,240	147,857,439
1850.....	4,623,792	178,138,818
1851.....	5,453,592	216,224,932
1852.....	5,505,044	212,945,442
1853.....	4,201,382	267,978,647
1854.....	6,958,184	304,562,381
1855.....	3,659,812	261,468,520
1856.....	4,207,632	314,639,942

It will be seen that the imports of free goods are larger than ever before, while the receipts of dutiable goods are smaller than in 1854. Includ-

ed in the imports of free goods during the last fiscal year were 217,154,769 pounds of coffee, valued at \$21,514,196, and 21,152,785 pounds of tea, valued at \$6,893,891. The following is a comparative table of exports:

EXPORTS FROM THE UNITED STATES TO FOREIGN PORTS.

Year ending June 30th.	Domestic Produce.	Foreign Produce.
1845.....	\$98,455,330	\$7,584,781
1846.....	101,718,042	7,865,206
1847.....	150,574,844	6,166,754
1848.....	130,203,709	7,986,806
1849.....	131,710,081	8,641,091
1850.....	134,900,233	9,475,493
1851.....	173,620,138	10,295,121
1852.....	151,931,147	12,037,043
1853.....	189,869,162	13,096,213
1854.....	215,157,504	21,661,187
1855.....	192,761,135	20,168,368
1856.....	266,438,051	14,781,372

Year ending June 30th.	Specie and Bullion.	Total Exports.
1845.....	\$8,606,495	\$114,646,606
1846.....	3,905,268	113,488,516
1847.....	1,907,024	158,648,622
1848.....	15,841,616	154,032,131
1849.....	5,404,648	145,755,820
1850.....	7,522,994	151,898,720
1851.....	29,472,752	218,388,011
1852.....	42,674,135	209,642,325
1853.....	27,486,875	230,452,250
1854.....	41,422,423	278,241,064
1855.....	56,247,343	275,156,846
1856.....	45,745,485	326,964,908

The total exports of specie are less than last year, but the aggregate of exports is greater than ever before recorded in a single year since the formation of the Government.

We also annex our usual annual statement of the shipments of cotton, both in quantity and value, and the average value of the latter per pound.

Year ending June 30th,	Breadstuffs and Provisions.
1845.....	\$16,743,421
1846.....	27,701,121
1847.....	68,701,921
1848.....	37,472,751
1849.....	38,156,507
1850.....	26,051,733
1851.....	21,948,651
1852.....	25,857,027
1853.....	32,985,322
1854.....	65,941,323
1855.....	38,895,348
1856.....	77,187,301

COTTON.

	Pounds.	Value.	Av. price. Cents.
1845.....	872,905,996	\$51,789,643	5.92
1846.....	547,558,055	42,767,431	7.81
1847.....	527,219,958	53,415,848	10.34
1848.....	814,274,431	61,998,294	7.61
1849.....	1,026,602,269	66,396,967	6.04
1850.....	635,381,604	71,984,616	11.03
1851.....	927,237,089	112,315,317	12.11
1852.....	1,093,230,639	87,965,732	8.05
1853.....	1,111,570,370	109,456,401	9.85
1854.....	987,833,106	93,596,220	9.47
1855.....	1,008,424,601	88,143,144	8.74
1856.....	1,351,431,701	128,382,351	9.49

The total shipments of breadstuffs and provisions are nearly twelve millions of dollars larger than for any previous year; the exports of cotton also show a large increase, both in quantity and value. The average price of the cotton shipments is nearly three-quarters of a cent above the value for the preceding year, but about the same as in 1854. The number of bales of cotton shipped was 2,991,175, against 2,303,403 bales for the preceding year. This shows an average weight during the last year of 451 pounds per

bale, while during the preceding year the average was only 437 pounds—a very important difference upon nearly three millions of bales.

The following will show the exports of rice from the United States to foreign ports, with the average price per tierce:

Year ending June 30th,	Barrels.	Tierces.	Value.	Average price per tierce.
1845....	118,621	\$2,160,456	\$18 21
1846....	124,007	2,564,991	20 68
1847....	144,427	3,605,896	24 97
1848....	100,403	2,331,824	23 23
1849....	128,861	2,569,362	19 94
1850....	127,069	2,631,557	20 71
1851....	105,590	2,170,927	20 56
1852....	119,733	2,470,029	20 63
1853....	67,707	1,657,658	24 48
1854....	105,121	2,634,127	25 05
1855....	19,774	52,520	1,717,953	....
1856....	81,038	58,668	2,890,233	....

Up to the year 1854, the exports of rice were all reckoned into tierces, being chiefly shipped in that measure. During the last two years more has been sent out in barrels, but the value is given only in the aggregate. Of the barrels shipped the last year, 12,311 were sent to Denmark, 18,830 to Belgium, and 18,788 to Buenos Ayres.

We have also compiled a summary showing the quantity and value of the tobacco exported. Previous to 1855, the quantity was all reckoned in hogsheads.

Year ending				
June 30th,	Bales.	Cases.	Hogsheads.	Value.
1845.....	147,168	\$7,469,819
1846.....	147,998	8,478,270
1847.....	135,762	7,242,086
1848.....	130,665	7,551,122
1849.....	101,521	5,804,207
1850.....	145,729	9,951,023
1851.....	95,945	9,219,251
1852.....	137,097	10,031,283
1853.....	159,853	11,319,319
1854.....	126,107	10,016,046
1855.....	12,193	13,366	150,213	14,712,468
1856.....	17,772	9,384	116,962	12,221,848

There was considerable falling off, it will be seen, in quantity, but the comparative value has increased.

We have also compiled with much care our usual comparative table of the total imports of wool and woolen goods from foreign ports. In the statistics accompanying the Secretary's report, is a summary prepared, but as our readers are interested in having the particulars, we have carefully compiled them from the returns of commerce and navigation.

	1854.	1855.	1856.
Wool.....	\$2,822,185	\$2,072,139	\$1,665,064
Cloths and Cassimeres..	13,159,583	9,144,861	11,683,476
Woolen Shawls.	1,476,062	2,240,104	2,529,771
Hosiery.....	1,272,857	1,170,642	1,173,094
Blankets.....	1,790,690	1,083,957	1,205,300
Worsted Stuffs.	10,375,879	8,590,506	12,238,275
Woolen and Worsted Yarn	359,341	160,599	198,746
Woolens tam'd or embroid'd	35,266		
Flannels.....	143,079	134,811	100,248
Baizes.....	113,048	97,578	117,561
Carpeting.....	2,268,815	1,506,577	2,212,318
Other Woolens.	1,888,064	274,514	505,004

Total Wool and Woolens.... \$35,204,779 26,476,228 38,625,857

We do not wonder that the Secretary urges the repeal of the duty on wool, in the face of an import of only \$1,665,064 in raw wool, and \$31,961,793 of manufactured woolens, the latter not including also many items which might be classed as woolens. The receipts of wool comprised 14,737,393 pounds, against 18,534,415 pounds last year, 20,200,110 in 1854, and 21,589,079 in 1853; showing a steady decrease in the receipts of foreign

wool during the last five years. The imports of woollens in 1853 were \$27,621,911.

We also annex a complete statement of the imports into the United States of foreign cottons and cotton manufactures during the same period:

	1854.	1855.	1856.
Raw Cotton....	\$31,318	\$131,457	\$71,835
Printed & colored cottons. 17,423,249 }	12,563,522	19,110,752	
White cottons. 2,191,217 }			
Cottons, tam'd or embroid'd 4,045,476	3,000,000	3,000,000	
Velvets of cot.. 496,442 }	432,715	565,883	
Velvets of cot. and silk.... 95,343 }			
Cords, gimps, & galloons.. 189,639	128,500	194,005	
Hosiery & articles made on frames.... 3,013,664	2,055,595	2,516,848	
Cotton, yarn & thread.... 1,076,987	997,673	1,276,760	
Hatters' Plush (part silk).. 102,824	45,081	26,468	
Cotton insert's laces, &c.... 853,552	767,055	1,191,019	
All other cot's. 5,314,622	1,534,026	2,227,283	
Total imports of cottons..	\$34,834,033	21,655,624	30,180,353

The embroideries are all classed together, and some other changes in terms have been made, but the above will be readily understood, and embraces all the particulars in the official statement.

The following is the comparative total receipts of foreign silk goods at all the ports of the United States during the same period:

	1854.	1855.	1856.
Raw silk.....	\$1,085,261	\$742,251	\$391,234
Silk piece goods 25,296,519	20,069,957	25,200,651	
Hosiery and articles made on frames.... 1,001,299	459,093	611,298	
Sewing silk.... 332,301	189,220	250,138	
Silks tambour'd or embroid'd. 1,183,299	800,000	1,500,000	
Silk hats and bonnets.... 106,139	110,586	102,827	
Silk floss..... 14,078	9,366	16,498	
Bolting cloths. 43,868	56,984	70,146	
Silk and worst'd goods.... 1,594,038	1,133,839	1,335,247	
Silks not specified..... 6,728,406	3,480,716	3,974,974	

Total import of silks.....\$37,400,205 27,052,012 34,053,011

We have also compiled the comparative imports of flax and linen goods into the United States from foreign ports during the same period:

	1854.	1855.	1856.
Flax.....	\$250,391	\$286,809	\$132,461
Linens, bleach'd & unbleach'd 9,437,846	7,552,865	9,849,600	
Hosiery and articles made on frames.... 2,263	1,409	4,921	
Laces, thread, & insertings. 368,309	318,511	410,591	
Articles tam'd or embroid'd. 59,624	92,749	164,353	
Linens not specified..... 1,363,803	1,062,891	1,334,942	

Total import of linens.....\$11,482,236 9,315,234 11,896,868

We have many other interesting items connected with the commerce of the country during the last fiscal year, but we cannot bring them within the limits assigned to the present article, and must therefore reserve them for another day. It will be seen that the imports have been conducted on a scale unparalleled in our previous history.—*Journal of Commerce.*

The countries which have taken the principal part of our exports are as follows:

Great Britain.....	\$195,791,886
France.....	42,594,963
Spain, including Cuba.....	15,900,672
Bremen.....	9,889,657
Holland.....	4,253,869
Belgium.....	5,346,386
Brazil.....	4,858,125
Portugal.....	4,439,127
Hamburgh.....	3,268,473
Other countries.....	24,238,272
Foreign good re-exported.....	16,378,578

Total exports.....\$326,964,908

We import the following amounts from the several countries named:

British Dominions.....	\$154,656,749
France and her Possessions.....	49,249,803
Spain do.....	33,482,700
Brazil.....	19,262,657
China.....	10,454,436
Bremen.....	11,846,580
Holland.....	4,615,436
Belgium.....	3,106,511
Hamburgh.....	2,611,932
Other countries.....	25,953,138

Total imports.....\$314,639,942

The following is a classification of the exports;

	1856.	1855.
Product of the Sea.....	\$3,516,894	\$3,356,797
Do. Forest.....	12,603,837	10,694,184
Do. Agriculture..	145,428,788	218,290,648
Manufactures.....	19,700,275	21,581,040
Do. of Cotton..	6,857,181	6,967,309
Bullion.....	84,114,995	28,689,946
Other articles.....	5,649,160	5,548,072

Total.....\$246,708,553 \$310,586,330

Chicago.

CITY IMPROVEMENTS DURING 1856.

We find in the *Chicago Press*, of 20th inst., a complete review of the progress of improvements in that city during the past year, from which we make the following abstract:

The PASSENGER DEPOT, belonging to the *Illinois Central and Michigan Central Railroads*, is now completed. It is situated on South Water st., on the harbor. It is built of rubled stone with a front looking north, three and a-half stories high. Its dimensions are 166½ by 504 feet. The roof is an arch supporting itself with a rise of 36 feet. The building is admirably lighted with gas, 2,668 feet of pipe being used for the purpose. The ticket office occupies a conspicuous place near the main entrance in close proximity both to the ladies' and gentlemen's waiting rooms. Directly over it is the telegraph office belonging to the connecting companies, and by which they govern the running of their trains. Eight tracks are laid in the building. All out trains leave from the west side which faces the street. All in trains arrive by the two eastern trains. The platforms are large and commodious, on one of which is built a tasteful baggage room, 125 feet long, with offices and rooms over it for conductors, baggagemen, brakemen, &c. Nothing has been neglected which could add to the comfort and convenience of the passengers, the accommodation of trains, and the disposal of freight, rendering this immense station house one of the most complete in the Union and probably in the world. The entire structure has been erected in the short space of thirteen months, at a cost of \$180,000.

The STORE ROOM is 120 by 30 feet and 14 feet at the eaves. It cost about \$10,000. The CAR SHOP will be completed about the 1st of Feby. It is 200 by 75 feet, and 18 feet at the eaves. It

is constructed to accommodate all the wood machinery, and is furnished with ten tracks which will accommodate twenty freight cars and two passenger cars. Situated near Twelfth street, and will cost about \$20,000.

The *Chicago and Milwaukee Railroad Company* have erected a neat and commodious frame freight house, 156 by 60 feet, situated on the west side, near Kinzie street bridge, with the offices of the company above it. Cost \$7,000.

The *Chicago, St. Paul and Fond du Lac Railroad Company* have erected a frame freight house, situated on the west side, near Kinzie street bridge, at a cost of \$10,000, and a passenger depot costing \$6,000.

The *Rock Island Railroad Company* have during the year completed a capacious and durable grain warehouse of spiked plank sufficient to store one million bushels, at a cost of \$130,000. The machinery and the entire appointments are of the most complete and substantial character. They have also built a new frame freight depot, costing some \$15,000.

The *Michigan Southern Railroad Company* has erected during the year a convenient and substantial brick freight house, situated on Clark near Twelfth street. Cost \$15,000.

The *Chicago, Burlington and Quincy Railroad Company* have erected an engine house near Illinois Central machine shops of a substantial character. They are also erecting buildings at South Branch depot, with a convenient slip for lumber business. Cost about \$15,000.

The *Michigan Central Railroad Company* have erected during the year in this city the following buildings:

BUILDING FOR OFFICES.—This is an elegant stone building, situated near the Union or Illinois passenger depot, three stories high and 120 by 50 feet in size. Cost \$50,000.

ADDITION TO ROUND HOUSE.—This is a brick building situated near Twelfth street. Cost \$10,000.

NEW FREIGHT HOUSE.—This is a brick building situated at the foot of South Water street. It is designed for the transfer of freight, and enlarges still further the ample freighting accommodations of this company. Cost \$50,000.

Kentucky Central Railroad.

We are gratified to learn that the Covington and Lexington Railroad have leased for ten years the Maysville road from Paris to Lexington. This settles an unpleasant controversy, and leaves the Covington road without a rival for freight and passengers from all Central Kentucky towards the North and East. The effect upon the Covington stock and bonds will be most agreeable to all holders, as it will put them to their value in market on forced or voluntary sales.

The road from this city to Danville is now fully graded to the Kentucky river, and if Cincinnati would perform her solemn engagement, and pay up the amount due, we are sure the cars would be running to the great Clay Bridge in a very short space of time. The obvious good policy of this course, to say nothing of common honesty, would seem to assure us of its speedy adoption.—*Lexington Observer.*

St Paul and St Anthony Railroad.

The *Pioneer* says the estimated cost of the road, with the necessary depots, workshops, locomotives, cars, &c., is but \$219,000, and that there is a strong probability that the road will be in process of construction next summer.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of share.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of share.	
Atlantic & St. Lawrence	149	1,588,100	2,973,700	6,019,929	470,647	110,247	6	64	Brunswick and Florida, Ga.	30	300,000	800,000	550,000	In progr.				
Androscoggin & Kennebec	55	588,042	1,622,905	2,210,947	309,476	110,247	none	14	South Western	92	1,007,496	465,500	1,624,920	253,306	141,168	8		
Kennebec & Portland	56	1,114,725	1,661,236	2,775,961	270,214	112,491	6	34	Tennessee and Alabama	20	248,488	679,906	In progr.					
Portland, Saco, & Portsmouth	51	1,367,000	119,237	1,486,237	230,224	120,834	2	13	Tennessee and Mississ.	217	170,931	176,240	In progr.					
Boston, Concord, & Montreal	53	1,808,068	1,059,512	2,867,580	380,221	143,665	2	74	Memphis and Charleston	153	2,179,440	2,127,002	4,028,798	811,631	159,572			
Chesapeake	35	2,085,925	809,313	2,895,238	335,494	136,454	2	89	Mobile and Ohio	153	2,568,555	1,802,921	4,536,412	199,332	109,236			
Concord	32	1,500,000	8,242	1,508,242	304,971	136,454	2	89	Miss. Central	158	642,534	none	628,308	In progr.				
Northern, N. H.	82	2,768,400	none	2,768,400	370,529	138,299	2	89	N.O., Opelousa & G.W.	55	2,930,425	671,645	2,567,565	In progr.				
Con't & Passumpsic Riv.	61	1,048,148	767,608	1,815,756	162,687	55,173	none	4	Vicksburg, Shreveport & Tex.	111	1,111,760	none	1,077,895	In progr.				
Androscoggin & Burlington	120	2,233,876	2,662,396	4,896,272	489,764	140,377	6	54	East Tennessee and Ga.	111	1,000,000	1,500,000	2,500,000	In progr.				
Vermont Central	117	5,000,000	3,550,236	8,550,236	820,119	214,795	none	1	East Tennessee and Va.	16	625,426	988,588	1,033,781	In progr.				
Boston and Lowell	27	1,800,000	325,635	2,125,635	286,563	140,377	6	54	Naah and Chattanooga	151	2,319,330	1,407,081	3,843,694	816,090	112,177	none		
Boston and Maine	88	4,076,974	160,000	4,236,974	854,426	339,060	6	76	Ovington & Lexington	98	1,802,804	2,235,939	3,738,753	264,973	138,094	18		
Boston and N.Y. Central	73	2,240,300	1,518,671	3,758,971	69,917	8,740	none	6	Lexington and Frankfort	29	430,055	168,099	337,071	98,283	43,635	6		
Boston and Providence	68	4,800,000	359,132	5,159,132	558,071	219,689	none	65	Lexington and Danville	65	694,444	52,734	747,178	In progr.				
Boston and Worcester	68	4,800,000	359,132	5,159,132	558,071	219,689	none	65	Louisville and Frankfort	65	694,444	52,734	747,178	In progr.				
Cape Cod	47	681,690	280,598	962,288	119,221	65,827	3	40	Atlantic & Gt. Western	254	866,939	77,294	613,231	In progr.				
Connecticut River	62	1,591,110	273,241	1,864,351	286,563	103,787	5	45	Bellefontaine and Ind.	118	1,881,638	2,025,925	2,852,652	298,293	140,828	none	30	
Eastern, Mass.	60	2,583,400	2,947,737	5,531,137	647,231	305,998	40	70	Clev., Col. and Cin.	141	4,547,020	1,225,857	4,613,722	1,290,295	732,094	9	100	
Fitchburg	67	3,540,000	163,700	3,703,700	681,163	225,071	70	70	Cleveland and Toledo	200	2,075,435	2,689,801	5,124,629	738,272	396,986	10	73	
North-Eastern	30	800,242	225,535	1,025,777	198,991	55,523	6	81	Clev. and Mahoning	103	628,533	628,533	In progr.					
N. Bedford and Taunton	21	500,000	none	500,000	108,991	55,523	6	81	Clev. and Pittsburgh	133	2,780,744	3,043,992	5,537,466	581,877	309,518	55		
Old Colony and Fall River	37	3,015,100	292,650	3,307,750	653,499	295,738	6	81	Cin., Hamilton & Dayton	60	2,163,900	1,321,213	2,967,767	508,271	278,012	63		
Vermont and Mass.	77	2,232,541	1,033,670	3,266,211	286,726	87,313	none	8	Cin., Wilm. & Zanesv.	131	1,120,450	1,131,265	2,251,715	In progr.				
Western, Mass.	155	5,160,000	5,966,420	11,126,420	1,868,073	633,013	7	92	Columbus and Xenia	55	1,484,550	149,000	1,633,550	356,346	187,518	10	82	
Worcester and Nashua	46	1,141,000	203,665	1,344,665	274,780	76,760	2	45	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.				
Providence and Worcester	43	1,510,020	338,461	1,848,481	311,430	138,067	10	76	Dayton and Michigan	140	1,076,620	393,011	1,185,826	In progr.				
Hartford and N. Haven	72	2,389,000	939,000	3,328,000	730,012	262,799	10	18	Dayton and Western	35	310,000	500,000	733,769	In progr.				
Hartford, Prov. and Fishkill	123	2,000,110	2,030,666	4,030,776	258,585	119,011	none	1	Easton and Hamilton	42	454,600	904,489	1,155,138	171,929	65,000	20		
Housatonic	110	2,000,000	414,240	2,414,240	338,196	171,427	none	1	Little Miami	65	2,063,921	1,171,785	3,648,172	681,562	336,708	84		
Naugatuck	67	1,031,900	524,244	1,556,144	220,459	98,768	none	36	Mad River and L. Erie	205	2,451,560	2,672,932	4,444,661	In progr.				
N. York and N. Haven	62	3,000,000	2,376,803	5,376,803	884,806	338,877	none	36	Central Ohio	138	1,620,927	3,485,076	4,283,443	Recently opened.				
N. Haven and N. London	60	738,258	705,165	1,443,423	88,007	30,318	none	36	Ohio and Penn.	187	2,451,700	3,219,000	5,670,700	1,111,626	662,117	9	54	
N. London, W. & Palmer	66	609,200	1,733,673	2,342,873	124,044	66,490	none	36	Pittsburg, Mayv. & Cin.	50	371,350	31,000	390,933	In progr.				
Norwich and Worcester	66	2,122,300	673,489	2,795,789	304,236	88,458	2	30	Sand'y, Manaf. & Newk	127	1,850,000	2,208,587	3,552,587	328,968	164,479	none		
Albany Northern	32	439,005	1,625,093	2,064,098	117,716	9,904	none	30	Scioto & Hocking Valley	135	408,975	609,066	888,568	In progr.				
Black River and Utica	35	643,330	317,859	961,189	123,423	66,333	none	30	Spring, Mt. Vernon & P.	113	1,000,000	960,000	In progr.					
Buffalo, Conn. and N. Y.	100	1,487,874	1,601,183	3,088,057	172,476	66,333	none	30	Tol. Wabash & St. Louis	242	2,500,000	4,530,000	In progr.					
Buffalo and N. Y. City	92	798,439	2,637,849	3,436,288	288,392	31,896	none	30	Cin., Log. and Chicago	255	4,196,079	1,006,126	2,080,439	In progr.				
Buffalo and St. Line	69	1,300,000	1,040,000	2,340,000	279,750	355,763	10	30	Evansville & Crawfordsv.	109	708,945	1,177,596	1,844,541	127,400	64,552	60		
Canandaigua and Elmira	47	434,111	922,393	1,356,504	174,089	69,506	none	30	Ind. and Cincinnati	88	1,218,723	1,442,846	2,178,461	386,012	193,142	7	60	
Canandaigua & Niagara F.	98	1,316,496	2,279,854	3,596,350	335,433	135,433	none	29	Indiana Central	66	611,400	1,261,179	1,907,917	350,176	184,376	45		
Cayuga & Susquehanna	35	687,000	506,689	1,193,689	135,433	49,469	none	29	Ind. Clev. & Pittsburg	83	828,825	1,099,400	1,531,225	226,058	93,010	none		
Hudson River	144	3,758,466	9,250,362	13,008,828	603,946	208,946	29	29	Jeffersonville	66	1,014,252	694,000	206,544	94,818	none			
Long Island	95	1,875,148	685,949	2,561,097	301,793	116,462	none	29	Madison and Indianapolis	37	1,947,700	1,386,816	1,205,000	296,146	112,880	none		
New York Central	584	24,154,860	14,462,742	38,617,602	3,663,581	1,162,126	8	91	New Albany and Salem	258	2,535,121	6,281,848	6,643,189	846,427	371,402	none		
New York and Erie	484	10,023,958	25,126,669	35,150,627	4,588,939	2,627,118	none	60	Penn. and Indianapolis	73	658,314	658,314	160,000	90,000	none	16		
New York and Harlem	133	5,717,100	4,069,769	9,786,869	1,038,877	224,126	none	16	Terre Haute and Ind.	73	974,800	604,355	1,502,166	287,512	159,702	10	16	
Northern, N. Y.	118	1,633,022	4,406,874	6,039,896	135,754	69,982	3	1	Chicago and Rock Is'd	182	3,141,500	2,987,355	5,214,162	In progr.			104	
Oswego and Syracuse	35	399,000	1,261,681	1,660,681	126,540	59,982	3	1	Chicago and St. Louis	230	1,639,100	1,684,736	2,884,622	722,580	379,821	20		
Potsdam and Watertown	29	467,200	294,139	761,339	In progr.	82,600	7	none	Central Military Tract	88	1,202,500	2,133,060	2,920,241	471,399	219,688	none		
Rensselaer & Saratoga	25	610,000	140,000	750,000	241,149	82,600	7	none	Chic. St. Paul & P'd du Lac	178	2,300,000	1,825,000	3,625,000	In progr.				
Saratoga and Whitehall	48	500,000	395,600	895,600	71,909	21,089	none	7	Galena and Chicago	259	5,441,500	3,818,039	7,742,514	2,815,788	1,192,042	22	118	
Saratoga & Binghamton	80	768,369	1,678,804	2,447,173	159,484	22,503	none	7	Illinois Central	627	2,271,050	10,416,392	20,374,446	1,532,118	527,952	120		
Syracuse and Binghamton	27	437,830	737,079	1,174,909	166,363	55,184	3	63	Peoria and Oquawka	93	569,889	818,454	1,388,342	In progr.				
Troy and Boston	97	1,370,378	700,979	2,071,357	404,874	172,474	3	63	Ohio & Miss. (West Div.)	147	1,780,295	3,202,403	4,970,586	Recently opened.				
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	161,355	75,584	12	124	Terre Haute and Alton	173	2,281,420	1,256,000	3,537,424	In progr.				
Belvidere Delaware	94	3,000,000	11,407,200	14,407,200	8,636,623	2,017,127	961,941	12	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	In progr.				
Camden and Amboy	60	369,320	1,522,131	1,891,451	122,417	60,080	10	124	Mich. Central	282	6,082,444	5,998,018	10,680,158	2,215,283	879,656	10	92	
Camden and Atlantic	30	348,850	690,000	1,038,850	861,614	500,747	10	124	Mich. South & N. Ind.	475	6,928,900	6,919,224	11,645,208	2,410,000	875,000	10	87	
New Jersey Central	63	2,000,000	2,366,176	4,366,176	339,728	171,003	6	6	Green Bay, Mil. & Ch.	155	764,076	422,726	1,193,766	In progr.				
New York Central	63	1,157,805	375,000	1,532,805	229,341	96,267	6	6	Milwaukee and Miss.	106	1,826,428	2,467,889	3,878,767	661,843	417,443	17	78	
Morris and Essex	44	1,637,367	342,564	1,979,931	Recently opened.				Milwaukee & Water'n	72	354,881	132,000	486,881	In progr.				
Albany Valley	63	1,700,000	1,940,000	3,640,000	219,253	122,450	6	80	Milwaukee and Horicon	15	554,200	354,108	908,308	In progr.				
Cataw. Wil. & Erie	56	1,099,500	12,211	1,111,711	148,381	66,994	6	80	Milwaukee & La Crosse	61	1,861,832	832,131	1,883,963	In progr.				
Camden and Western	109	801,622	3,884,702	4,686,324	268,911	269,263	6											

Railroad Bonds.

INAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	87	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	85	87
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	80	80
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	80	80
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	78	80
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	72	74
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	90
Do. do.	450,000	2d do. do.	7	May, Novemb.	"	1880	80	84
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	75	75
Cincinnati, Wilmington, and Zanesville	1,800,000	Do. convertible	7	May, Novemb.	"	1862	80	80
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	91	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	93	93
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	88	88
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	65	65
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	65	65
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	75	75
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	65	66
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	79	82½
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	80	80
Gauley and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	91	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	85	86
Great Western (Illinois)	1,900,000	1st mortgage, do.	10	April, October	"	1868	90	94
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	90	94
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	75	75
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	90	90
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	77	81
Indianapolis & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	85	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	87	88
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	71
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	77½	80
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	100	101
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	100	100½
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	97	97
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	92	92
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	85	87
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	85	87
Do. do.	2,325,000	Do. oth. sec. con. till 1868	8	May, Novemb.	"	1864-75	85	87
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	95	95
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	90	90
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	92½	92½
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	77½	77½
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	98	99
Racine and Mississippi	650,000	Do. conv. sink'g Pd	8	Feb'y, August	N.Y.	1875	82½	82½
Scioto and Hocking Valley	800,000	Do. 1st sec. conv	7	May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	80	80
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	100	100
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	77	80
Do. do.	2,000,000	2d do. do.	8	Feb'y, August	"	1870	71	72

INAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	2,500,000	Mortgage	6	April, October	Balt.	1885	82½	83
Do. do.	1,125,000	Do.	6	Jan'y, July	Balt.	1875	84½	85
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1859	7	10 Jan. 10 July	N.Y.	1870	91	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	108	107
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	96	98
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	94½	95½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	94	94½
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	86	86½
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	87	88
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	98	98½
Do. do.	2,000,000	2d do. do.	7	June, 18 Dec.	"	1860	83½	85
Do. do.	5,000,000	3d do. convertible	7	May, Novemb.	"	1870	84½	85
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	94½	95
Do. (Free Land)	8,000,000	Mfg 345,000 acrs—priv. 7 shares	7	March, Sept.	"	1860	108	110
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1861-72	78	78½
New York and Harlem	1,800,000	Do. do.	7	June, Decemb.	"	1855-60	82½	85
New York and New Haven	750,000	No mortgage, do.	7	Jan'y, July	"	1873	85	85
New Haven and Hartford	1,000,000	1st mortgage, do.	7	Feb'y, August	"	1861	91	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1868	81	83
Do. Goshen Branch	1,500,000	Do. do.	6	May, Novemb.	"	1883	85½	86
New York Central	8,287,000	No mortgage, do.	7	15 June, 15 Dec.	"	1864	98½	99½
Do. do.	3,000,000	No m/g conv. from June 57-59	7	Jan'y, July	"	1866	98	100
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	98	100
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	98	100
Reading, issued 1843	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	89½	89½
Do. do. 1844, '48, '49	1,300,000	Do. convertible	6	Jan'y, July	"	1860	89½	89½
Do. do. 1849	3,466,000	Do. inconvertible	6	April, October	"	1870	81½	82

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES.	Int't payable.	Off'd	Asked
New York 7 per ct. 1857	Feb'y, May, August, November	100	102	Milwaukee 7 per ct. coup.	X	Divers	77½
Do. 5 do. 1858-60	Jan'y, July	93	95	New Orleans 6 per ct. R.R. X	Do.	Do.	72
Do. 5 do. 1870-75	Quarterly	91	93	N. Orleans 6 per ct. municip. X	Jan'y, July	80	85
Do. 5 do. 1880	Jan'y, July	90	91½	Philadelphia 6 per ct. 1878-98	Jan'y, July	90½	91
Albany 6 per ct. coup. 1871-81	Feb'y, August	100	100	Pittsburgh 6 per ct. coup.	X	Divers	74
Albany 6 per ct. coup.	Jan'y, July	92½	93	Quincy 8 per ct. coup. 1868	X	Jan'y, July	75
Baltimore 6 per ct. 1879-90	Quarterly	92½	93	Racine 7 per ct. coup. 1873	X	10 Feb'y, Aug	85
Boston 6 per ct. coup.	April, October	98	98	Rochester 6 per ct. coup.	X	Divers	96½
Brooklyn 6 per ct. coup. Long	Jan'y, July	100	100	St. Louis 6 per ct. coup. Long	X	Do.	78½
Clev. Pd, 7 per ct. cp. W.W. 1879	Do. do.	100	100	Do. do. Municipal	X	Do.	80½
Cincinnati 6 per ct. coup.	Divers	88	88	Sacramento 10 per ct. cp. 1862-74	X	Do.	72
Chicago 6 per ct. coup. 1873-77	Jan'y, July	99	99	S.F. 7 per ct. cp. 1865, pay. N.Y.	X	May, Novemb.	73
Do. 7 per ct. coup. 1880	Jan'y, July	100	100	Do. 10 per ct. cp. 1871	X	Do. do.	86
Detroit 7 per ct. cp. W.W. 1873-78	Feb'y, August	100	102½	Do. 10 per ct. pay. N.Y.	X	Jan'y, July	59
Elkhart 6 per ct. cp. Long	March, Sept.	101	101	Do. 8 per ct. pay. N.Y. 1875	X	Do. do.	59
Jersey City 6 per ct. cp. W.W. 1877	Jan'y, July	93	93	Whoeing 6 per ct. coupon	X	Divers	67½
Louisville 6 per ct. cp. 1880-83	Divers	80	80	Do. 6 per ct. Mun. 1874	X	March, Sept.	78
Memphis 6 per ct. coup. 1882	Jan'y, July	67½	67½	Zanesville 7 do.	X	April, October	100

Cincinnati Stock Sales.

By HEWSON & HOLMES.

For the week ending December 17, 1856.

BONDS.	
\$3,000 Little Miami, 6 per ct., 1st Mortg.	80
6,000 Cov. & Lex., 7 per ct., 2d Mortg.	65
2,000 Do. do.	66
1,500 Covington & Lex., 6 per ct. Income	40
1,000 City of Wheeling 6 per ct.	65 (& int.)
1,000 Fayette Co., Ky., 6 per cent.	80
5,000 Hillsboro' & Cin., 7 per ct. 1st Mortg.	45
1,000 Cin., Wilm. & Zanesv., 7 per ct. 3d Mortg.	20
437 50 Little Miami, Dividend Scrip, June issue	82
STOCKS.	
100 Shares Ohio and Mississippi	6
127 " Indianapolis & Cincinnati	65
50 " Little Miami, ex div.	87
20 " Indiana Central	45½
200 " Indianapolis, Pittsb. and Clevel.	22½
28 " Hillsborough and Cincinnati	16
65 " Junction (Ind.)	7½
40 " Do	8
72 " Bellefontaine & Indiana	30
100 " K'y Central (Cov. & Lex.)	20

By KIRK & CHEEVER.

For the week ending December 16, 1856.

BONDS.		Per ct.
Little Miami, 6 per ct. Mort.	80	80
Covington & Lexington, 2nd Mort. 7 per ct.	65	65
Ohio & Mississippi, 2nd Mort. 7 per ct. (Eastern Division)	49	49
Indianap. & Cin. 2nd Mort. 7 per ct.	80	80
Cin., Ham. and Dayton, 2nd Mort. 7 per ct.	62½	62½
Hillsboro' & Cin., 7 per ct. 1st Mortg.	46	46
Covington & Lexington, 10 per ct. Income	58	58
Indianapolis and Cincinnati Dividend	70	70
Columbus and Xenia Dividend, due Jan'y 1, 1861.	68	68
Little Miami, Dividend Scrip, issued June, 1856	81	81

Extract from De Coppet & Co's Money Circular for the European Steamer of the 24th inst.

[TRANSLATED.]

NEW YORK, Monday, Dec. 22, 1856.

Since our advices of the 15th inst., there has been less activity in our Stock Market. A very brisk demand for Money has been felt during the whole week, and has exercised a marked influence on the prices of, and animation in Stocks. The non-arrival of the steamer from Liverpool of the 6th December has also contributed to produce some dullness. This has been more particularly felt in State Stocks and Railroad Bonds—there having been a fair degree of animation in the latter. There is no general, uniform movement in prices to notice; they close variously—some at an advance, and others at a decline on our last quotations, as is shown by the annexed table of daily fluctuation. The rates of 12 and 15 per cent., which are paid for carrying Stocks, and for time contracts, nevertheless, indicate confidence in an improvement in prices for the commencement of the new year. The only important fluctuation to notice is that upon the shares of the Illinois Central Railroad, which, under the influence of large transactions, partly on foreign orders, have risen 2½ per cent. State Stocks—There has been but little activity in these securities in general. Virginia 6s. have, nevertheless, given rise to transactions of some importance, closing at 1 per cent. decline, as also California 7s. 1875, which, after having fallen 2 per cent., close 1½ per cent. advance. City and County Bonds are dull, without any particular transactions to notice. Railroad Bonds—There has been a decided lack of animation as well on the Stock Exchange as outside. Illinois Centrals, with a smaller business, have advanced 1 per cent. Some New York Central 6s. have been done at well sustained prices. There has been a rise of 4 per cent. on Illinois Central Freeland Bonds, with privilege, but with very limited transactions. Railroad shares are the only securities which continue animated. There has been a good demand for Illinois Central, at a rise of 2 per cent., and a fair activity in Erie, at an advance of 1½; in Reading, of ½; in New York Central, of ½; in Cleveland and Toledo, of ¼; in

Milwaukee and Mississippi, of $\frac{3}{4}$; and in Galena and Chicago, of $\frac{1}{2}$ per cent; also in Panama, at a decline of $\frac{1}{4}$; and in Chicago and Rock Island, without change, and Michigan Southern, of $\frac{1}{2}$; Michigan Central and La Crosse and Milwaukee are quoted ex-dividend. Money in very active demand, at 7 and even higher for loans on call. Paper more abundant, at 10c14, according to class and length.

DE COPPET & CO.

American Railroad Journal.

Saturday, December 27, 1856.

Vicksburg, Shreveport and Texas R. R.

We have received the fourth annual report of the President and Directors and Chief Engineer of this company, from which we learn that thirty-five miles of graduation, commencing at the Mississippi river and running west, have been completed by the contractors, and that their sub-contractors are distributed and at work upon the remaining portions of the eastern division, as far as the 64th mile, or to a point within ten miles of Monroe. The trestle bridging on the first 20 miles is finished. Two thousand tons of iron rails have been purchased, 800 tons of which, sufficient for eight miles of track, had been delivered at De Soto, and five miles of superstructure laid, on which one of Norris' first class locomotives was employed in transporting iron and cross ties for its extension. The balance of the iron remaining in bond in New Orleans, to be shipped up the river as needed. It was thought that ten additional miles would be required by the 1st of January. The track is $5\frac{1}{2}$ feet gauge. The rail of a T pattern, weighing 65 lbs. to the yard, laid on cedar cross ties 6 by 8 inches, and 9 feet long, placed two feet apart. The contractors intend to push forward the work at the rate of a mile a week, if the company will furnish the iron.

The work of grading on the western division was progressing. About \$28,000 had been expended upon it. The contract stipulates for the completion of the road across Caddo parish on the 1st of August, 1858. But since all doubt as to the building of the Southern Pacific road is removed, it is exceedingly desirable to have it finished within the next twelve months, in order to transport the iron for that road to its junction with the western end of this, in time to secure the chartered rights and land grants to that road. The Southern Pacific road, in connection with the Vicksburg, Shreveport and Texas road, will form a continuous line from the Mississippi river on through the State of Texas, with a view of ultimately reaching the Pacific ocean. The time within which the Texas company were required to complete the first ten miles of their road has been extended to Feb., 1858, and a loan of \$6,000 per mile granted by the State.

By an act passed at the late session of Congress, donating lands to aid in the construction of railroads in Louisiana, the V., S. and T. road is entitled to 420,924 acres. Much of this is the best quality of cotton land in the State, lies immediately upon the line of the road, and will be more or less valuable upon its completion. The President recommends that the company retain the lands until the road is built, and the government lands have been sold, and in the meantime borrow money upon the faith of these lands to aid in car-

rying on the work. Or when the eastern division is finished, and the contiguous government lands sold, the lands on the western division may be disposed of, which will afford an ample fund to meet interest accruing upon bonds—should any be issued by the company; or for their purchase should they fall below par.

As the entire line of this road had been surveyed and located previous to the passage of the above act, and no changes are to be made in the location, unless demanded by economy of construction, the title to all the vacant lands belonging to the government, and designated by odd numbered sections or fractional sections, within the prescribed limits of 15 miles on either side of the road, vested in the company when the act was signed by the President on the 3d of June, 1856.

The right of way on the eastern division has been very generally granted. In one instance, a strip of 40 acres of valuable land, which had been cut off from the main land by the road, was purchased at \$50 per acre; but the land being worth the amount paid for it, no loss will be sustained. In another case \$1,200 was paid for the right of way through a lot in Monroe. The proprietors of land on the Mississippi river, opposite Vicksburg, have given to the company 10 acres of land for depot grounds, and 150 feet in width through the rest of their land for right of way. Other donations of land have been received, viz: At 20 mile station right of way and two acres; at Texas, right of way and depot ground; the same at Bayou Macon, Cotton Port and Boeuf river. At Monroe 130 acres were purchased for \$5,000; after reserving enough of this for the purposes of the company, the balance is to be divided into town lots and sold, from which it is thought a considerable profit may be realised. On the middle division the right of way has been secured as far as the line is located. The same may be said of the western division: at Five Mile Station, at Shreveport; and on the Texas line, the western terminus of the road, depot grounds in addition to the right of way, has been donated to the company.

The following is a statement of the Cash receipts and disbursements for the year ending Sept. 29, 1856.

RECEIPTS.

Balance as per last report.....	\$3,854.64
Installments to capital stock.....	205,563.73
Bills receivable.....	38,600.00
	\$248,018.37

DISBURSEMENTS.

Construction.....	\$191,685.00
Surveying and Engin'g.....	11,176.58
Salaries.....	4,944.43
Printing, office and contingent expenses.....	1,595.10
Depot grounds and right of way.....	8,074.01
Reduction of stock by tax.....	4,126.54
Commission.....	3,677.09
Interest.....	6,483.39
Contributions to survey funded.....	32.52
Balance to credit of agents per last report.....	5,448.07
Amount in hands of agents.....	5,791.36
Cash on hand.....	4,983.30
	\$248,018.37

The entire amount expended in work on the road, since its commencement, including cross ties, iron rails, chairs, spikes, one locomotive,

freight, insurance and charges, is \$409,832.50, to which should be added \$66,364.58 for engineering and surveying, and salaries of officers, including office exp'ses, etc., and \$8,081.91 for depot grounds and right of way. The amount of capital stock subscribed is \$1,792,452.78, of which, \$421,847.99 has been paid in, of this amount, \$110,377.78 was taken by contractors. The company have in cash and in the hands of agents at the close of the fiscal year \$10,769.68. The present indebtedness of the company is \$77,339—\$38,600 of which is for notes given for right of way, and money borrowed to meet July payments. The balance, \$38,739 is due contractors—\$20,373.24 of which is to be paid in the company bonds running 20 years.

To meet the above indebtedness, complete the graduation of the eastern division, lay the iron as far as the Bayou Macon, erect buildings, purchase another locomotive and cars, it is estimated will require an additional outlay during the ensuing year of \$685,000. Of this sum, the contractors are to take \$255,540 in stock and bonds of the company; the balance is provided for by instalments of stock due, and to fall due during the year, with the exception of \$25,629.

The entire cost of the western division, including equipments, etc., is estimated at \$399,000. This amount is also provided for, except \$81,925, which must be made up by an increase of local subscriptions or the sale of the company's bonds.

The officers of the company are:

CHARLES G. YOUNG, *President*.
O. D. STILLMAN, *Secretary*.
JOSEPH M'GUIRE, *Treasurer*.
W. G. BONNER, *Chief Engineer*.

Illinois Central Railroad.

In a brief article upon this road in our last, we incorrectly stated the gross earnings of this road for the six months ending Oct. 31st, 1856. Instead of \$936,094.71, as stated, they were as follows:

May.....	\$214,643
June.....	194,727
July.....	197,440
August.....	246,204
September.....	281,804
October.....	295,292
	\$1,430,110

Michigan Central Railroad.

At a meeting of the Board of Directors of this company, held in Boston on the 16th inst., a semi-annual dividend of 5 per cent. was declared, payable on the 1st of January next.

The following is a statement of the capital account and income of the road which we take from the company's circular:

1856.	Dr.
Dec. 1. To Capital Stock.....	\$6,058,390
" Bond Account, viz:	
6 per cent. Sterling Bonds not convertible....	463,613.33
8 per cent. Bds. not convertible.....	1,019,950.00
8 per cent. Sterling Bds., convertible.....	500,000.00
8 per cent. Dds., convertible.....	3,650,000.00
	5,633,563.33
To Dividends unpaid.....	1,731.00
" Bills payable.....	841,725.00
" Income Acct., Balance of this Acct.,.....	918,177.55
	\$13,453,786.88

Dec. 1. By Construction Acct., Purchase of Road.....	\$2,000,000.00
" Construction Acct., Expenditures since purchase	9,661,256.07
" Assets in hands of R. N. Rice, Superintendent....	197,448.51
" Assets in hands of U. T. Howe, Local Treasurer...	111,063.15
" Assets in hands of C. B. Swain, Steamboat Agent.	9,892.15
" New Albany and Salem R. R. (Stock and Bonds.)	609,763.99
" Cash on hand.....	124,765.28
" Bills Receivable.....	265,798.17
" Steamboats.....	311,699.88
" Joliet and Northern Indiana R. R. Stock.....	162,599.68
	\$13,453,786.88

INCOME ACCOUNT.

June 1, To Balance of this Account, per report this day.....	466,761 28
" 30, " Receipts.....	266,074 91
July 31, " ".....	258,452 58
Aug. 31, " ".....	282,942 48
Sept. 30, " ".....	364,193 77
Oct. 31, " ".....	415,564 98
Nov. 30, " ".....	341,118 99
	2,395,108 99

June 18, By Dividend declared June 18, 1856, 5 per cent.....	301,595 00
" 30, " Operating Expenses.....	139,105 37
July 31, " ".....	150,866 78
Aug. 31, " ".....	132,598 19
Sept. 30, " ".....	135,841 43
Oct. 31, " ".....	131,862 48
Nov. 30, " ".....	224,485 78
Interest Account, Balance of this Account.....	261,166 41
" Balance.....	918,177 55
	2,395,108 99

Dec. 1, To Balance of this Account, Am't of dividend declared.	302,855 00
Balance undivided.....	\$615,322 55

Railroad Earnings.

The earnings of the Lehigh Valley Railroad for the month of November were:

Passengers.....	\$6,989 88
Freight.....	2,085 28
Coal.....	23,501 80
Total.....	\$32,576 96

The following are the earnings of the Cincinnati and Indianapolis Railroad for the month ending November 30th:

Passengers.....	\$27,225 26
Freight.....	32,879 98
Mail.....	752 08
Express.....	500 00

Total.....	\$61,365 43
Earnings for November, 1855.....	45,195 64

Increase.....	\$16,179 79
The receipts of the Milwaukee and Mississippi Railroad for the month of November last were.....	\$55,703
Total receipts for 11 months of 1856.....	\$646,993
Do. do. 1855.....	641,895

Increase.....\$5,098
The decrease in the receipts for November, as compared with those of November, 1855, is about \$28,000, and is attributed to the fact that the grain has not been sent forward this season over the road to Milwaukee, in consequence of low prices. Last year at this time there had been shipped from Milwaukee over 3,000,000 bush.,

while the shipments this year are only about 2,000,000, although the present year's crop is larger than last year's. It is believed that seven-tenths of the last crop is still retained in the interior, and must come forward in the Spring.

The business of the Watertown and Rome Railroad for the year ending on the 30th of September last, and also for the previous year, shows the following result:

	1856.	1855.
Earnings.....	\$434,524 79	\$407,705 62
Expense.....	218,505 56	239,783 95
Total.....	\$216,019 23	\$167,921 67

Increase.....\$48,097 65

The financial statement for the year ending on the 30th of September last, was as follows:

Earnings.....	\$434,524 79
Expenses.....	\$218,505 56
Interest and Sink'g Fund	60,000 90
	278,505 56

Net profits for the year.....\$156,019 28
—or 10.4 per cent. for the year on the capital of \$1,500,000.

The earnings of the Williamsport and Elmira Railroad were:

November, 1856.....	\$25,250 00
Do. 1855.....	15,238 67

Increase since last year.....\$10,011 33

The earnings of the Central Railroad Company of New Jersey were:

November, 1856.....	\$52,679 02
Do. 1855.....	33,955 48

Increase, 55 per cent.....\$18,723 54

The earnings of the Little Miami and Columbus and Xenia Railroad Company were

November, 1856.....	\$103,919 03
Do. 1855.....	77,369 90

Increase, 34½ per cent.....\$26,549 13

The earnings for the Michigan Central Railroad for the first week in December, were as follows:

	1855.	1856.
Pass'ers..	\$25,198 25	\$26,642 12
Freight...	37,628 08	27,148 48
		Dec. 10,479 55

Total....\$62,326 28 \$53,790 60 Net D. 9,035 68

The receipts of the New York and Harlem Railroad Co. were—

November, 1856.....	\$91,718 45
Do. 1855.....	84,625 74

Increase.....\$7,092 71

The following are the comparative receipts of the New York and Erie R. R. for the years 1855 and 1856.

	1855.	1856.
January.....	\$427,829 41	\$402,988 65
February.....	340,751 68	367,915 60
March.....	507,090 26	460,019 56
April.....	506,597 42	628,073 12
May.....	475,127 38	587,785 21
June.....	396,837 69	489,782 17
July.....	372,077 83	472,105 02
August.....	434,779 57	540,268 08
September....	547,119 46	661,784 62
October.....	598,340 15	564,183 24
November.....	547,581 51	517,911 47

Total.....\$5,154,182 35 \$5,703,357 82
5,154,182 35

Increase in 1856.....\$549,175 47

The earnings of the Chicago, St. Paul and Fond du Lac Railroad in November were:

Passengers.....	\$15,583 51
Freight.....	24,440 48
Mails, Express and Miscellaneous.....	1,492 00

Total.....\$41,515 97

The directors of the Cleveland, Columbus and Cincinnati Railroad Company have declared a semi-annual dividend of six per cent., payable to New York stockholders at the office of Messrs. Winslow, Lanier & Co. This road has no funded or floating debt. The bonds issued during its construction have all been converted into stock. After the payment of the above dividend, the company has a surplus of \$124,608 48 on the year's business, equal to about 2½ per cent. on the capital stock. The business of the year, 1856, has been as follows:

EARNINGS.	
Up to Nov. 30, by passenger trains ..	\$422,851 10
Do. freight trains.....	762,078 70
Do. by rents, interests, &c.....	34,118 06
December estimated.....	105,000 00

\$1,324,047 86

EXPENSES.	
Up to October 31.....	\$539,511 38
November and December, estimated.....	100,000 00
Taxes.....	25,000 00
New iron on hand.....	13,400 00
	677,911 38

Estimated net income.....\$646,136 48

July dividend, 5 per cent....	\$237,058
Jan'y " 6 " ..	284,470
	521,528 00

Surplus.....\$124,608 48

Included in the expenses during the year were, for construction, &c., for ballasting and real estate.....	\$52,721 87
New cars and engines.....	67,601 11
	115,322 78

The capital of the Company is \$4,741,170.

The annual meeting of the stockholders of this road, for the election of directors, will take place on the 14th January, at Cleveland. The books will be closed from January 4th to 14th, inclusive, and for the payment of the dividend from December 20th to 2d January.

The receipts of the Illinois Central Road in November were \$233,700, and the land sales of the first week of December were 71,000. The above receipts make an aggregate for the year of about \$2,240,000, leaving \$260,000 for December, and mail service not included, to make up the estimate of the Company for the year, which was \$2,500,000.

The receipts of the Cleveland and Toledo Railroad for the first week in December shows a very large gain on last year. The effect of the opening of the Wabash Valley Road is beginning to be felt. The receipts were \$28,497, against \$20,776 in 1855, an increase of \$7,721, or nearly 40 per cent. In the second week of December the earnings of the La Crosse and Milwaukee Road were \$9,586 83. The Mad River Railroad is also doing a largely increased business. The earnings of the past two weeks were \$31,250, against \$20,200 same time last year, an increase of over 50 per cent. The receipts of the Erie continue to be large, and show an increase on last year. For e

first 17 days of the month they reach \$431,000. The second week of December on the Rock Island Road gives \$29,000 against \$22,000 last year. This is in advance of the estimate for December upon which the late advance was made.

SUMMARY OF RAILROAD TRAFFIC FOR NOVEMBER.

	1856.	1855.
New York Central.....	\$745,411	\$694,941
New York and Erie.....	517,911	547,586
Pennsylvania Central....	453,122	410,850
Baltimore and Ohio.....	424,959	399,118
Michigan Central.....	321,294	305,096
Galena and Chicago.....	237,832	222,502
Rock Island.....	157,000	130,000
Burlington.....	137,000	151,894
Illinois Central.....	230,816	176,890
Toledo.....	107,874	90,653
Harlem.....	91,748	84,625
La Crosse.....	55,584	New.
Little Miami.....	103,919	77,369
Hudson River.....	187,583	120,650
New Haven.....	73,672	68,280
Indiana Central.....	43,561	36,627
Fond du Lac.....	41,125	New.
St. Louis Pacific.....	50,251	New.
Pittsburgh and Chicago..	147,704	107,457
Cincin. and Indianapolis.	61,365	45,195
Norwich and Worcester..	25,203	25,056
Cleveland and Columbus.	114,848	113,746
Central New Jersey.....	52,679	33,955
Milwaukee & Mississippi.	55,703	84,000

Total, 24 Roads.....\$4,839,005 \$3,925,990
Increase about 10 per cent. in 1856.

Journal of Railroad Law.

CARRIERS' LIMITATION OF LIABILITY.

The right of railway companies as common carriers to make an express agreement and thereby change their relation and subject themselves to different liabilities, is clearly sustained by authorities both English and American. When it has been questioned before the courts whether it is competent for the carrier to restrict his obligation even by a special agreement, judges have been unable to perceive any well founded objection to the restriction or any stronger reasons forbidding it than exist in the case of an insurer of goods: but with this distinction that he can by no means do so by any act of his own. He has public duties to perform, from which he should not be permitted to exonerate himself without the assent of the parties concerned.

Before railways were in use, the articles conveyed by carriers were of a different nature from what they are now. Sheep and other live animals are frequently transported upon railways. It is fair that the carrier should be subjected to rules less stringent than was the carrier of a day when railroads were unknown. Contracts therefore are now made with reference to the new state of things, and it is held very reasonable that carriers should be allowed to make agreements for the purpose of protecting themselves against the new risks to which they are in modern times exposed. The rapid motion and noise of the engine with various other matters are apt to alarm live stock and cause them to do injuries to themselves. Against these risks carriers are permitted to protect themselves within certain limits.

These views have been adopted in the Supreme Court of the United States, and the rule established there has been acquiesced in by the courts of this State in several recent decisions and may be regarded as not only sound in principle but sustained by authority, that a common carrier may by an express contract or agreement with the

owner so vary and change his relation as to become a private carrier. In that event his liability in the transportation of that property is measured by the specific provisions of his contract; but a general notice to the public limiting his obligation as such carrier will afford no evidence of such a contract either express or implied through the existence and contents of the notice are brought home to the actual knowledge of the party. The implication is as strong that the owner intended to insist upon his rights and the duties of the carrier, as it is that he assented to their qualification.

If the railway company are common carriers, upon them the law casts the duty of safely transporting and delivering the property at the place of its destination, unless prevented by the act of God, the public enemies, or the fault of the party complaining. But under an express contract the obligations and duties of the carriers may be modified or discharged. The owner by entering into a contract verbally agrees that in that particular transaction the carrier is not to be regarded as in the exercise of his public employment, but as a private person who incurs no responsibility beyond that of an ordinary agent and answerable only for his misconduct or negligence.

These observations have been suggested by the report of a recent decision in Vermont, in which the principles here laid down are incidentally discussed.

William Kimball against Rutland and Burlington Railroad Company. 26 Vt. R., 247.

In the trial of this case it appeared that the plaintiff made a contract with the company for the use of a car to convey cattle from Brandon, Vt., to Cambridge, Mass., that he was to have the same privileges as others had agreeably to the freight tariff published by the defendants. The provision in this tariff which was questioned is as follows:

"At these rates the owners are to load, unload, and feed their stock at their own expense and risk, and assume all risk that animals may cause to each other or themselves, or damage in consequence of their breaking from the cars or otherwise, no risk will be assumed by the corporation nor damage allowed, unless especially agreed to when the animals are taken for transportation and an additional price of twenty-five per cent. upon tariff rates paid."

In behalf of the plaintiff it was claimed that the injury was the result of culpable negligence; that there was no well adjudged case in this country, that has gone the length of deciding that the carrier can stipulate against the consequences of his own default or throw a loss occasioned by his own negligence or misconduct upon those who have entrusted their property to his care, and that courts have held that, if such a stipulation was intended between the parties it was contrary to public policy and void, and finally, that the contract, if it have any validity, does not destroy the liability, and by the express terms of the contract, the company were bound to use all reasonable care and diligence.

The defence insisted that railroads are not common carriers of cattle and horses, but that universal usage is to the contrary. That a special contract was made and is evidenced by the ticket delivered to the plaintiff, and that undoubtedly under such a contract the defendants

were not liable for any loss or damage to defendant's cattle.

The decision of the court was given by Judge Isham. He says:

It is for the benefit and advantage of owners of live stock that a special agreement may be made, and that on the payment of a less sum they may become their own carriers and have furnished them the necessary means for that purpose.—When a plaintiff therefore does not choose to pay the required compensation to have his cattle transported by the defendants as common carriers at their risk, but elects to pay the lower rate, it is reasonable that he should be bound by his own election.

It would be unreasonable that the plaintiff should now hold the defendants responsible as common carriers and charge them with a risk and a responsibility which they never assumed, never were requested to assume, and for which they were not paid. We think the matter very clear that a special contract was made in respect to the transportation of those cattle under which the defendants in the exercise of a reasonable care were to furnish the plaintiff with a suitable car and other necessary means of transportation, and the plaintiff was to assume the risk and general responsibility of their transportation.

Judgment for defendants.

The Tehuantepec Enterprise.

The construction of a carriage road across the Isthmus of Tehuantepec, to be followed by a railroad with the least possible delay will form an epoch in the history, not only of New Orleans and Louisiana, but of the Southern States, and of the whole Valley of the Mississippi. We venture to affirm that the experience of a few years will show that the most sanguine among us at the present time, do not fully realize its importance, or the results in the channels of trade, which it will effect. The whole transit business between the Atlantic and the Pacific oceans will take this direction in preference to all others. A few facts will show this beyond all contradiction. The route is twelve hundred miles north of Panama. The distance between New York and San Francisco, by the latter route, is four thousand nine hundred and ninety-two miles. By the Tehuantepec route, it is only three thousand eight hundred and four miles—a difference in favor of Tehuantepec of eleven hundred and eighty-eight miles. The distance from New Orleans to San Francisco is via Panama, four thousand five hundred and five miles; via Tehuantepec, but two thousand seven hundred and four miles—a difference in favor of the latter of eighteen hundred and one miles! nearly as great as the distance between this city and Pittsburg, in Pennsylvania. The time for the transit of mails and passengers from New York to San Francisco at present, is about twenty-three days, never less than twenty-two; and from this city to San Francisco, the time is never less than twenty one days, and frequently much longer. By the Tehuantepec route, the company agrees to carry the mails after the first of January next, from New Orleans to San Francisco, even with the carriage road only, in thirteen days, thereby saving eight days in point of time with the carriage road, and which saving will be, of course, further increased when the railroad is completed. When the latter is done, the passage will doubtless be made in ten days, or even less, thus bringing this city, and through it the Valley of the Mississippi, into immediate connection with our vast and increasing possession on the Pacific coast. These are not matters of conjecture, or hypothetical speculations. They are facts which we are about to realize, much to the astonishment of many of our citizens with whom it has become fashionable, or rather a habit, to talk of the "decadence of New

Orleans," and of some others elsewhere who would like to see verified, for reasons which they well understand, what they thus talk about. The company is at this moment pushing on the construction of the carriage road with great energy. Five hundred laborers foreign to Mexico, and a large number of natives, are now employed on the route, and two hundred more will be sent down next week with additional implements, provisions, etc. The road is to be completed within sixty days at farthest. In order to be in readiness to transport passengers across the Isthmus as soon as the road is done, the company has already entered into contract with an extensive stage proprietor, to place at once upon the route twenty stages, with the necessary teams and equipments, for the transmission of passengers and mails. Preliminary measures for the building of the necessary stables and hotels, at convenient distances, have already been commenced, and the contractor for this particular department, William Stevens, Esq., is now on his way to the Isthmus to superintend the business. The road is to be completely stocked by the first of February. The road commences at the little town of Suchil, about ninety miles from the mouth of the Coatzacoalcos river, and on its banks. This river is navigable at all seasons of the year to Minatitlan, twenty miles from its mouth, for vessels drawing thirteen feet of water, and for the remaining distance to the point where the carriage road commences, seventy miles, it is navigable at all seasons for vessels of lighter draft.

The Company has now one steamer the *Leonora*, on the river for the transportation up it of men and materials of construction, and is in negotiation for a number of others, to ply between this city and the Coatzacoalcos. The length of the whole road from its eastern terminus at Suchil to its western at the Bay of Ventosa on the Pacific, will be ninety-six miles. The whole must be done, and in running order, pursuant to the provisions of the contract with the Mexican Government, made February 5th, 1853, three years from the date of said contract; that is, by the 5th of February next. By the same contract the Company has bound itself under heavy forfeiture, to build the railroad in five years from the latter date. It intends, however, to have it done and in operation long before the expiration of the time, and the energy and ability it has already manifested are proofs that it can and will carry its purposes into execution. The channel of the Coatzacoalcos is to be deepened by the Company, two and a half per cent of the net revenue of the roads being appropriated by the charter to this and kindred objects, so that during a large portion of the year steamboats of ordinary draft will be enabled to go directly from New Orleans to the western terminus of the road at Suchil, thus doing away with the necessity of reshipping at Minatitlan. By the Gadsden treaty this road, both plank and rail, is placed specially under the protection of the United States, and it will be as free from obstacles for the transmission of passengers, mails and freight across the Isthmus, as any road in the United States; and further, the Mexican Government has bound itself by the same treaty to allow the Government of the United States the right to transmit troops and munitions of war, without interposing any obstacles whatever. So important was this right of transit across the Isthmus considered, the immense saving in distance and time and the greater security being taken into the account, that Mr. Buchanan the President elect, while Secretary of State under Mr. Polk, authorized H. B. Trist, Esq., then in Mexico, to offer the Mexican Government fifteen millions of dollars to secure it for this country!

In view of the certainty of the completion of the plank road by the 5th of February next or before, Commissioners of the Tehuantepec Company have already memorialized the Hon. Postmaster General of the United States, and submitted such proposals to him for carrying the mails as must we think, receive his early and favorable consideration. The sum now paid by the Government for the transmission of a mail twice a month

from New York to San Francisco is \$737,750. They propose to carry it from New Orleans to San Francisco twice a month for \$480,000 a little more than half the former sum; and they propose to carry a weekly mail between the two points for a fraction over what is now paid for a semi-monthly one, viz: \$750,000.—*N. O. Bulletin.*

Duration of Railroad Iron.

The *London Mining Journal* says that the complaints respecting the inferior quality of recently manufactured rails, naturally attributable to the attempts made by companies to reduce the price, have attracted attention both in England and the United States, and have led to some practical and scientific inquiries. On the first introduction of railroads, it was confidently asserted that the rails would last for infinite periods; but experience soon demonstrated that railway bars were subject to lamination and disintegration from the repeated rolling of heavy loads. Their duration, in some instances, has not exceeded two or three years; and on some of the earliest constructed lines in England the rails have been changed twice, or even three times since their opening. Where the conditions are favorable, and the bars themselves perfectly sound, it is believed that the traffic which rails of ordinary quality are capable of bearing, will not fall short of the large figure of twenty millions of tons.

Covington and Lexington Railroad.

At the annual meeting of stockholders of the Covington and Lexington Railroad Company, held at the office of the company, in this city, on Tuesday last, 18th inst., the following gentlemen were elected Directors for the current year:

John T. Levis, John B. Casey, B. W. Foley, John Mackoy, Covington; A. Robbins, Falmouth; E. Oldham, Lexington; Lucius Desha, Harrison; John Cunningham, Paris.

Messrs. Foley, Mackoy, Desha and Cunningham are new members,—taking the places, respectively, of M. M. Benton, John Chouning, Thos. T. Garnett and Garrett Davis, all of whom we understand, declined further service.

At a subsequent meeting of the Board, the following officers were elected:

President—JOHN T. LEVIS.
Superintendent—C. A. WITHERS.
Secretary—G. M. CLARK.
Treasurer—S. J. WALKER.

We cannot permit the occasion to pass without expressing the deep regret we feel that Mr. Benton should have felt constrained to decline a re-election to the Board. He has been an early, faithful and efficient friend to the enterprise, and has labored with an unflinching faith and unwavering effort for its success. For about three years past he has been President of the company, and as such has had difficulties to encounter before which a man of less energy or of less capacity, would have succumbed. For his services Mr. Benton is entitled to more than the thanks of the friends of the road.

We think the Company have been fortunate in the selection of a successor to Mr. Benton. John T. Levis has also been an early and efficient friend of the road; and by his courtesy, business tact, and strict integrity, will at once command the respect and confidence of all with whom he may be brought in contact by his official duties.—*Covington Journal.*

Baltimore and Ohio Railroad.

The Directors of the Baltimore and Ohio Railroad have declared a dividend of 80 per cent out of the earnings of the road. The dividend is declared in scrip, convertible in June next into bonds of the Company bearing 6 per cent interest, and in 1862 convertible into stock of the Company. The City Councils have authorized an appeal to

the Courts to prevent the Company carrying out their purpose.

Central Railroad Depot.

Many of our citizens have, although the entire traveling public have not, known the reasons which have delayed the erection of becoming passenger depots at this point, viz: the difficulty of obtaining the space necessary for the buildings. This difficulty has been gradually removed, in part; and as a guarantee of that may be ultimately looked for, sundry improvements are now in progress, which will revolutionize the appearance of the point of debarkation.

As the first necessary step, a spacious ticket office has been erected near what will be the centre of the square. The gentlemen's room is large, and has several entrances. The ladies' room, adjoining, is also spacious, and is to be neatly furnished, and to have a dressing and wash room attached.

The upper rooms (entrance from the north side) are to be occupied by Superintendent Foster, the telegraph operators and the conductors.

The present ticket office (long an eye sore) is to be removed, and, in the spring, the express freight shed will also come down, when there will be no obstruction between the rear of the Broadway buildings and the ticket office, which face what was Dean street.

The entrance from the railroad ferry boats, will be on the river front. It will be spacious and convenient, and will be deemed by the traveling public a leading feature in the improvements.

The passenger train track will be changed to accommodate the new location of the ticket office.

The ticket office and passenger depot of the Northern railroad, will occupy a convenient point in the spacious area; and the whole will present an appearance in agreeable contrast with the past.

—*Albany E. Journal.*

Pensacola and Georgia Railroad.

The annual meeting of the stockholders of the Pensacola and Georgia Railroad Company was held in this city, on Wednesday, the 3d inst.

The report of the Hon. E. C. Cabell, President of the Board of Directors, was eminently interesting, and, we believe, satisfactory to all present. It exhibits, without the semblance of doubt, that the great work is progressing; at various points on the line of way, with the most flattering indications of complete success; there being now, as satisfactorily shown, no obstacle in the way to impair the practicability of the enterprise. A sufficient amount of iron has been obtained through the successful negotiations of the President (who has just returned from New York), to course twenty miles of the grading when completed, and will be en route for its destination in a very short time. Three hundred and seventy hands are actively employed on so much of the track as is embraced within the counties of Leon, Jefferson and Madison, and this number will be considerably increased in the ensuing month of January.

The greatly improved aspect of matters, connected with our Railroad system, has inspired its leading projectors with new hopes and increased confidence in the entire feasibility of their magnificent undertaking. Let them press forward, now the work has been commenced, in the noble effort to advance the commercial prosperity and political importance of our State.—*Tallahassee Floridian; Dec. 8th.*

Detroit and Toledo Railroad.

We understand that it is the intention to commence running trains on this road, from Monroe to Trenton, sixteen miles below this city, next week. Every exertion is being made to get the road ready to run trains to this city by the 1st of January, but the extreme cold weather has rendered it difficult to lay the ties, and consequently delays the work. Between the rivers Rouge and Ecorse, a distance of about three miles, the ties and track are yet to lay. If not ready by the first

of the month, trains will undoubtedly be running between this city and Monroe as soon as the 10th or 15th.—*Detroit Adv.*

Alabama Railway Items.

The *Alabama Whig*, of the 27th ult., announces the gratifying fact, that several contractors had commenced work on the N. E. & S. W. Railroad in the neighborhood of Eutaw, and several others would soon commence.

The *Selma Reporter*, of the 10th inst., says over 1800 bars of iron for the Marion Railroad have been received there, and the road will reach Marion by Jan. 1st.

The same paper says the Alabama and Tennessee River Railroad Company are laying down half a mile of iron a day, and expect to cross the bridge by Christmas.

New York Central Railroad.

The *Albany Statesman* says "that the New York Central Railroad Company manufactures its own railroad iron at a less cost than one-half its market value. The average cost to railroad companies is now \$60 to \$65 per ton, while the cost to the manufacturer is about \$30 per ton. The cost of the New York Central Railroad Company's iron-works, all complete, including 1,560 acres of land, containing their ore, was \$145,600. This sum the Company saved in one-year by making for itself the iron necessary to supply the annual wear and tear of the road."

Railways in Canada.

The *Canadian Almanac* for 1857, published at Toronto, gives some valuable facts and statistics relating to the benefit of Railways in Canada. It says: Before a railway existed north of Toronto, all mining articles of farming industry were neglected as articles of trade, over one-half of the region through which the line now passes. Now, however, at every station, fruit, eggs, and vegetables command a ready cash sale. The price of firewood has risen considerably, so that in many localities where wood was an incumbrance, it now has become a source of profit quite independent of ulterior farming operations on the land it occupies.

Few persons could have foretold the extraordinary increase which has taken place on the value of land in the remote townships through which the Northern Railway passes. Leaving out of sight altogether the sites of villages or new formed towns, and giving attention solely to farm land within five or ten miles of the track, the following results derived from unexceptionable sources furnish a startling proof of the local trade created by the Railway. Present average value of land per acre, in which the Northern Railway passes, £9. Average value before construction of the Railway £1 10s. Increase due to the construction of the road £6—other causes, £1 10s.

The present average of land or farms per acre, within five miles of the railway and on either side, is £16. Between five and fifteen miles from the railway, it varies from £16 to £14 per acre. The average value before the road was built was £8 to £6 per acre. The increase, solely due to the construction of the railway, may be estimated at one-half of the actual increase, or about £4 per acre within fifteen miles on either side of the track. Whatever may be the future value of Canadian railways, considered as property only, there can be no room for conjecture as to the extent and nature of the advantages they impart to the sections of the country they serve; neither can there be any doubt that the municipalities of fertile townships gain ten-fold more by the increase of property along the line of railway than they involve themselves by its construction, even when they become responsible for the whole cost of the work serving their townships.

Home-made Railroad Iron.

The progress of manufacturing all articles requiring iron is more rapid than that of almost any other business. We have an instance of this in the quantity of manufactured iron which is now being turned out in establishments, where but two years ago there was not a forge or a furnace within miles. Machine establishments, rolling mills, smelting furnaces, are all called, and the moment they are ready to do business, there is sufficient employment to drive them far beyond their capacity. As an instance of this, the Wyandotte Iron Works are an example, of which Detroit should be somewhat proud. On the docks of the Central Railroad, at the present moment, there are piles of railroad bars, which compare favorably in every quality that renders railroad iron valuable, with the best English that is brought into this country. The quality of this iron is most excellent. Of its capacity to withstand the wear and tear of travel, we have not as yet had a sufficient test, for there has not been time. But when a bar is sawn in two, and is then polished so that it has a surface equal to that of good quality of wrought iron, we may admit that it will stand any reasonable test. The Wyandotte Mills are now turning out these bars at the rate of 200 tons per week, and they are used by the Michigan Central road in all its repairs and reconstruction of track, and also in the new additions being made to the road. The old worn rails are turned over to the Rolling Mill, and new ones are sent back in their place. The saving that this effects is very large, and besides the road is thus directly building up a great industrial interest, the importance of which cannot now be calculated. We sincerely hope that the dabbling and patching of the tariff by Congress, will not effect this mighty interest injudiciously, now that so great an element of wealth to this State has been so auspiciously commenced.—*Detroit Tribune.*

Finances of South Carolina.

EXTRACT FROM THE MESSAGE OF GOV. ADAMS.

Since the 1st of October, 1856, the public debt has been increased as follows:—By issue of bonds to construct new State House, \$250,000; by subscription to Blue Ridge Railroad, \$200,000.

The following table exhibits the debt, liability, and assets of the State:

ACTUAL DEBT.	
Three and Five per cent. State Stock	\$123,407 69
Fire Loan Bonds	1,669,868 91
Bonds new State House	500,000 00
Bonds Blue Ridge Railroad	400,000 00
United States' Treasury Surplus Fund	1,051,422 09
	\$3,744,698 69
LIABILITY.	
Guarantor South Carolina R. R.	2,000,000 00
Debt and liability	\$5,744,698 69
ASSETS.	
Capital of Bank	\$2,770,802 53
Sinking Fund	1,490,886 55
Shares in Railroads, par value	1,742,300 00
Cash on 1st October	139,625 66
	\$6,143,114 74

Ottawa Canal.

We are glad to announce that our private advices from Ottawa and Toronto, bring us information that the report of Mr. Shanly, who has had charge of the preliminary survey of the Ottawa, is understood to be decidedly favorable, pronouncing the opening of water communication by that route to Lake Huron for vessels of a large size, to be quite feasible. Such a report, coming from an engineer who stands so deservedly high as Mr. Shanly—one whose opinion will carry so much weight with it, will, we fancy, settle the dispute about feasibility. The construction of the canal becomes now only a question of time and money.—*Montreal Gazette.*

Maysville and Lexington Railroad Co.

About 25 citizens of this city and county, besides a civil engineer from Cincinnati and another from the East, attended the meeting recently held at the Goddard House, for the re-organization of the Maysville and Lexington Railroad Co. Eben Milton, Esq., of Lexington, was present as the agent and attorney of the bondholders and the purchasers of the road—with authority to do all that was necessary to perfect the organization of the road under the act of the Kentucky Legislature of March 8, 1856.

The meeting was organized by calling Eben Milton, Esq., to the chair, and appointing Robert A. Cochran, Esq., secretary. The bondholders—i. e. those who had not received the dividend of \$25 40 in full of their bonds—made known through their agent their intention to organize the company, subscribing as stock therein their bonded debt and interest—equal to 15,500 shares of \$50 each, or \$575,000. Different gentlemen present held proxies to vote the stock of about two thirds of the stockholders, and cast a unanimous vote for seven directors of the new company—Wm. W. Corcoran, of Washington City, Wm. Hoge, L. Von Hoffman, Edward Stucker, and three others, whose names we have forgotten—all of New York city. A little additional business, entirely of a formal character, was done, when the meeting adjourned.

After the meeting, the gentlemen present remained and spent an hour in free conversation about the prospects of the road, the best plan to pursue to enlist public opinion in favor of an early completion of the road, &c. We understand nothing further was done, than to send a communication to the New York stockholders in reference to future action about the road.—*Maysville Eagle.*

Rabun Gap Railroad.

The Annual Meeting of the Stockholders of the Blue Ridge Railroad Company in South Carolina, was held in Charleston, on the 22nd ult.—Reports were submitted by the President, Chief Engineer, and Treasurer, which were received and adopted. It was ordered also that application be made to the Legislature of South Carolina, for certain amendments of the Charter, suggested by the President in his report. The following gentlemen were elected Directors of the Road for the ensuing year: Hon. Edward Frost, Hon. Wm. Porcher Miles, Mayor of Charleston, Henry Gourdin, C. M. Furman, G. A. Trenholm, Robert Adger, Wm. C. Dukes, Charles T. Lowndes. Hon. EDWARD FROST was unanimously re-elected President of the Company and W. H. PERONNEAU, Secretary and Treasurer.

Charleston and Savannah Railway.

We are pleased to learn that a telegraphic despatch from Columbia, South Carolina, addressed to W. B. Hodgson, Esq., one of the Directors, was received last evening, announcing the important intelligence that a bill had passed the Legislature, giving \$5,000 a mile to this road, for every twenty miles graded and ready for the iron. We are also assured that the work on the Georgia portion of this road will be commenced forthwith. Fifty-one miles of the road, beginning at Charleston, are nearly ready for the iron. The cars on that portion of the road will be running during the next year, and the expectation of the company is that the opening of the year 1858 will be the opening of land travel and mail conveyance between the two cities. This cannot be effected soon for the interest of both.

We cannot refrain from alluding to the notice of this important road, made by R. R. Cuyler, Esq., in his recent annual report on the Central Railroad. In discussing the projected road between Macon and Augusta, which will compete with the Central, he says:

"Furthermore, a railroad is now in progress, between this city and Charleston. By it, and the road of this company, the distance between Macon and Charleston will be 233 miles; only 40 miles longer than by the Macon and Warrenton

duce and goods can be trans-
-en Macon and Charleston,
-ver can be via Warrenton

would do well to make a
their energies and capital to
We hope, too, they will send
ndant capital here, and help us to
antic and Gulf road. That is an en-
-t must be remunerating.—*Sav. Repub.*

Milwaukee and Horicon Railroad.

The Milwaukee Sentinel, in noticing the extension of the Milwaukee and Horicon Railroad, says:

"The road is now running to Ripon 82 miles north west from Milwaukee. The grading is well advanced to Berlin, on the Fox River, 12 miles further, and the iron from this section purchased. It will be open to that point early in the Spring. The gradual approach of this road to Stevens' Point is hailed with delight by the citizens of that thriving town. The last *Pinery* says:

A single individual, Andrew Warren, jr., of this village, took, last week, \$50,000 of stock in the Milwaukee, Horicon and Stevens' Point Railroad. The subscriptions from this village in that stock amount now to near \$300,000, and rapidly on the increase."

Cincinnati Bridge.

The construction of the towers for the suspension bridge over the Ohio at Cincinnati is progressing. The towers, of which both foundations are now laid, eighty-six by fifty-two feet at the base, will be two hundred and thirty feet high, and one thousand and six feet apart. The cables will be anchored three hundred feet back on each side of the river, pass over the tops of the towers, and thus be made to sustain the weight of the bridge. The entire span will therefore be sixteen hundred and six feet—a little short of one-third of a mile. The elevation of the floor at the middle above low water mark will be one hundred and twenty-two feet. The great flood of 1832—the highest on record—rose sixty-two feet above low water; and, making allowance even for this, there will remain sixty feet, which is considerably more than will be required for the highest steamboat pipes on the river.

SAFETY AND ECONOMY.

JAMES HARRISON, JR.'S, AUTOMATIC STEAM WHISTLE FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing or other point for which it is used. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the Whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

Cor. of 22d Street and 2d Avenue.
New York, December 1, 1856.

Notice to Contractors.

Philadelphia & Baltimore Central R. R.

PROPOSALS will be received at the office of this company, in CARROLL HALL, city of Baltimore, on the 31st of January, 1857, for the GRADING AND MASONRY OF THIRTY MILES OF THE ROAD, laying in Baltimore and Hartford counties; and also for the MASONRY and SUPER-STRUCTURE of wood and iron of THE BRIDGE OVER THE SUSQUEHANNA RIVER, three miles above Port Deposit, Maryland.

The work will be ready for inspection after 20th Jan'y, and information desired may be received at the office of the company, in Baltimore, after that date. By order of the Board.
4152 I. R. TRIMBLE, Chief Engr.

NOTICE TO Railroad Contractors.

THE undersigned hereby invites proposals until the 20th of January, next, for laying the track of the Norfolk and Petersburg Railroad. Length 80 miles. Parties proposing had better tender their bills in person.

WILLIAM MAHONE, Chief Engr.
OFFICE CHIEF ENGINEER N. & P. R. R.
Norfolk, Va., December 20th, 1856. 3452

REMOVAL.

ROGERS, KETCHUM, & GROSVENOR,
AND THEIR SUCCESSORS,

THE ROGERS LOCOMOTIVE AND MACHINE WORKS,

HAVE removed their offices from No. 74 BROADWAY to
No. 44 EXCHANGE PLACE. 6152

PHILADELPHIA RAILWAY COMMISSION AGENCY, Nos. 12 and 14 Walnut St.

TO MANUFACTURERS.

THE subscriber having leased for a term of years a large and substantial building in one of the most prominent business streets of Philadelphia, proposes in addition to his regular business to establish a depot for the exhibition and sale of all descriptions of machinery, and invites the attention of manufacturers generally to this plan of making their goods well known. If sufficient inducement is held out the subscriber will put up a steam engine of sufficient power to run any machinery that the manufacturers may wish exhibited in motion, and it is his wish and intention as far as possible to make his establishment an attractive resort for all those interested in the purchase and sale of American manufactures, and he has no doubt (if assisted by those parties who may wish to extend their business) of being able to establish on a permanent basis an exhibition that will be as attractive (on a small scale) as the yearly exhibitions of Boston, New York, Philadelphia and Baltimore. For full particulars address

4150

PHILADELPHIA.

English Iron and Metals.

THE undersigned, having the support of some of the leading makers of Iron in England, is prepared to take orders for Manufactured Iron of all descriptions, as well as Pig Iron, Block Tin, Tin Plates, Spelter, &c., and undertake shipment of the same to the United States on the best terms, both as regards prices and freight arrangements.

WILLIAM ELLIS,
Metal Broker, Shipping and Commission Agent,
Dec. 13—6m 64 King William st., LONDON.

TEN PLATFORM CARS,

28 ft. long, 4 ft. 8½ inch gauge, made in the best manner, with brakes, and now ready for delivery.
BOX and PLATFORM CARS, made to order.

4150

WILLIAMS & PAGE,
44 Water st., BOSTON.

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THE "MONTGOMERY IRON COMPANY" is prepared to execute orders for RAILS of the usual patterns and weights, and of any required length, not exceeding 30 feet per rail. Apply to
THOS. CHAMBERS, President,
No. 42 Exchange Place, New York.

REMOVALS.

CLARK & JESUP have removed their office to
44 Exchange Place.

THE RAQINE & MISSISSIPPI R. R. CO. have removed their office to 44 Exchange Place. 3149

Wheel Barrows and Hand Trucks.

A LARGE assortment of WHEELBARROWS, including three different sizes, handsomely finished, for stores, shops, gardens, and city use generally. Also a large lot of CANAL and RAILROAD BARROWS,

all made in the most substantial manner, to which the attention of contractors is directed.
Also, HAND TRUCKS, of various sizes, used in stores and warehouses, for moving boxes, bales, bags, &c., &c.

BLACKSMITHING.

The subscriber informs his friends and the public that in connection with his Agricultural Implement and Machine Works, he has erected an extensive BLACKSMITH SHOP and is now prepared to turn out Blacksmith work of every description, such as Picks, Crowbars, Miners' Tools and Drills, Stone Cutters, Chisels, Wheelwright work, &c., &c., at the shortest notice. He desires to call the attention of Contractors to the facilities of his establishment, which is the largest in the city.

All orders for Agricultural Implements, Contractors' Tools, Turning, Sawing, Blacksmith Work, &c., &c., promptly attended to.
F. S. BOAS, Reading, Pa.

U. S. MAIL AND EXPRESS ROUTE DIRECT FOR Iowa, Kansas and Nebraska.

CHICAGO, BURLINGTON & QUINCY RAILROAD.

THE ONLY DIRECT ROUTE FROM
CHICAGO TO AURORA, MENDOTA, PRINCETON,
GALESBURG, QUINCY, BURLINGTON, ANY PART
OF SOUTHERN OR CENTRAL IOWA, KANSAS
OR NEBRASKA.

PASSENGER TRAINS leave the Central Depot, foot of South Water street, CHICAGO, daily as follows:—

8.00 A.M.—MORNING EXPRESS.—Connecting at Mendota with Illinois Central Railroad, north for Amboy, Dixon, Galesburg and Dunleith, south for La Salle, Bloomington, Decatur, Springfield, Jacksonville, St. Louis, Cairo, &c.; at Galesburg with Northern Cross R.R. for Quincy, &c.; and at Burlington with Burlington and Missouri River R.R., and with Packets for points up and down the Mississippi river.

8.45 P.M.—EVENING EXPRESS.—Making same connections as above.

NO TRAIN SATURDAY EVENING.

ONE TRAIN SUNDAY, 8.45 P.M.

BAGGAGE CHECKED THROUGH TO BURLINGTON AND QUINCY.

THROUGH TICKETS can be procured at all the principal eastern railroad offices and in Chicago at the Depot and at the Michigan Central R. R. office, corner of Lake and Dearborn streets, opposite the Tremont House.

SAM'L POWELL,
Gen. Ticket Agent.

C. G. HAMMOND,
Gen. Supt.

New York and Erie R. R.

On and after Monday, November 3, 1856, and until further notice,

PASSENGER TRAINS

will leave Pier foot of Duane street, as follows, viz:—

BUFFALO EXPRESS, at 6½ a.m., for Buffalo.

DUNKIRK EXPRESS, at 6½ a.m., for Dunkirk.

MAIL, at 8½ a.m., for Dunkirk and Buffalo, and intermediate stations.—Passengers by this train will remain over night at Owego, and proceed the next morning.

CHICAGO EXPRESS, at 12 m., for Dunkirk.

ROCKLAND PASSENGER, at 3 p.m., (from foot of Chambers st.) via Piermont, for Suffern's and intermediate stations.

WAY PASSENGER, at 4 p.m., for Newburgh and Middletown and intermediate stations.

NIGHT EXPRESS, at 4½ p.m., for Dunkirk and Buffalo.

EMIGRANT, at 5 p.m., for Dunkirk and Buffalo and intermediate stations.

The above trains run daily, Sundays excepted.

These Express Trains connect at Elmira, with the Elmira, Canandaigua and Niagara Falls Railroad, for Niagara Falls; at Binghamton with the Syracuse and Binghamton Railroad, for Syracuse; at Corning with Buffalo, Corning and New York Railroad, for Rochester; at Great Bend with Delaware, Lackawanna and Western Railroad, forScranton; at Buffalo and Dunkirk with the Lake Shore Railroad for Cleveland, Cincinnati, Toledo, Detroit, Chicago, etc.

D. C. McCALLUM, General Supt.

Philadelphia, Wilmington & Baltimore Railroad.

UNITED STATES MAIL ROUTE TO THE SOUTH AND WEST.

Trains will leave the Southern and Western Station, corner e Broad and Prime streets, Philadelphia, at 8 30 a.m. 12 45, 3 and 11 pm.

FARE BY THROUGH TICKETS TO THE SOUTH.

From New York to Wilmington	\$15 50
do do Norfolk	8 50
From Philadelphia to Wilmington	14 00
do do Norfolk	6 50
do do Petersburg	9 00
do do Richmond	9 00

FARE BY THROUGH TICKETS TO THE WEST.

From New York to Cincinnati	\$17 00
do do Louisville	19 00
From New York to Indianapolis	19 00
From Philadelphia to Cincinnati	16 00
do do Louisville	18 00

An extra charge will be made for meals and state rooms on board the boat.

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Portable Steam Engine.

A N engine of 12 horse power, in complete order, for sale
by HABICHT & PARISH,
4149 No. 80 Beaver st.

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A CIVIL and MECHANICAL ENGINEER of first rate theoretical education and practical experience in Railroad Machinery and in the superintendence of railroads, and who is at present engaged as a Mechanical Draughtsman and constructor on a leading road, offers his services to Railroad Companies and others as Master of Repairs. Address J. M. at the office of the Am. Railroad Journal.
New York July 21st, 1856.

Railroad Iron.

THE undersigned, Agents for leading Manufacturers in Staffordshire and Wales, are prepared to contract for delivery on board ship at Liverpool, or Welsh port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

Railroad Iron.

1,000 TONS best quality Welsh Rails "Erie" pattern, 55000 lbs. per yard, now due at New Orleans, for sale by
VOSE, LIVINGSTON, & CO.,
No. 9 South William st., N. Y.

October 18, 1866.

Railroad Iron.

500 TONS best quality Welsh Rails, approved T pattern, 55 lbs. per yard, for sale by
VOSE, LIVINGSTON & CO.,
9 South William st.

Railroad Iron.

WE are prepared to contract to deliver Rails at fixed sterling prices, free on board, in English or Welsh ports, and also at prices including freight to New York or Boston.
NAYLOR & CO.,
99 and 101 JOHN ST., N. Y.

FOR SALE

TWO LOCOMOTIVE ENGINES, suitable for gravel or other light trains. The above machines are in good order and sold for want of use. Apply at the office of the OAMDEN AND ATLANTIC R. R. CO., 55 Walnut st., PHILADELPHIA, Penna.

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THE undersigned has devised and patented the only system of ventilation for Buildings, Vessels, RAILROAD CARS, &c., by which spontaneous ventilation can be effectually carried out; and is willing to dispose of the same to parties desirous of purchasing at a reasonable price.
Address HENRY BUTTAN,
Cobourg, Canada.

BUSINESS CARDS.**CAR AXLE WORKS,
PENCYD IRON WORKS.****A. & P. ROBERTS,**

OFFICE AND WAREHOUSE BROAD NEAR VINE ST
PHILADELPHIA, PENN.

HAMMERED CAR AND ENGINE AXLES,
ROLLED CAR AXLES AND BAR IRON.

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49 Merchants' Exchange, Wall Street,

THE subscribers have formed a Co-Partnership under the name of **DRAKE & CARTER**, for the purpose of continuing the business of Buying and Selling Stocks and Bonds, Loaning Money on Stocks and other Securities, making Collections, &c.

The general partners of the concern will be **JAMES M. DRAKE** and **GALEN A. CARTER**. **EDWARD B. LITTLE** Esq. has contributed Fifty Thousand Dollars as special partner.

D. & C. will occupy the Office No. 49 MERCHANTS' EXCHANGE, (entrance on Wall St.)

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No. 10 WALL ST.,

BANKERS, DEALERS in DOMESTIC and FOREIGN EXCHANGE, &c., are prepared to negotiate stocks, Bonds and Financial Securities in general.

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WELLS, Fargo & Co. 18t

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REFERENCES: American Exchange Bank, Bank of the Republic, Metropolitan Bank, Merchants' Bank. 1718

Lord & Wright,

Counsellors at Law, Cincinnati Ohio. 161

VIRGINIA**Locomotive and Car Manufacturing Company,**

ALEXANDRIA, VA.

T. PERKINS, Pres't.

R. C. SMITH, Treas'r.

MANUFACTURE LOCOMOTIVE ENGINES, CARS OF EVERY DESCRIPTION, STATIONARY ENGINES & BOILERS, CHILLED CAR WHEELS AND AXLES.

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Iron Rails, Chairs, & Spikes,

ENGINES, CARS, AND MACHINERY,

BUSH & LOBBELL's and other kinds of WHEELS,

BEST HAMMERED FAGOTED AXLES,

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Iron and Steel of all kinds for Railroad Shops,

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American and Foreign bar, boiler, and pig iron, Tyres, Axles, wrought iron Wheels, boiler, water and gas Tubes, iron and steel Wire, boiler and tank Rivets, Steel, Files, Emery, &c.

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We have on hand and for sale, of County Bonds—

Hardin County (Ky), 6 per ets. Davidson City (Tenn.), 6 p.cts
Carter, Bath, and Montgomery (Ky), 6 per cents. Iowa County (Wis.), 8 per cts.
Also a variety of CITY, COUNTY, and RAILWAY
SECURITIES in smaller lots.

April 30th, 1866.

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LOCOMOTIVE EXPRESS

FOR THE RECEIPT AND TRANSPORTATION OF

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PASSENGER AND BOX CARS

OF ANY GAUGE

To the Western and South-Western States.

PROPRIETORS—KASSON, SON & CO.

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ARE prepared to contract for the construction and equipment of railroads in any part of the country; also to furnish corps of Engineers and Contractors; Locomotive Engines and Cars; Railroad Iron, Chairs, Spikes, Switch-irons, &c., &c.

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SEYMOUR, MORTON & Co. have to dispose of at private sale, in amounts to suit persons desirous of investing a large amount of valuable Railroad and other Securities.

The members of the firm having had a large experience as Civil Engineers, on some of the most important public works in this country, also tender their services as Consulting Engineers to those engaged in the construction of Railroads.

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SPECIAL SALES

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LOANS, NOTES, BILLS OF EXCHANGE,

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THE undersigned may be consulted upon the location, construction, equipment, and management of railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron.

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A long and intimate connection with the construction and management of our most important American railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable railroad companies to avoid errors of location, construction and management which are more or less inseparable from all new enterprises in our country.

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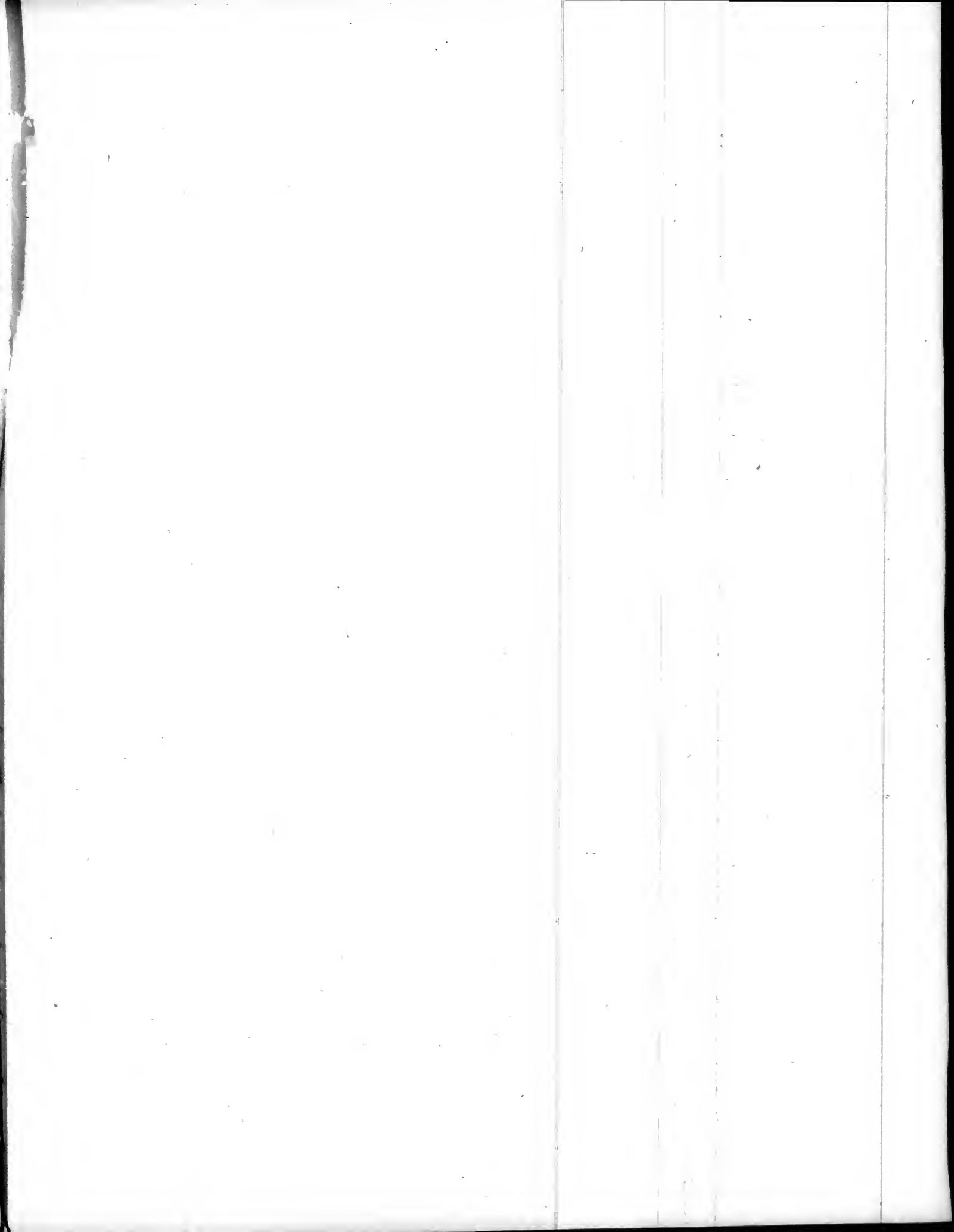
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